Revision Process Documentation for West Virginia Board of Education Policies 2520.1A and 2520.2B

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Submitted by the

West Virginia Department of Education

Division of Teaching and Learning

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Summary and Timeline of Academic Spotlight

July 2015

The West Virginia Board of Education partnered with the West Virginia Department of Education and West Virginia University to launch Academic Spotlight, a community review of the English language arts and mathematics standards. This initiative gave teachers, citizens, parents, and other education stakeholders the opportunity to provide feedback on the Next Generation Standards (WV's version of the Common Core State Standards) via an online portal during a 90-day period. Additionally, regional town hall meetings, hosted by colleges and universities, were held throughout the state.

Approximately **250,000 comments** from more than **5,000 individuals** were received via the online portal. **Over 84%** of all respondents identified themselves as **educators**.

A summary of the comments received from the Academic Spotlight is reflected below:

Mathematics		Engl. Lang. Arts	
95.86% of standards received feedback (n=72,301)		100% of standards received feedback (n=179,130)	
Agree	94.60% (n=68,396)	Agree	96.77% (n=173,341)
Disagree	5.40% (n=3,905)	Disagree	3.23% (n=5,789)
Moved	4.04% (n=2,922)	Moved	2.39% (n=4,275)
Rewritten	1.04% (n=749)	Rewritten	0.63% (n=1,133)
Broken	0.37% (n=270)	Broken	0.23% (n=413)

Source: WV Academic Spotlight Executive Summary Handout, 2015.

October 2015

Content Review Teams were established for Elementary English Language Arts and Mathematics, Middle and Secondary English Language Arts, and Middle and Secondary Mathematics. With assistance from the West Virginia Education Association and the American Federation of Teachers – West Virginia, educators, administrators, special education representatives, counselors, and higher education faculty content experts convened to review the Academic Spotlight data. Led by West Virginia University, the content review teams reviewed the comments and made recommendations, in particular targeting flexibility for teachers. The Academic Spotlight Executive Summary with recommended changes was presented to the West Virginia Department of Education in early November, 2015, and the majority of the recommended changes were incorporated into a revised policy.

Summary of Public Commenting Period for WVBE Policies 2520.1A and 2520.2B

November 13 – December 14, 2015

Following is a summary of the 30 day comment period for WVBE Policies 2520.1A and 2520.2B ending December 14, 2015. All documents from this point forward reflect the policy revisions made based on the public comment period, including implications, skill charts and progression documents.

WVBE Policy 2520.1A West Virginia College- and Career-Readiness Standards for English Language Arts

36 individuals submitted 59 comments that resulted in 13 revisions to the policy. The revisions include correcting typographical errors, adding text examples, and support for personalized education.

WVBE Policy 2520.2B West Virginia College- and Career-Readiness Standards for Mathematics

51 individuals submitted 79 comments that resulted in 30 revisions to the policy. The revisions include correcting typographical errors, skill progression charts, clarification, consistency, money in grades K-2, instructional notes for grade 3 denominators, and high school standards to specify measurable outcomes.

2011 WV Next Generation Content Standards and Objectives and the 2015 WV College and Career Readiness Standards – Policy Comparison

2011 West Virginia Next Generation Content Standards and Objectives	BOTH sets of Standards	2015 West Virginia College and Career Readiness Standards
Included details that could have limited educators in the design of their own curriculum	Inclusive of developmental milestones and learning targets that indicate what students should know, understand, and be able to do by the end of the school year.	Details that limit educators in the design of their own curriculum have been eliminated.
Skills progressions and numbering for English Language Arts were not consistent.	Developed by West Virginia educators and thoroughly vetted by stakeholders, educators, and content area experts to ensure developmental milestones and learning targets are included at each grade level.	Skills progressions for English Language Arts have consistent numbering so educators can see what a particular standard looks like for students in each grade level, from kindergarten through high school graduation.
Numbering system was complex and difficult to navigate.		Numbering system has been simplified to be more teacher- and stakeholder-usable.
The use of many complex educational terms made readability difficult for non-educators.		Standards are more accessible for readability (“educationese” has been eliminated).

2011 West Virginia Next Generation Content Standards and Objectives		2015 West Virginia College and Career Readiness Standards
The West Virginia Next Generation Content Standards and Objectives begin with an overview describing the process by which these standards were developed, studied, and placed into the West Virginia Framework. The English Language Arts policy outlines a vision of what it means to be literate in the twenty-first century. The Mathematics policy outlines the intent of providing clear and focused standards that respect what is known about how students learn.	Introduction 	Each West Virginia College- and Career-Readiness Standard content policy will begin with shared language that explains what college- and career-readiness means in our state. This description and explanation comes directly from the agreed-upon definition established through a collaborative effort between the West Virginia Department of Education, the West Virginia Board of Education, the Governor's Office, and the Higher Education Policy Commission. Each policy will also contain content-specific language that provides an overview for how college- and career-readiness will be supported and achieved. The revisions to WVBE Policies 2520.1A and 2520.2B will provide uniformity for all content policies in the state with the goal of college- and career-readiness for all students.
Related objectives of West Virginia Next Generation Content Standards and Objectives are grouped into clusters. As a result, explanations for the terms "content standards", "clusters", and "objectives" are provided. Narrative performance descriptors categorize and explain student performance on the statewide summative assessment and provide information about the level of knowledge and skills students needed to acquire. Each of the five performance levels is identified and described.	Explanation of Terms 	Related standards of the West Virginia College- and Career-Readiness Standards are grouped into clusters; related groups of clusters form domains, or the broad components that make up the content area. Explanations for the terms "clusters", "standards", and "domains" are provided. The shift from content standards and objectives to the sole use of standards serves two purposes. First, the term "standards" reflects the common language used by teachers, administrators, parents, and the media when referencing the expectations for what students should know, understand, and be able to do. The use of "content standards and objectives" often confused those outside of education and made the role of the standards unclear, especially in regard to their relationship to objectives. Second, and more important, calling these expectations "standards" allows teachers to plan, document, and implement standards-based instruction more easily. Identifying the standards as the expectations of each grade level or course provides greater clarity and consistency for teachers, students, and families.

2011 West Virginia Next Generation Content Standards and Objectives		2015 West Virginia College and Career Readiness Standards
The numbering of objectives is composed of four parts, each part separated by a period: the content area code is M for Mathematics, the grade level, the standard, and the objective. For example, ELA.2.SL.C14.2 identifies the content as English Language Arts, the grade as Grade 2, the standard as Speaking and Listening, the cluster as Presentation of Knowledge and Skills, and this as the second objective in this cluster. Similarly, the standard M.1HS.CPC.10 identifies the content as mathematics, the course as High School Mathematics I, the standard as Congruence, Proof, and Constructions, and this as the tenth objective in this cluster.	Numbering of Standards 	The numbering of the standards will be streamlined for all content policies. Previous numbering systems were intricate and inconsistent across grade levels. The West Virginia College- and Career-Readiness Standards will follow a simple system using the content, the grade level or course, and the standard number. For example, M.K.7 identifies the content area as Mathematics, the grade-level as Kindergarten, and the number seven to denote the 7th standard for Kindergarten Math. Similarly, M.A18.3 identifies the content as Mathematics, the course as 8th Grade Algebra I, and the number three denotes the 3rd standard for 8th grade algebra. The organization of standards will also be consistent across grade levels and courses. Clusters will be used to organize groups of related standards but will not be numbered; the numbering of clusters is inconsistent in our current policies. Simplifying the numbering and organization of the standards makes them easier to find, reference, and understand.
Introductions for each grade identify the critical concepts that serve as the grade-level focus and list the eight mathematical practices. Detailed narratives that describe each of the critical concepts are provided.	Grade-Level Introductions 	Grade-level introductions focus on the specific skill for the respective grade levels. While the Next Generation content policy contained grade-level introductions, there was no explanation of how skills should progress from one grade level to the next. These new introductions explain and provide examples of the skills students will develop and expand as they advance. This provides context and purpose for the skills contained in the standards at each grade level. In mathematics, emphasis is also placed on the necessary integration of content standards and process goals.

English Language Arts (Policy 2520.1A) Revision Implications

Implications of Changes Made in the Repeal and Replace of Policy 2520.1A (ELA)

Kindergarten		
NxG CSO	WV CCRS	Implications
read emergent-reader texts with purpose and understanding. (ELA.K.R.C8.1)	Read emergent-reader texts with purpose and understanding. (ELA.K.I)	Fluency was moved to a new domain, Early Learning Foundations, as a foundational skill that is critical to a student's success in all other content standards and objectives.
know and apply grade-level phonics and word analysis skills in decoding words. • demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sounds for each consonant. • associate the long and short sounds with common spellings (graphemes) for the five major vowels. • read common high-frequency words by sight (e.g., *the, of, to, you, she, my, is, are, do, does*). • distinguish between similarly spelled words by identifying the sounds of the letters that differ. (ELA.K.R.C7.1)	Know and apply grade-level phonics and word analysis skills in decoding words. • Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sounds for each consonant. • Associate common spellings (graphemes) with the five major short vowel sounds. • Read common high-frequency words by sight (e.g., *the, of, to, you, she, my, is, are, do, or does*). • Distinguish between similarly spelled words by identifying the sounds of the letters that differ. (ELA.K.II)	Phonics and Word Recognition was moved to Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards.
demonstrate command of the conventions of standard English grammar and usage when writing or speaking. • print many upper- and lowercase letters. • use frequently occurring nouns and verbs. • form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog, dogs; wish, wishes*). • understand and use	Print upper- and lowercase letters. (ELA.K.III)	"Print many upper- and lowercase letters" was deleted from Language and moved to Early Learning Foundations - Handwriting as a foundational skill that is critical to a student's success in all other content standards. The word "many" was deleted to make the standard more developmentally appropriate.

question words (interrogatives) (e.g., *who, what, where, when, why, how*). • use the most frequently occurring prepositions (e.g., *to, from, in, out, on, off, for, of, by, with*). • produce and expand complete sentences in shared language activities. (ELA.K.L.C15.1)		
demonstrate understanding of spoken words, syllables and sounds (phonemes). • recognize and produce rhyming words. • count, pronounce, blend and segment syllables in spoken words. • blend and segment onsets and rimes of single-syllable spoken words. • isolate and pronounce the initial, medial vowel and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant or cvc) words. (this does not include cvcs ending with /l/, /r/ or /x/.) • add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words. (ELA.K.R.C6.1)	Know and apply grade-level phonics and word analysis skills in decoding words. • Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sounds for each consonant. • Associate the long and short sounds with common spellings (graphemes) for the five major vowels. • Read common high-frequency words by sight (e.g., *the, of, to, you, she, my, is, are, do, or does*). • Distinguish between similarly spelled words by identifying the sounds of the letters that differ. (ELA.K IV)	Phonological Awareness was moved to Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards and objectives.
demonstrate understanding of the organization and basic features of print. • follow words from left to right, top to bottom and page by page. • recognize that spoken words are represented in written language by specific sequences of letters. • understand that words are separated by spaces in print. • recognize and name all	Demonstrate understanding of the organization and basic features of print. • Follow words from left to right, top to bottom, and page by page. • Recognize that spoken words are represented in written language by specific sequences of letters. • Understand that words are separated by spaces in print. • Recognize and name all upper- and lowercase letters of the alphabet. (ELA.K.V)	Print Concepts was moved to Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards and objectives.

upper- and lowercase letters of the alphabet. (ELA.K.R.C5.1)		
demonstrate understanding of the organization and basic features of print. • follow words from left to right, top to bottom and page by page. • recognize that spoken words are represented in written language by specific sequences of letters. • understand that words are separated by spaces in print. • recognize and name all upper- and lowercase letters of the alphabet. (ELA.K.R.C5.1)	Demonstrate understanding of the organization and basic features of print. • Follow words from left to right, top to bottom, and page by page. • Recognize that spoken words are represented in written language by specific sequences of letters. • Understand that words are separated by spaces in print. • Recognize and name upper- and lowercase letters of the alphabet. (ELA.K.V)	Following the 30-day comment period, the word "all" was removed from the last bullet. This allows teachers to provide personalized education to all students while adhering to developmental appropriateness.
with prompting and support, identify characters, settings and major events in a story in literary text. (ELA.K.R.C1.3)	With prompting and support, identify characters, settings, and major events in a literary text. (ELA.K.3)	To make the language less prescriptive and to support teacher flexibility, the phrase "in a story" was removed.
ask and answer questions about unknown words in a literary text. (ELA.K.R.C2.1)	With prompting and support, ask and answer questions about unknown words in a literary text. (ELA.K.7)	The phrase "with prompting and support" was added to provide consistency among the standards.
recognize common types of texts (e.g., storybooks, poems). (ELA.K.R.C2.2)	With prompting and support, recognize common types of texts (e.g., storybooks, poems). (ELA.K.8)	The phrase "with prompting and support" was added to provide consistency among the standards.
identify the front cover, back cover and title page of a book. (ELA.K.R.C2.5)	With prompting and support, identify the front cover, back cover and title page of a book. (ELA.K.11)	The phrase "with prompting and support" was added to provide consistency among the standards.
name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text. (ELA.K.R.C2.6)	With prompting and support, name the author and illustrator of a text and define the role of each in presenting the ideas or information in an informational text. (ELA.K.12)	The phrase "with prompting and support" was added to provide consistency among the standards.
know and apply grade-level phonics and word analysis skills in decoding words. • demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sounds for each consonant. • associate the long and short sounds with common spellings	Know and apply grade-level phonics and word analysis skills in decoding words. • Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sounds for each consonant. • Associate common spellings (graphemes) with the five major short vowel sounds.	The requirement for students to associate long vowel sounds with common spellings (graphemes) was removed to make the standard more developmentally appropriate. This foundational skill was moved to the first grade standards.

(graphemes) for the five major vowels. • read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does). • distinguish between similarly spelled words by identifying the sounds of the letters that differ. (ELA.K.R.C7.1b)	• Read common high-frequency words by sight (e.g., *the, of, to, you, she, my, is, are, do, or does*). • Distinguish between similarly spelled words by identifying the sounds of the letters that differ. (ELA.K.II)	
use a combination of drawing, dictating and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., *my favorite book is...*). (ELA.KW.C9.1)	Use a combination of drawing, dictating, and writing to compose opinion pieces in which the topic or the name of the book being discussed is included; state an opinion or preference about the topic or book (e.g., "My favorite book is..."). (ELA.K.20)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
use a combination of drawing, dictating and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (ELA.K.W.C9.2)	Use a combination of drawing, dictating, and writing to compose informative/ explanatory texts; name and supply some information about the topic. (ELA.K.21)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
with guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. (ELA.K.W.C10.2)	With guidance and support from adults and collaborative discussions, add details to strengthen writing as needed. (ELA.K.24)	The language "respond to questions and suggestions from peers" was revised to "collaborative discussions" to increase the clarity of intent and make the standard more developmentally appropriate.
participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (ELA.K.W.C11.1)	With guidance and support, participate in shared research and writing (e.g., explore a number of books by a favorite author and express opinions about them). (ELA.K.26)	The phrase "with guidance and support" was added to provide consistency and make the standard more developmentally appropriate.
determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. •identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck). •use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word. (ELA.K.L.C17.1b)	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *kindergarten reading and content*. • Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*). • Introduce the most frequently occurring inflections and affixes (e.g., *-ed, -s, re-, un-, pre-, -ful,* and *-less*) as a clue to the meaning of an unknown word. (ELA.K.39)	The word "introduce" was added to make the standard more developmentally appropriate and support the skill progression.

determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. • identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck). • use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word. (ELA.K.L.C17.1b)	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *kindergarten reading and content*. • Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*). • Introduce the most frequently occurring inflections and affixes (e.g., *-ed, -s, re-, un-, pre-, -ful,* and *-less*) as a clue to the meaning of an unknown word. (ELA.K.39)	Following the 30-day comment period, the second bullet was missing from this standard. The error has been fixed.
with guidance and support from adults, explore word relationships and nuances in word meanings. • sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. • demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). • identify real-life connections between words and their use (e.g., note places at school that are *colorful*). • distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut, prance*) by acting out the meanings. (ELA.K.L.C17.2c)	With guidance and support from adults, explore word relationships and nuances in word meanings. • Sort common objects into categories (e.g., shapes or foods) to gain a sense of the concepts the categories represent. • Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). • Identify real-life connections between words and their use (e.g., note places at home that are *cozy*). • Distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut,* and *prance*) by acting out the meanings. (ELA.K.40)	The example "(e.g., shapes, foods)" was changed to "(e.g., shapes or foods)," and "(e.g., note places at school that are *colorful*)" was changed to "(e.g., note places at home that are *cozy*)" to make the language of the standard clearer and more accessible.
1st Grade		
NxG CSO	WV CCRS	Implications
read with sufficient accuracy and fluency to support comprehension. • read on-level text with purpose and understanding. • read on-level text orally with accuracy, appropriate	Read with sufficient accuracy and fluency to support comprehension. • Read on-level text with purpose and understanding. • Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.	Fluency was moved to a new domain, Early Learning Foundations, as a foundational skill that is critical to a student's success in all other content standards and objectives.

rate and expression on successive readings. • use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.1.R.C8.1)	• Use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.1.I)	
know and apply grade-level phonics and word analysis skills in decoding words. • know the spelling-sound correspondences for common consonant digraphs. • decode regularly spelled one-syllable words. • know final -e and common vowel team conventions for representing long vowel sounds. • use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. • decode two-syllable words following basic patterns by breaking the words into syllables. • read words with inflectional endings. • recognize and read grade-appropriate irregularly spelled words. (ELA.1.R.C7.1)	Know and apply grade-level phonics and word analysis skills in decoding words. • Know the spelling-sound correspondences for common consonant digraphs. • Decode regularly spelled one-syllable words. • Know final -e and common vowel team conventions for representing long vowel sounds. • Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word. • Decode two-syllable words following basic patterns by breaking the words into syllables. • Read words with inflectional endings. • Recognize and read grade-appropriate irregularly spelled words. (ELA.1.II)	Phonics and Word Recognition was moved to Early Learning Foundations, as a foundational skill that is critical to a student's success in all other content standards and objectives.
demonstrate command of the conventions of standard English grammar and usage when writing or speaking. • print all upper- and lowercase letters. • use common, proper and possessive nouns. • use singular and plural nouns with matching verbs in basic sentences (e.g., *he hops; we hop*). • use personal, possessive and indefinite pronouns (e.g., *i, me, my; they,*	Print all upper- and lowercase letters. (ELA.1.III)	"Print all upper- and lowercase letters" was deleted from Language and moved to Early Learning Foundations - Handwriting as a foundational skill that is critical to a student's success in all other content standards and objectives.

them, their, anyone, everything). • use verbs to convey a sense of past, present and future (e.g., *yesterday i walked home; today i walk home; tomorrow i will walk home*). • use frequently occurring adjectives. • use frequently occurring conjunctions (e.g. and*, but or, so, because*). • use determiners (e.g., *articles, demonstratives*). • use frequently occurring prepositions (e.g., *during, beyond, toward*). • produce and expand complete simple and compound declarative, interrogative, imperative and exclamatory sentences in response to prompts. (ELA.1.L.C15.1)		
demonstrate understanding of spoken words, syllables and sounds (phonemes). • distinguish long from short vowel sounds in spoken single-syllable words. • orally produce single-syllable words by blending sounds (phonemes), including consonant blends. • isolate and pronounce initial, medial vowel and final sounds (phonemes) in spoken single-syllable words. • segment spoken single-syllable words into their complete sequence of individual sounds (phonemes). (ELA.1.R.C6.1)	Demonstrate understanding of spoken words, syllables, and sounds (phonemes). • Distinguish long from short vowel sounds in spoken single-syllable words. • Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. • Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. • Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes). (ELA.1.IV)	Phonological Awareness was moved to Early Learning Foundations, as a foundational skill that is critical to a student's success in all other content standards and objectives.
demonstrate understanding of the organization and basic features of print.	Demonstrate understanding of the organization and basic features of print. • Recognize the distinguishing	Print Concepts was moved to Early Learning Foundations as a foundational skill that is critical to a

recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation). (ELA.1.R.C5.1)	features of a sentence (e.g., first word, capitalization, and ending punctuation). (ELA.1.V)	student's success in all other content standards and objectives.
write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion and provide some sense of closure. (ELA.1.W.C9.1)	Write opinion pieces by introducing the topic or name of the text being discussed, stating an opinion, supplying a reason for the opinion, and providing some sense of closure. (ELA.1.20)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
write informative/explanatory texts in which they name a topic, supply some facts about the topic and provide some sense of closure. (ELA.1.W.C9.2)	Write informative/explanatory texts by naming a topic, supplying some facts about the topic, and providing some sense of closure. (ELA.1.21)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use transitional words to signal event order and provide some sense of closure. (ELA.1.W.C9.3)	Write narratives to recount two or more appropriately sequenced events, include some details regarding what happened, use transitional words to signal event order, and provide some sense of closure. (ELA.1.21)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
with guidance and support from adults, focus on a topic, respond to questions and suggestions from peers and add details to strengthen writing as needed. (ELA.1.W.C10.2)	With guidance and support from adults and collaborative discussions, focus on a topic and add details to strengthen writing as needed. (ELA.1.24)	The standard was reworded for clarity and to remove restrictive language, allowing teachers more flexibility in design of curriculum.
participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions). (ELA.1.W.C11.1)	Participate in shared research and writing (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions). (ELA.1.26)	To remove prescriptive language and to support teacher flexibility, the word "projects" was deleted.
use words and phrases acquired through conversations, reading and being read to and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because). (ELA.1.L.C17.3)	Use words and phrases acquired through conversations, reading, being read to, and responding to texts; use frequently occurring conjunctions to signal simple relationships (e.g., *because*). (ELA.1.41)	To remove prescriptive language and to support teacher flexibility, the word "including" was deleted. Commas were added to make the standard clearer and more accessible.
2nd Grade		
NxG CSO	WV CCRS	Implications
read with sufficient accuracy and fluency to support comprehension. • read on-level text with purpose and understanding. • read on-level text orally with accuracy, appropriate rate and expression.	Read with sufficient accuracy and fluency to support comprehension. • Read on-level text with purpose and understanding. • Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive	Fluency was moved to a new domain, Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards and objectives.

• use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.2.R.C8.1)	readings. • Use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.2.I)	
know and apply grade-level phonics and word analysis skills in decoding words. • distinguish long and short vowels when reading regularly spelled one-syllable words. • know spelling-sound correspondences for additional common vowel teams. • decode regularly spelled two-syllable words with long vowels. • decode words with common prefixes and suffixes. • identify words with inconsistent but common spelling-sound correspondences. • recognize and read grade-appropriate irregularly spelled words. (ELA.2.R.C7.1)	Know and apply grade-level phonics and word analysis skills in decoding words. • Distinguish long and short vowels when reading regularly spelled one-syllable words. • Know spelling-sound correspondences for additional common vowel teams. • Decode regularly spelled two-syllable words with long vowels. • Decode words with common prefixes and suffixes. • Identify words with inconsistent but common spelling-sound correspondences. • Recognize and read grade-appropriate irregularly spelled words. (ELA.2.II)	Phonics and Word Recognition was moved to Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards and objectives.
	Create readable documents with legible print or cursive as developmentally appropriate. (ELA.2.III)	This language was added to Early Learning Foundations Handwriting as foundational skill that is critical to a student's success in all other content standards and objectives. The addition of "or cursive as developmentally appropriate" was a recommendation of the WVBE member.
by the end of year, read and comprehend informational texts, including history/social studies, science and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. (ELA.2.R.C4.2)	By the end of year, read and comprehend informational texts, including social studies, science, and technical texts, in the grades 2–3 text complexity range proficiently, with scaffolding as needed at the high end of the range. (ELA.2.19)	The word "history" was deleted to eliminate redundancy.
write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the	Write opinion pieces by introducing the topic or text being discussed, stating an opinion, supplying reasons that support the	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

opinion, use linking words (e.g., because, and, also) to connect opinion and reasons and provide a concluding statement or section. (ELA.2.W.C9.1)	opinion, using linking words (e.g., because, and, or also) to connect opinion and reasons, and providing a concluding statement or section. (ELA.2.20)	
write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points and provide a concluding statement or section. (ELA.2.W.C9.2)	Write informative/explanatory texts by introducing a topic, using facts and definitions to develop points, and providing a concluding statement or section. (ELA.2.21)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts and feelings, use transitional words to signal event order and provide a sense of closure. (ELA.2.W.C9.3)	Write narratives to recount a well-elaborated event or short sequence of events, including details to describe actions, thoughts, and feelings, and using transitional words to signal event order and provide a sense of closure. (ELA.2.22)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
with guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing. (ELA.2.W.C10.2)	With guidance and support from adults and collaborative discussions, focus on a topic and strengthen writing as needed by revising and editing. (ELA.2.24)	To remove prescriptive language, to support teacher flexibility, and for clarity, the standard was reworded.
participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). (ELA.2.W.C11.1)	Participate in shared research and writing (e.g., read a number of books on a single topic to produce a report; record science observations). (ELA.2.26)	To remove prescriptive language and to support teacher flexibility, the word “projects” was deleted.
tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences. (ELA.2.SL.C14.1)	Tell a story or recount an experience with appropriate facts and relevant, descriptive details; speaking audibly and coherently. (ELA.2.33)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).he standard was reworded for clarity.
3rd Grade		
NxG CSO	WV CCRS	Implications
read with sufficient accuracy and fluency to support comprehension. • read on-level text with purpose and understanding. • read on-level prose and poetry orally with accuracy, appropriate rate and expression on successive readings. use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.3.R.C8.1)	Read with sufficient accuracy and fluency to support comprehension. • Read on-level text with purpose and understanding. • Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. • Use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.3.I)	Fluency was moved to a new domain, Early Learning Foundations, as a foundational skill that is critical to a student’s success in all other content standards.

know and apply grade-level phonics and word analysis skills in decoding words. • identify and know the meaning of the most common prefixes and derivational suffixes. • decode words with common Latin suffixes. • decode multisyllable words. • read grade-appropriate irregularly spelled words. (ELA.3.R.C7.1)	Know and apply grade-level phonics and word analysis skills in decoding words. • Identify and know the meaning of the most common prefixes and derivational suffixes. • Decode words with common Latin suffixes. • Decode multi-syllable words. • Read grade-appropriate irregularly spelled words. (ELA.3.II)	Phonics and Word Recognition was moved to Early Learning Foundations, as a foundational skill that is critical to a student's success in all other content standards.
	Write legibly in cursive or joined italics, allowing margins and correct spacing between letters in a word and words in a sentence. (ELA.3.III)	This language was added to Early Learning Foundations -Handwriting as a foundational skill that is critical to a student's success in all other content standards.
by the end of the year, read and comprehend informational texts, including history/social studies, science and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently. (ELA.3.R.C4.2)	By the end of the year, read and comprehend informational texts, including social studies, science, and technical texts, at the high end of the grades 2–3 text complexity range independently and proficiently. (ELA.3.19)	The word "history" was deleted to eliminate redundancy.
write opinion pieces on topics or texts, supporting a point of view with reasons. • introduce the topic or text they are writing about, state an opinion and create an organizational structure that lists reasons. • provide reasons that support the opinion. • use linking words and phrases (e.g., *because*, *therefore*, *since*, *for example*) to connect opinion and reasons. • provide a concluding statement or section. (ELA.3.W.C9.1)	Write opinion pieces on topics or texts, supporting a point of view with reasons. • Introduce the topic or text being discussed, state an opinion, and create an organizational structure that lists reasons. • Provide reasons that support the opinion. • Use linking words and phrases (e.g., *because*, *therefore*, *since*, or *for example*) to connect opinion and reasons. • Provide a concluding statement or section. (ELA.3.20)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
report on a topic or text, tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace. (ELA.3.SL.C14.1)	Report on a topic or text; tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly and coherently. (ELA.3.33)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

4th Grade		
NxG CSO	WV CCRS	Implications
read with sufficient accuracy and fluency to support comprehension. • read on-level text with purpose and understanding. • read on-level prose and poetry orally with accuracy, appropriate rate and expression. • use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.4.R.C8.1)	Read with sufficient accuracy and fluency to support comprehension. • Read on-level text with purpose and understanding. • Read on-level prose and poetry orally with accuracy, appropriate rate, and expression. • Use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.4.I)	Fluency was moved to a new domain, Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards and objectives.
know and apply grade-level phonics and word analysis skills in decoding words. use combined knowledge of all letter-sound correspondences, syllabication patterns and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. (ELA.4.R.C7.1)	Know and apply grade-level phonics and word analysis skills in decoding words. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. ELA.4.II)	Phonics and Word Recognition was moved to Early Learning Foundations, as a foundational skill that is critical to a student's success in all other content standards.
	Write fluidly and legibly in cursive or joined italics.	This language was added to Early Learning Foundations-Handwriting as a foundational skill that is critical to a student's success in all other content standards.
determine the meaning of words and phrases as they are used in a literary text, including those that allude to significant characters found in mythology (e.g., herculean). (ELA.4.R.C2.1)	Determine the meaning of words and phrases as they are used in a literary text, including words that allude to significant characters such as those found in mythology (e.g., herculean). (ELA.4.7)	To remove prescriptive language, to support teacher flexibility, and for clarity, the standard was reworded.
compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided in informational text. (ELA.4.R.C2.6)	Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in the focus and information provided in these informational texts. (ELA.4.12)	The revised language clarifies relationships between texts.
make connections between the text of a story or drama and a visual or oral presentation of the literary text, identifying where each version reflects specific descriptions and directions in the text. (ELA.4.R.C3.1)	Make connections between the text of a story or drama and a visual or oral presentation of the literary text, identifying where specific descriptions and directions in the text are reflected in the visual or oral presentation. (ELA.4.13)	The revised language clarifies connections between texts and visual/oral presentations.

by the end of the year read and comprehend informational texts, including history/social studies, science and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range. (ELA.4.R.C4.2)	By the end of the year read and comprehend informational texts, including social studies, science and technical texts, in the grades 4–5 text complexity range proficiently, with scaffolding as needed at the high end of the range. (ELA.4.19)	The word "history" was deleted to eliminate redundancy.
with some guidance and support from adults, use technology, including the internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting. (ELA.4.W.C10.3)	With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills. (ELA.4.25)	This standard was changed in response to a ripple effect of a 5th grade revision. Removing the page limit requirement creates the flexibility for teachers to determine how to help individual students develop and enhance their keyboarding skills.
5th Grade		
NxG CSO	WV CCRS	Implications
read with sufficient accuracy and fluency to support comprehension. • read on-level text with purpose and understanding. • read on-level prose and poetry orally with accuracy, appropriate rate and expression on successive readings. • use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.5.R.C8.1)	Read with sufficient accuracy and fluency to support comprehension. • Read on-level text with purpose and understanding. • Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. • Use context to confirm or self-correct word recognition and understanding, rereading as necessary. (ELA.5.I)	Fluency was moved to a new domain, Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards and objectives.
know and apply grade-level phonics and word analysis skills in decoding words. • use combined knowledge of all letter-sound correspondences, syllabication patterns and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. (ELA.5.R.C7.1)	Know and apply grade-level phonics and word analysis skills in decoding words. • Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. (ELA.5.II)	Phonics and Word Recognition was moved to Early Learning Foundations as a foundational skill that is critical to a student's success in all other content standards.
analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view	Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view	Revisions were made to support learning progression due to change made to 4th grade standard.

they represent in an informational text. (ELA.5.R.C2.6)	they represent in informational texts. (ELA.5.12)	
by the end of the year, read and comprehend informational texts, including history/social studies, science and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently. (ELA.5.R.C4.2)	By the end of the year, read and comprehend informational texts, including social studies, science, and technical texts, at the high end of the grades 4–5 text complexity range independently and proficiently. (ELA.5.19)	The word "history" was deleted to eliminate redundancy.
with some guidance and support from adults, use technology, including the internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting. (ELA.5.W.C10.3)	With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type accurately. (ELA.5.25)	This standard was changed to support the skill progression to 6th grade. Removing the page limit requirement creates the flexibility for teachers to determine how to help individual students develop and enhance their keyboarding skills.
6th Grade		
NxG CSO	WV CCRS	Implications
describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution. (ELA.6.R.C1.3)	Describe how a particular story's or drama's plot unfolds in a series of events and how the characters respond or change as the plot moves toward a resolution. (ELA.6.3)	Using the phrase "series of events" will promote grade-level appropriate discourse when students discuss the plot of a literary text.
determine an author's point of view or purpose in an informational text and explain how it is conveyed in the text. (ELA.6.R.C2.6)	Determine an author's point of view or purpose in an informational text and explain how it is communicated in the text. (ELA.6.12)	Using "communicated" promotes grade-level appropriate discourse when students discuss author's purpose of point of view in an informational text.
compare and contrast the experience of reading a story, drama or poem to listening to or viewing an audio, video or live version of the literary text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch. (ELA.6.R.C3.1)	Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the literary text, including contrasting what is "seen" and "heard" when reading the text to what is perceived when listening or watching. (ELA.6.13)	Clarification of the language in the standard provides teachers a greater understanding of the skills expected in mastery of the standard.
integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue. (ELA.6.R.C3.3)	Integrate information presented in different media or formats (e.g., visually and/or quantitatively) and in words to develop a coherent understanding of a topic or issue. (ELA.6.15)	Clarity of language makes the standard more accessible.
compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person) in informational text. (ELA.6.R.C3.5)	Compare and contrast two authors' presentations of events (e.g., a memoir written by and a biography on the same person) in informational text. (ELA.6.17)	Clarity of language makes the standard more accessible.

by the end of the year, read and comprehend literary nonfiction and other informational text in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range. (ELA.6.R.C4.2)	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 6–8 text complexity range proficiently, with scaffolding as needed at the high end of the range. (ELA.6.19)	Inclusion of the word "literary" in the NxG CSO about informational texts was confusing to educators and parents; removing this word clarifies the intent and scope of the standard.
use technology, including the internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting. (ELA.6.W.C10.3)	Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type efficiently and accurately. (ELA.6.25)	Removing the page limit requirement creates the flexibility for teachers to determine how to help individual students develop and enhance their keyboarding skills.
engage effectively in a range of collaborative discussions (one-on-one, in groups and teacher-led) with diverse partners on grade 6 topics, texts and issues, building on others' ideas and expressing their own clearly. • come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text or issue to probe and reflect on ideas under discussion. • follow rules for collegial discussions, set specific goals and deadlines and define individual roles as needed. • pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text or issue under discussion. • review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. (ELA.6.SL.C13.1)	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing ideas clearly. • Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. • Follow rules for shared discussions, set specific goals and deadlines, and define individual roles as needed. • Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. • Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. (ELA.6.30)	Removing the phrase "collegial discussions" and replacing it with "shared discussions" makes the standard more grade-level appropriate and promotes discourse among students as they engage in collaborative discussions.
determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. • use context (e.g., the overall meaning of a sentence or paragraph; a word's position or	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or	Replacing the word "preliminary" with "initial" ensures greater clarity and accessibility of the standard.

function in a sentence) as a clue to the meaning of a word or phrase. • use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, audible). • consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.6.L.C17.1)	function in a sentence) as a clue to the meaning of a word or phrase. • Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., audience, auditory, and audible). • Consult reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.6.39)	
acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.6.L.C17.3)	Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.6.41)	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.
7th Grade		
NxG CSO	WV CCRS	Implications
by the end of the year, read and comprehend literary nonfiction and other informational texts in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range. (ELA.7.R.C4.2)	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 6–8 text complexity range proficiently, with scaffolding as needed at the high end of the range. (ELA.7.19)	Inclusion of the word “literary” in the NxG CSO about informational texts was confusing to educators and parents; removing this word clarifies the intent and scope of the standard.
gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (ELA.7.W.C11.2)	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., MLA or APA). (ELA.7.27)	Including the two most commonly used citation formats in both liberal arts/humanities and STEM fields provides teachers clarification and context for addressing research skills.
determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies. • Use context (e.g., the overall	Replacing the word “preliminary” with “initial” ensures greater clarity and accessibility of the standard.

• use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel). • consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.7.L.C17.1)	meaning of a sentence or paragraph or a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, or rebel). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.7.39)	
acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.7.L.C17.3)	Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.7.41)	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.
8th Grade		
NxG CSO	WV CCRS	Implications
analyze how a modern work of fiction draws on themes, patterns of events or character types from myths, traditional stories or religious works such as the bible, including describing how the material is rendered new. (ELA.8.R.C3.2)	Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, including describing how the material is transformed in the modern work (e.g., how a modern interpretation of a Shakespearean text draws from the original text). (ELA.8.14)	The incorporation of a Shakespeare-related example provides consistency in the standard in terms of the learning progression. The high school versions of this standard contain grade-appropriate examples using Shakespeare. This inclusion creates stronger vertical alignment for cross-grade planning and professional learning.
analyze how a modern work of fiction draws on themes, patterns of events or character types from myths, traditional stories or religious works such as the bible, including describing how the material is rendered new. (ELA.8.R.C3.2)	Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, such as the Bible, including describing how the material is transformed in the modern work (e.g., how a modern	Following the 30-day comment period, an additional example was added to the standard.

	interpretation of a Shakespearean text draws from the original text). (ELA.8.14)	
by the end of the year, read and comprehend literary nonfiction and other informational text at the high end of the grades 6–8 text complexity band independently and proficiently. (ELA.8.R.C4.2)	By the end of the year, read and comprehend nonfiction and other informational texts at the high end of the grades 6–8 text complexity range independently and proficiently. (ELA.8.19)	Inclusion of the word "literary" in the NxG CSO about informational texts was confusing to educators and parents; removing this word clarifies the intent and scope of the standard.
gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (ELA.8.W.C11.2)	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., MLA or APA). (ELA.8.27)	Including the two most commonly used citation formats in both liberal arts/humanities and STEM fields provides teachers clarification and context for addressing research skills.
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grade 8 reading objectives to literature (e.g., "analyze how a modern work of fiction draws on themes, patterns of events or character types from myths, traditional stories or religious works such as the bible, including describing how the material is rendered new"). • apply grade 8 reading objectives to literary nonfiction and other informational texts (e.g., "delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced"). (ELA.8.W.C11.3)	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, including describing how the material is transformed in the modern work (e.g., how a modern interpretation of a Shakespearean text draws from the original text)"). • Apply grade 8 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced"). (ELA.8.28)	This revision supports the change made to WV CCRS ELA.8.14. Students will be expected to use writing skills to communicate their analyses conducted as part of the reading standards.
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grade 8 reading objectives to literature (e.g., "analyze how a modern work of fiction draws on themes, patterns of events or character types from	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or	Following the 30-day comment period, this revision supports the change made to WV CCRS ELA.8.14. An additional example was added.

myths, traditional stories or religious works such as the bible, including describing how the material is rendered new"). • apply grade 8 reading objectives to literary nonfiction and other informational texts (e.g., "delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced"). (ELA.8.W.C11.3)	character types from myths, traditional stories, or religious works, such as the Bible, including describing how the material is transformed in the modern work (e.g., how a modern interpretation of a Shakespearean text draws from the original text)"). • Apply grade 8 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced"). (ELA.8.28)	
demonstrate command of the conventions of standard English grammar and usage when writing or speaking. • explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. • form and use verbs in the active and passive voice. •form and use verbs in the indicative, imperative, interrogative, conditional and subjunctive mood. •recognize and correct inappropriate shifts in verb voice and mood. (ELA.8.L.C15.1a)	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Explain the function of verbals (gerunds, participles, and infinitives) in general and their function in particular sentences. (ELA.8.36)	The removal of three bullets provides greater clarity and focus to the language skills addressed in the standard. This standard is now solely focused on the use of verbals.
demonstrate command of the conventions of standard English grammar and usage when writing or speaking. • explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences. • form and use verbs in the active and passive voice. • form and use verbs in the indicative, imperative,	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Explain the function of verbals (gerunds, participles, and infinitives) in general and their function in particular sentences. (ELA.8.36)	The removal of three bullets provides greater clarity and focus to the language skills addressed in the standard. This standard is now solely focused on the use of verbals.

interrogative, conditional and subjunctive mood. • recognize and correct inappropriate shifts in verb voice and mood. (ELA.8.L.C15.1c)		
use knowledge of language and its conventions when writing, speaking, reading or listening. • use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact). (ELA.8.L.C16.1a)	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Use verbs in the active and passive voice (e.g., emphasizing the actor or the action). • Use verbs in the indicative, imperative, interrogative, conditional and subjunctive mood to achieve particular effects (e.g., expressing uncertainty or describing a state contrary to fact). • Recognize and correct inappropriate shifts in verb voice and mood. (ELA.8.38)	The addition of two bullets provides clarity to teachers regarding the grammar skills students should master in this grade level. This standard is now solely focused on voice and mood as they relate to verbs.
determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies. • use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede). • consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.8.L.C17.1)	Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence or paragraph or a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, or secede). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.8.39)	Replacing the word "preliminary" with "initial" ensures greater clarity and accessibility of the standard.

acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.8.L.C17.3)	Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.8.41)	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.
9th Grade		
NxG CSO	WV CCRS	Implications
analyze how the author unfolds an analysis or series of ideas or events in informational texts, including the order in which the points are made, how they are introduced and developed and the connections that are drawn between them. (ELA.9.R.C1.6)	Analyze how the author unfolds an analysis or series of ideas or events in an informational text, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them. (ELA.9.6)	The addition of the Oxford comma provides clarity to the standard and helps teachers more easily determine how to structure and chunk instruction around informational texts.
analyze how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the bible or how a later author draws on a play by Shakespeare). (ELA.9.R.C3.2)	Analyze how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid, or how a later author draws on a play by Shakespeare). (ELA.9.14)	The clarification of unique examples creates consistency in this standard across grade levels. This inclusion creates stronger vertical alignment for cross-grade planning and professional learning.
analyze how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the bible or how a later author draws on a play by Shakespeare). (ELA.9.R.C3.2)	Analyze how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible, or how a later author draws on a play by Shakespeare). (ELA.9.14)	Following the 30-day comment period, an additional example was added to the standard.
analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, The Gettysburg Address, Roosevelt's Four Freedoms Speech, King's "Letter From Birmingham Jail"), including how they address related themes and concepts. (ELA.9.C3.5)	Analyze influential U.S. documents of historical and literary significance (e.g., Washington's Farewell Address or The Gettysburg Address), including how they address related themes and concepts. (ELA.9.17)	Including unique examples for each grade level provides greater perspective of the texts that fall within the grade band reading expectations and, at the same time, strengthens the distinction between the grades within the grade bands.
by the end of the year, read and comprehend literary nonfiction in the grades 9-10 text complexity band proficiently, with scaffolding as needed at the high end of the range. (ELA.9.R.C4.2)	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 9-10 text complexity range proficiently, with scaffolding as needed at the high end of the range. (ELA.9.19)	Inclusion of the word "literary" in the NxG CSO about informational texts was confusing to educators and parents; removing this word clarifies the intent and scope of the standard.
gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the	Including the two most commonly used citation formats in both liberal arts/humanities and STEM fields provides teachers

usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. (ELA.9.W.C11.2)	usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation (e.g., MLA or APA). (ELA.9.27)	clarification and context for addressing research skills.
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grades 9–10 Reading objectives to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). • apply grade 9 Reading objectives to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.9.W.C11.3a)	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply *grades 9 Reading standards* to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or how a later author draws on a play by Shakespeare]"). • Apply *grade 9 Reading standards* to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.9.28)	This revision supports the change made to WV CCRS ELA.9.14. Students will be expected to use writing skills to communicate their analyses conducted as part of the reading standards.
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grades 9–10 Reading objectives to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). • apply grade 9 Reading objectives to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 9 Reading standards to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible, or how a later author draws on a play by Shakespeare]"). • Apply grade 9 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the	Following the 30-day comment period, this revision supports the change made to WV CCRS ELA.9.14. An additional example was added.

reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.9.W.C11.3a)	argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.9.28)	
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grades 9–10 Reading objectives to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). • apply grade 9 Reading objectives to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.9.W.C11.3a)	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 9 Reading standards to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible, or how a later author draws on a play by Shakespeare]"). • Apply grade 9 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.9.28)	Following the 30-day comment period, the typographical error in the first bullet was corrected.
initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups and teacher-led) with diverse partners on grade 9 topics, texts and issues, building on others' ideas and expressing their own clearly and persuasively. • come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. • work with peers to set rules for collegial discussions and decision-making (e.g., informal	Initiate and effectively participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 9 topics, texts, and issues, building on others' ideas and expressing ideas clearly and persuasively. • Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. • Work with peers to set rules for collegial discussions and decision-making (e.g., informal	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.

consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines and individual roles as needed. • propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify or challenge ideas and conclusions. • respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented. (ELA.9.SL.C13.1)	consensus, taking votes on key issues, or presentation of alternate views); set clear goals, deadlines, and individual roles as needed. • Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. • Respond thoughtfully to diverse perspectives; summarize points of agreement and disagreement and, when warranted, qualify or justify views and understanding and make new connections in light of the evidence and reasoning presented. (ELA.9.30)	
apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style and to comprehend more fully when reading or listening. • write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian's Manual for Writers) appropriate for the discipline and writing type. (ELA.9.L.C16.1)	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. • Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook or APA Handbook) appropriate for the discipline and writing type. (ELA.9.38)	The *Turabian's Manual for Writers* mentioned in the NxG CSOs is most often used for theses and dissertations; it is not appropriate for public school students as it is not one of the two most commonly used formats for style and citations. The formats included in the WV CCRS, however, are examples; teachers retain the flexibility to use the format and/or style manual that best meets students' needs.
determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 9 reading and content, choosing flexibly from a range of strategies. • use context (e.g., the overall meaning of a sentence, paragraph or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy). • consult general and specialized reference materials	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 9 reading and content, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph or text or a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical, advocate, or advocacy). • Consult general and specialized reference materials	Replacing the word "preliminary" with "initial" ensures greater clarity and accessibility of the standard.

(e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech or its etymology. • verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.9.L.C17.1)	(e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.9.39)	
acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.9.L.C17.3)	Acquire and accurately use general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.9.41)	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.
10th Grade		
NxG CSO	WV CCRS	Implications
analyze how the author unfolds an analysis or series of complex ideas or events in informational texts, including the order in which the points are made, how they are developed and interact. (ELA.10.R.C1.6)	Analyze how the author unfolds an analysis or series of complex ideas or events in informational texts, including the order in which the points are made, how they are developed, and how they interact. (ELA.10.6)	The addition of the Oxford comma provides clarity to the standard and helps teachers more easily determine how to structure and chunk instruction around informational texts.
analyze the representation of a literary text of a subject or a key scene in two or more different artistic mediums, including what is emphasized or absent in each treatment and why (e.g., Auden's "Musée des Beaux Arts" and Breughel's Landscape with the Fall of Icarus). (ELA.10.R.C3.1)	Analyze the representation, in a literary text, of a subject or a key scene in two or more different artistic mediums, including what is emphasized or absent in each treatment and why (e.g., Auden's "Musée des Beaux Arts" and Breughel's Landscape with the Fall of Icarus). (ELA.10.13)	The wording of the NxG CSO was unclear and confusing. The proposed revision provides clarity to teachers, students, and parents as to the skills being developed with the use of literary texts.
analyze and defend how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare). (ELA.10.R.C3.2)	Analyze and defend how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid, or how a later author draws on a play by Shakespeare). (ELA.10.14)	The proposed revision supports the progression of a change made to a 9th grade standard. The vertical alignment has been strengthened and streamlined through the use of consistent examples. This revision creates stronger vertical alignment for cross-grade planning and professional learning.

analyze and defend how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare). (ELA.10.R.C3.2)	Analyze and defend how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible, or how a later author draws on a play by Shakespeare). (ELA.10.14)	Following the 30-day comment period, an additional example was added to the standard.
analyze and defend seminal U.S. documents of historical and literary significance (e.g. Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts. (ELA.10.R.C3.5)	Analyze and defend influential U.S. documents of historical and literary significance (e.g. Roosevelt's Four Freedoms speech or King's "Letter from Birmingham Jail"), including how they address related themes and concepts. (ELA.10.17)	Including unique examples for each grade level provides greater perspective of the texts that fall within the grade band reading expectations and, at the same time, strengthens the distinction between the grades within the grade bands.
by the end of the year, read and comprehend literary nonfiction, independently and proficiently, at the high end of the grade 9-10 text complexity band. (ELA.10.R.C4.2)	By the end of the year, read and comprehend nonfiction and other informational texts, independently and proficiently, at the high end of the grade 9-10 text complexity range. (ELA.10.19)	Inclusion of the word "literary" in the NxG CSO about informational texts was confusing to educators and parents; removing this word clarifies the intent and scope of the standard.
gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in terms of task, purpose and audience answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation. (ELA.10.W.C11.2)	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in terms of task, purpose, and audience and in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation (e.g., MLA or APA). (ELA.10.27)	Including the two most commonly used citation formats in both liberal arts/humanities and STEM fields provides teachers clarification and context for addressing research skills.
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grade 10 Reading objectives to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). • apply grade 10 Reading objectives to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 10 Reading standards to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or how a later author draws on a play by Shakespeare]"). • Apply grade 10 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the	This revision supports the change made to WV CCRS ELA.10.14. Students will be expected to use writing skills to communicate their analyses conducted as part of the reading standards.

text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.10.W.C11.3)	argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.10.28)	
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grade 10 Reading objectives to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). • apply grade 10 Reading objectives to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.10.W.C11.3)	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 10 Reading standards to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). • Apply grade 10 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning"). (ELA.10.28)	Following the 30-day comment period, this revision supports the change made to WV CCRS ELA.10.14. An additional example was added.
apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style and to comprehend more fully when reading or listening. • write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian's Manual for Writers) appropriate for the discipline and writing type. (ELA.10.L.C16.1)	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. • Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook or APA Handbook) appropriate for the discipline and writing type. (ELA.10.38)	The *Turabian's Manual for Writers* mentioned in the NxG CSOs is most often used for theses and dissertations; it is not appropriate for public school students as it is not one of the two most commonly used formats for style and citations. The formats included in the WV CCRS, however, are examples; teachers retain the flexibility to use the format and/or style manual that best meets students' needs.
determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 10 reading and content, choosing flexibly from a range of strategies. • use context (e.g., the overall meaning of a sentence, paragraph or text; a word's	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 10 reading and content, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph or text or a word's	Replacing the word "preliminary" with "initial" ensures greater clarity and accessibility of the standard.

position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical; advocate, advocacy). • consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, part of speech or etymology. • verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.10.L.C17.1)	position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., analyze, analysis, analytical, advocate, or advocacy). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, part of speech, or etymology. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.10.39)	
acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.10.L.C17.3)	Acquire and accurately use general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.10.41)	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.
11th Grade		
NxG CSO	WV CCRS	Implications
delineate and evaluate the reasoning in seminal U.S. informational texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). (ELA.11.R.C3.4)	Delineate and evaluate the reasoning in influential U.S. informational texts, including the application of constitutional principles (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist Papers* or presidential addresses). (ELA.11.16)	Removing the phrase "and use of legal reasoning" gives teachers the flexibility to focus on the delineation and evaluation of reasoning in significant informational texts.
analyze seventeenth-, eighteenth- and nineteenth-century foundational U.S. informational	Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. informational	Including unique examples for each grade level provides greater perspective of the texts that fall

documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights and Lincoln's Second Inaugural Address) for their themes, purposes and rhetorical features. (ELA.11.R.C3.5)	documents of historical and literary significance (e.g., *The Declaration of Independence* and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features. (ELA.11.17)	within the grade band reading expectations and, at the same time, strengthens the distinction between the grades within the grade bands.
analyze seventeenth-, eighteenth- and nineteenth-century foundational U.S. informational documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights and Lincoln's Second Inaugural Address) for their themes, purposes and rhetorical features. (ELA.11.R.C3.5)	Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. informational documents of historical and literary significance (e.g., The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features. (ELA.11.17)	Following the 30-day comment period, congruent examples were included for 11th and 12th grade.
by the end of the year, read and comprehend literary nonfiction in the grades 11-CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. (ELA.11.R.C4.2)	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 11-12 text complexity range proficiently, with scaffolding as needed at the high end of the range. (ELA.11.19)	Inclusion of the word "literary" in the NxG CSO about informational texts was confusing to educators and parents; removing this word clarifies the intent and scope of the standard.
gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. (ELA.11.W.C11.2)	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (e.g., MLA or APA). (ELA.11.27)	Including the two most commonly used citation formats in both liberal arts/humanities and STEM fields provides teachers clarification and context for addressing research skills.
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grade 11 Reading objectives to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics").	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 11 Reading standards to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics").	Following the 30-day comment period, the phrase "and use of legal reasoning" was removed from the quoted reading standard in order to ensure consistency across the English language arts domains.

• apply grade 11 Reading objectives to literary nonfiction (e.g., "Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes and arguments in works of public advocacy [e.g., The Federalist, presidential addresses]"). (ELA.11.W.C11.3)	• Apply grade 11 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the reasoning in influential U.S. texts, including the application of constitutional principles [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes and arguments in works of public advocacy [e.g., The Federalist Papers or presidential addresses]"). (ELA.11.28)	
determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 11 reading and content, choosing flexibly from a range of strategies. • use context (e.g., the overall meaning of a sentence, paragraph or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable). • consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology or its standard usage. • verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.11.L.C17.1)	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 11 reading and content, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, or conceivable). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.11.39)	Replacing the word "preliminary" with "initial" ensures greater clarity and accessibility of the standard.
acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when	Acquire and accurately use general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.

considering a word or phrase important to comprehension or expression. (ELA.11.L.C17.3)	considering a word or phrase important to comprehension or expression. (ELA.11.41)	
12th Grade		
NxG CSO	WV CCRS	Implications
delineate and evaluate the reasoning in seminal U.S. informational texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes and arguments in works of public advocacy (e.g., The Federalist, presidential addresses). (ELA.12.R.C3.4)	Delineate and evaluate the reasoning in influential U.S. informational texts, including the application of constitutional principles (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist Papers* or presidential addresses). (ELA.12.16)	Removing the phrase "and use of legal reasoning" gives teachers the flexibility to focus on the delineation and evaluation of reasoning in significant informational texts.
analyze seventeenth-, eighteenth- and nineteenth-century foundational U.S. informational documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights and Lincoln's Second Inaugural Address) for their themes, purposes and rhetorical features and current relevancy. (ELA.12.R.C3.5)	Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. informational documents of historical and literary significance (e.g., the *Preamble to the Constitution* and the *Bill of Rights*) for their themes, purposes, rhetorical features, and current relevancy. (ELA.12.17)	Including unique examples for each grade level provides greater perspective of the texts that fall within the grade band reading expectations and, at the same time, strengthens the distinction between the grades within the grade bands.
analyze seventeenth-, eighteenth- and nineteenth-century foundational U.S. informational documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights and Lincoln's Second Inaugural Address) for their themes, purposes and rhetorical features and current relevancy. (ELA.12.R.C3.5)	Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. informational documents of historical and literary significance (e.g., The Declaration of Independence, the Preamble to the Constitution, and the Bill of Rights and Lincoln's Second Inaugural Address) for their themes, purposes, rhetorical features, and current relevancy. (ELA.12.17)	Following the 30-day comment period, congruent examples were added for 11th and 12th grade.
by the end of the year, read and comprehend literary nonfiction independently and proficiently at the high end of the grades 11-CCR text complexity band. (ELA.12.R.C4.2)	By the end of the year, read and comprehend nonfiction and other informational texts independently and proficiently at the high end of the grades 11-12 text complexity range. (ELA.12.19)	Inclusion of the word "literary" in the NxG CSO about informational texts was confusing to educators and parents; removing this word clarifies the intent and scope of the standard.
gather and synthesize relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths	Gather and synthesize relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths	Including the two most commonly used citation formats in both liberal arts/humanities and STEM fields provides teachers

and limitations of each source in terms of the task, purpose and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. (ELA.12.W.C11.2)	and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (e.g., MLA or APA). (ELA.12.27)	clarification and context for addressing research skills.
draw evidence from literary or informational texts to support analysis, reflection and research. • apply grade 12 Reading objectives to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics"). • apply grade 12 Reading objectives to literary nonfiction (e.g., "Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes and arguments in works of public advocacy [e.g., The Federalist, presidential addresses]"). (ELA.12.W.C11.3)	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade 12 Reading standards to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics"). • Apply grade 12 Reading standards to nonfiction and other informational texts (e.g., "Delineate and evaluate the reasoning in influential U.S. texts, including the application of constitutional principles [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes and arguments in works of public advocacy [e.g., The Federalist Papers or presidential addresses]"). (ELA.12.28)	Following the 30-day comment period, the phrase "and use of legal reasoning" was removed from the quoted reading standard in order to ensure consistency across the English language arts domains.
determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 12 reading and content, choosing flexibly from a range of strategies. • use context (e.g., the overall meaning of a sentence, paragraph or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, conceivable).	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 12 reading and content, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., conceive, conception, or conceivable).	Replacing the word "preliminary" with "initial" ensures greater clarity and accessibility of the standard.

• consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology or its standard usage. • verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.12.L.C17.1)	• Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary). (ELA.12.39)	
acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.12.L.C17.3)	Acquire and accurately use general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. (ELA.12.41)	The misplaced modifier in the NxG CSO made the language unnecessarily complex; appropriately placing the modifier ensures greater clarity and accessibility.
Transition English Language Arts for Seniors		
NxG CSO	WV CCRS	Implications
cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. (ELA.T.R.C1.1)	Cite strong and thorough textual evidence to support analysis of what the literary text says explicitly as well as inferences drawn from the text, including determining where the literary text leaves matters uncertain. (ELA.T.1)	The clarifications included in this standard provide focus for teachers to help students apply these skills to literary texts.
determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text. (ELA.T.R.C1.2)	Determine two or more themes or central ideas of a literary text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the literary text. (ELA.T.2)	The clarifications included in this standard provide focus for teachers to help students apply these skills to literary texts.
cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain. (ELA.T.R.C1.4)	Cite strong and thorough textual evidence to support analysis of what the informational text says explicitly as well as inferences drawn from the text, including determining where the informational text leaves matters uncertain. (ELA.T.4)	The clarifications included in this standard provide focus for teachers to help students apply these skills to informational texts.

determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text. (ELA.T.R.C1.5)	Determine two or more central ideas of an informational text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the informational text. (ELA.T.5)	The clarifications included in this standard provide focus for teachers to help students apply these skills to informational texts.
determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) (ELA.T.R.C2.1)	Determine the meaning of words and phrases as they are used in a variety of literary texts, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.) (ELA.T.7)	The clarifications included in this standard provide focus for teachers to help students apply these skills to literary texts.
determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines “faction” in Federalist No. 10). (ELA.T.R.C2.3)	Determine the meaning of words and phrases as they are used in an informational text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines “faction" in Federalist No. 10). (ELA.T.9)	The clarifications included in this standard provide focus for teachers to help students apply these skills to informational texts.

Number of English Language Arts Standards by Grade as a Result of the Repeal and Replace of WVBE Policy 2520.1A

Grade	Number of Standards
ELA - Kindergarten	37 *5 Foundations for Early Learning*
ELA - Grade 1	37 *5 Foundations for Early Learning*
ELA – Grade 2	38 *3 Foundations for Early Learning*
ELA – Grade 3	40 *3 Foundations for Early Learning*
ELA – Grade 4	41 *3 Foundations for Early Learning*
ELA – Grade 5	41 *2 Foundations for Early Learning*
ELA – Grade 6	41
ELA – Grade 7	41
ELA – Grade 8	41
ELA – Grade 9	41
ELA – Grade 10	41
ELA – Grade 11	41
ELA – Grade 12	41
**Foundations for Early Learning are critical skills for literacy in grades K-5.*	

Mathematics (Policy 2520.2B) Revision Implications

Implications of Changes Made in the Repeal and Replace of Policy 2520.2B (Mathematics)

Kindergarten		
NxG CSO	WV CCRS	Implications
identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”). M.K.G.3	Through the use of real-life objects, identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). M.K.19	Clarifying language highlights the need for real-world connections.
analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length). M.K.G.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”), and other attributes (e.g., having sides of equal length). Instructional Note: Student focus should include real-world shapes. M.K.20	Clarifying language highlights the need for real-world connections.
classify objects into given categories, count the numbers of objects in each category, and sort the categories by count. Category counts should be limited to less than or equal to 10. M.K.MD.3	Classify objects into given categories, count the numbers of objects in each category, and sort the categories by count. Category counts should be limited to less than or equal to 10. (e.g., Identify coins and sort them into groups of 5s or 10s.) M.K.16	Following the 30-day comment period, identification of coins was added.
1st Grade		
NxG CSO	WV CCRS	Implications
add and subtract within 20, demonstrating fluency for addition and subtraction within 10 and use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8= 4); and creating equivalent but easier or known sums (e.g., adding 6 +7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). M.1.OA.6	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10 and use strategies such as • counting on; • making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); • decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); • using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8= 4); and • creating equivalent but easier or known sums (e.g., adding 6 +7 by creating the known	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

	equivalent 6 + 6 + 1 = 12 + 1 = 13). M.1.6	
add within 100, including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used and understand that in adding two-digit numbers, one adds tens and tens, ones and ones and sometimes it is necessary to compose a ten. M.1.NBT.4	Add within 100, including • adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10, • using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction. Relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten. M.1.12	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences) using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction, and relate the strategy to a written method and explain the reasoning used. M.1.NBT.6	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences) using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction. Relate the strategy to a written method and explain the reasoning used. (M.1.14)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
understand the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight or nine tens (and 0 ones). M.1.NBT.2	Understand the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." (e.g., A group of ten pennies is equivalent to a dime.) b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight or nine tens (and 0 ones). M.1.10	Following the 30-day comment period, an example related to the value of coins was added to the standard.

2nd Grade		
NxG CSO	WV CCRS	Implications
add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction, relate the strategy to a written method and understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones and sometimes it is necessary to compose or decompose tens or hundreds. M.2.NBT.7	Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones and sometimes it is necessary to compose or decompose tens or hundreds. M.2.11	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object and show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. M.2.MD.9	Generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. M.2.22	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories and solve simple put-together, take-apart and compare problems using information presented in a bar graph. M.2.MD.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. M.2.23	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces (sizes are compared directly or visually, not compared by measuring) and identify triangles, quadrilaterals, pentagons, hexagons and cubes. M.2.G.1	Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces (sizes are compared directly or visually, not compared by measuring). Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. M.2.24	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
partition circles and rectangles into two, three or four equal shares, describe the shares using the words *halves, thirds, half of, a third of,* etc., describe the whole as two halves, three thirds, four fourths and recognize that equal shares of	Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

identical wholes need not have the same shape. M.2.G.3	identical wholes need not have the same shape. M.2.26	
measure the length of an object twice, using length units of different lengths for the two measurements, describe how the two measurements relate to the size of the unit chosen. M.2.MD.2	Measure the length of an object twice, using length units of different lengths for the two measurements, describe how the two measurements relate to the size of the unit chosen. M.2.15	Following the 30-day comment period, the typographical error in was corrected.
3rd Grade		
NxG CSO	WV CCRS	Implications
fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations and by the end of Grade 3, know from memory all products of two one-digit numbers. M.3.OA.7	Learn multiplication tables (facts) with speed and memory in order to fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows that 40 ÷ 5 = 8) or properties of operations by the end of Grade 3. M.3.7	Clarifying language highlights the need to learn multiplication tables (facts) with speed and memory.
solve two-step word problems using the four operations, represent these problems using equations with a letter standing for the unknown quantity and assess the reasonableness of answers using mental computation and estimation strategies including rounding. (*This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parenthesis to specify a particular order (Order of Operations).)* M.3.OA.8	Solve two-step word problems using the four operations, represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. Instructional Note: This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations). M.3.8	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts and understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*. M.3.NF.1	Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b. Instructional Note: Fractions in this standard are limited to denominators of 2, 3, 4, 6, and 8. M.3.13	Following the 30-day comment period, relevant information was added to limit the focus of the standard to denominators of 2, 3, 4, 6, and 8.

understand a fraction as a number on the number line and represent fractions on a number line diagram a. represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts and recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line. b. represent a fraction *a*/*b* on a number line diagram by marking off *a* lengths 1/*b* from 0 and recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line. M.3.NF.2	Understand a fraction as a number on the number line and represent fractions on a number line diagram. a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line. (e.g., Given that b parts is 4 parts, then 1/b represents 1/4. Students partition the number line into fourths and locate 1/4 on the number line.) b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. (e.g., Given that a/b represents 3/4 or 6/4, students partition the number line into fourths and represent these fractions accurately on the same number line; students extend the number line to include the number of wholes required for the given fractions.) M.3.14	Examples were included for clarification.
understand a fraction as a number on the number line and represent fractions on a number line diagram a. represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts and recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line. b. represent a fraction *a*/*b* on a number line diagram by	Understand a fraction as a number on the number line and represent fractions on a number line diagram. a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line. (e.g., Given that b parts is 4 parts, then 1/b	Following the 30-day comment period, relevant information was added to limit the focus of the standard to denominators of 2, 3, 4, 6, and 8.

marking off *a* lengths 1/*b* from 0 and recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line. M.3.NF.2	represents 1/4. Students partition the number line into fourths and locate 1/4 on the number line.) b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. (e.g., Given that a/b represents 3/4 or 6/4, students partition the number line into fourths and represent these fractions accurately on the same number line; students extend the number line to include the number of wholes required for the given fractions.) Instructional Note: Fractions in this standard are limited to denominators of 2, 3, 4, 6, and 8. M.3.14	
explain equivalence of fractions in special cases and compare fractions by reasoning about their size a. understand two fractions as equivalent (equal) if they are the same size or the same point on a number line, b. recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3) and explain why the fractions are equivalent, e.g., by using a visual fraction model, *c.* express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers (*Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.),* *d.* compare two fractions with the same numerator or the same denominator by reasoning about their size, recognize that comparisons	Explain equivalence of fractions in special cases and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line. b. Recognize and generate simple equivalent fractions (e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent (e.g., by using a visual fraction model). c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. (e.g., Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.) d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons	Following the 30-day comment period, relevant information was added to limit the focus of the standard to denominators of 2, 3, 4, 6, and 8.

are valid only when the two fractions refer to the same whole, record the results of comparisons with the symbols >, = or < and justify the conclusions, e.g., by using a visual fraction model. M.3.NF.3	are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, = or < and justify the conclusions (e.g., by using a visual fraction model). Instructional Note: Fractions in this standard are limited to denominators of 2, 3, 4, 6, and 8. M.3.15	
tell and write time to the nearest minute, measure time intervals in minutes and solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram. M.3.MD.1	Tell and write time to the nearest minute, measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes (e.g., by representing the problem on a number line diagram). M.3.16	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg) and liters (*l*) (*Excludes compound units such as cm^3 and finding the geometric volume of a container.)* and subtract, multiply or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (*Excludes multiplicative comparison problems - problems involving notions of "times as much".)* M.3.MD.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg) and liters (l). Add, subtract, multiply or divide to solve one-step word problems involving masses or volumes that are given in the same units (e.g., by using drawings, such as a beaker with a measurement scale) to represent the problem. Instructional Note: Exclude compound units such as cm^3 and finding the geometric volume of a container. M.3.17	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
draw a scaled picture graph and a scaled bar graph to represent a data set with several categories and solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.* M.3.MD.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs (e.g., draw a bar graph in which each square in the bar graph might represent 5 pets). M.3.18	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch and show the data by	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves or quarters. M.3.MD.4	a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves or quarters. M.3.19	
understand that shapes in different categories (e.g., rhombuses, rectangles and others) may share attributes (e.g., having four sides), that the shared attributes can define a larger category (e.g. quadrilaterals), recognize rhombuses, rectangles and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories. M.3.G.1	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), that the shared attributes can define a larger category (e.g. quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. M.3.24	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as ¼ or the area of the shape. M.3.G.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as ¼ or the area of the shape. M.3.25	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
4th Grade		
NxG CSO	WV CCRS	Implications
know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec, within a single system of measurement, express measurements in a larger unit in terms of a smaller unit, record measurement equivalents in a two column table, (For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in.) and generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36). M.4.MD.1	Know relative sizes of measurement units within a system of units, including the metric system (km, m, cm; kg, g; l, ml), the standard system (lb, oz), and time (hr, min, sec.). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. (e.g., Know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...) (M.4.19)	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5 and represent verbal statements of multiplicative	Interpret a multiplication equation as a comparison (e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5). Represent verbal statements of multiplicative	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

comparisons as multiplication equations. M.4.OA.1	comparisons as multiplication equations. M.4.1	
solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted, represent these problems using equations with a letter standing for the unknown quantity and assess the reasonableness of answers using mental computation and estimation strategies including rounding. M.4.OA.3	Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. M.4.3	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
find all factor pairs for a whole number in the range 1–100, recognize that a whole number is a multiple of each of its factors, determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number and determine whether a given whole number in the range 1–100 is prime or composite. M.4.OA.4	Find all factor pairs for a whole number in the range 1–100, recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite. M.4.4	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
generate a number or shape pattern that follows a given rule and identify apparent features of the pattern that were not explicit in the rule itself. *For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.* M.4.OA.5	Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. (e.g., Given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.) M.4.5	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations and/or the relationship between multiplication and division and illustrate and explain the calculation by using equations, rectangular arrays and/or area	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations,	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

models. M.4.NBT.6	rectangular arrays and/or area models. M.4.11	
explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size and use this principle to recognize and generate equivalent fractions. M.4.NF.1	Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. M.4.12	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½, recognize that comparisons are valid only when the two fractions refer to the same whole and record the results of comparisons with symbols >, = or <, and justify the conclusions, e.g., by using a visual fraction model. M.4.NF.2	Compare two fractions with different numerators and different denominators (e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½). Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, = or <, and justify the conclusions by using a visual fraction model. M.4.13	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects and money, including problems involving simple fractions or decimals and problems that require expressing measurements given in a larger unit in terms of a smaller unit and represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. M.4.MD.2	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. M.4.20	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8) and solve problems involving addition and subtraction of fractions by using information presented in line plots (for example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection).	Apply the area and perimeter formulas for rectangles in real world and mathematical problems by viewing the area formula as a multiplication equation with an unknown factor. (e.g., find the width of a rectangular room given the area of the flooring and the length.) M.4.22	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

M.4.MD.4		
recognize angle measure as additive, when an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts and solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure. M.4.MD.7	Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems (e.g., by using an equation with a symbol for the unknown angle measure). M.4.25	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size, recognize right triangles as a category and identify right triangles. M.4.G.2	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. M.4.27	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
5th Grade		
NxG CSO	WV CCRS	Implications
generate two numerical patterns using two given rules, identify apparent relationships between corresponding terms, form ordered pairs consisting of corresponding terms from the two patterns and graph the ordered pairs on a coordinate plane. *For example, given the rule "Add 3" and the starting number 0 and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.* M.5.OA.3	Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. (e.g., Given the rule "Add 3" and the starting number 0 and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.) M.5.3	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
explain patterns in the number of zeros of the product when multiplying a number by powers of 10, explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10 and use whole-number exponents to denote powers of 10. M.5.NBT.2	Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. M.5.5	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays and/or area models. M.5.NBT.6	Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. M.5.9	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
add, subtract, multiply and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations and/or the relationship between addition and subtraction, relate the strategy to a written method and explain the reasoning used. M.5.NBT.7	Add, subtract, multiply and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between related operations, relate the strategy to a written method and explain the reasoning used. (M.5.10)	The language change expands the content of the standard to include relationships between multiplication and division with the relationships between addition and subtraction.
solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem and use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.* M.5.NF.2	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers (e.g., recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2). M.5.12	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$) and solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3 and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want*	Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers by using visual fraction models or equations to represent the problem. (e.g., Interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3 and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie? M.5.NF.3	sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?) M.5.13	
apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction a. interpret the product (a/b) × q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. *For example, use a visual fraction model to show (2/3) × 4 = 8/3 and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = ac/bd.)* b. find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths and show that the area is the same as would be found by multiplying the side lengths, multiply fractional side lengths to find areas of rectangles and represent fraction products as rectangular areas. M.5.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product (a/b) × q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a × q ÷ b. (e.g., Use a visual fraction model to show (2/3) × 4 = 8/3 and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15.) Instructional Note: In general, (a/b) × (c/d) = ac/bd. b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles and represent fraction products as rectangular areas. M.5.14	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8) and use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.* M.5.MD.2	Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. (e.g., Given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally). M.5.19	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume	Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume.	The standard was reworded for clarity, providing educators a clearer description of learning target(s).

a. find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base and represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. b. apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real-world and mathematical problems. c. recognize volume as additive and find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems. M.5.AD.5	a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes (e.g., to represent the associative property of multiplication). b. Apply the formulas V = l × w × h and V = b × h for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real-world and mathematical problems. c. Recognize volume as additive and find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems. M.5.22	
use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates and understand that the first number indicates how far to travel from the origin in the direction of one axis and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate). M.5.G.1	Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines, the origin, arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). M.5.23	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
6th Grade		
NxG CSO	WV CCRS	Implications

recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. M.6.SP.3	Through informal observation, understand that a set of data collected to answer a statistical question has a distribution which can be described by its center (mean/median), spread (range), and overall shape. M.6.26	Language relating to the concept of statistical variation has been removed from grade 6 standards. Clarifying language highlights the informal nature of students' introduction to statistics.
summarize numerical data sets in relation to their context, such as by: a. reporting the number of observations. b. describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. M.6.SP.5	Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center to the shape of the data distribution and the context in which the data were gathered. M.6.29	Language relating to the concept of statistical variation has been removed from grade 6 standards.
7th Grade		
NxG CSO	WV CCRS	Implications
Formerly a 6th grade standard.	Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. M.7.19	Language relating to the introduction of the concept of statistical variation has been moved to grade 7.
Formerly a 6th grade standard.	Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured	Language relating to the introduction of the concept of statistical variation has been moved to grade 7.

	and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. M.7.20	
apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged. b. understand $p + q$ as the number located a distance $\|q\|$ from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. c. understand subtraction of rational numbers as adding the additive inverse, $p – q = p + (–q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference and apply this principle in real-world	Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. Describe situations in which opposite quantities combine to make 0. (e.g., A hydrogen atom has 0 charge because its two constituents are oppositely charged.) b. Understand p + q as the number located a distance |q| from p, in the positive or negative direction, depending on whether q is positive or negative. (i.e., To add "p + q" on the number line, start at "0" and move to "p" then move |q| in the positive or negative direction depending on whether "q" is positive or negative.) Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. c. Understand subtraction of rational numbers as adding the additive inverse, p – q = p + (–	Clarifying language regarding the addition on the number line (p + q) was included.

contexts. d. apply properties of operations as strategies to add and subtract rational numbers. M.7.NS.1	q). Show that the distance between two rational numbers on the number line is the absolute value of their difference and apply this principle in real-world contexts. d. Apply properties of operations as strategies to add and subtract rational numbers. M.7.4	
recognize and represent proportional relationships between quantities. a. decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. b. identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams and verbal descriptions of proportional relationships. c. represent proportional relationships by equations. *For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn*. d. explain what a point*(x, y)* on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0,0) and (1,*r*) where *r* is the unit rate. M.7.RP.2	Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship (e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin). b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams and verbal descriptions of proportional relationships. c. Represent proportional relationships by equations. (e.g., If total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.) d. Explain what a point (x,y) on the graph of a proportional relationship means in terms of the situation. Focus special attention on the points (0,0) and (1,r) where r is the unit rate. (M.7.2)	Clarifying language was added regarding the points (0,0) and (1,r).
use variables to represent quantities in a real-world or mathematical problem and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. solve word problems leading	Use variables to represent quantities in a real-world or mathematical problem and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading	Clarifying language was added to the example.

to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. *For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?* b. solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. *For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.* M.7.EE.4	to equations of the form px + q = r and p(x + q) = r, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. (e.g., The perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width? An arithmetic solution similar to "54 – 6 – 6 divided by 2" may compare this method with the reasoning involved in solving the equation 2w – 12 = 54. An arithmetic solution similar to "54/2 – 6" may compare this method with the reasoning involved in solving the equation 2(w – 6) = 54.) b. Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. (e.g., As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.) (M.7.10)	
8th Grade		
NxG CSO	WV CCRS	Implications
know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually and convert a decimal expansion which repeats eventually into a rational number. M.8.NS.1	Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually and convert a decimal expansion which repeats eventually into a rational number. Instructional Note: A decimal expansion that repeats the digit 0	Relevant information about vocabulary relating to "terminating decimals" has been added to assist teachers with meeting learning target(s).

	is often referred to as a "terminating decimal." M.8.1	
use informal arguments to establish facts about the angle sum and exterior angle of triangles about the angles created when parallel lines are cut by a transversal and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.* M.8.G.5	Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. (e.g., Arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.) M.8.20	The standard was reworded for clarity, providing educators a clearer description of learning target(s).
define appropriate quantities for the purpose of descriptive modeling. M.1HS8.RBQ.2	Define appropriate quantities for the purpose of descriptive modeling. Instructional Note: Working with quantities and the relationships between them provides grounding for work with expressions, equations, and functions. M.1HS8.2	Relevant information highlighting the foundational nature of this standard has been added to assist teachers with meeting learning target(s).
understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If *f* is a function and *x* is an element of its domain, then *f(x)* denotes the output of *f* corresponding to the input *x*. The graph of *f* is the graph of the equation *y = f(x)*. M.1HS8.LER.7	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then f(x) denotes the output of f corresponding to the input x. The graph of f is the graph of the equation y = f(x). Instructional Note: Students should experience a variety of types of situations modeled by functions. Detailed analysis of any particular class of function at this stage is not advised. Students should apply these concepts throughout their future mathematics courses. Constrain to linear functions and exponential functions having integral domains. M.1HS8.15	Relevant information has been added to clarify the introductory and foundational nature of this standard and to assist teachers with meeting the learning target(s).
use function notation, evaluate functions for inputs in their domains and interpret statements	Use function notation, evaluate functions for inputs in their domains and interpret statements	Relevant information has been added to clarify the introductory and foundational nature of this

that use function notation in terms of a context. M.1HS8.LER.8	that use function notation in terms of a context. Instructional Note: Students should experience a variety of types of situations modeled by functions. Detailed analysis of any particular class of function at this stage is not advised. Students should apply these concepts throughout their future mathematics courses. Constrain to linear functions and exponential functions having integral domains. M.1HS8.16	standard and to assist teachers with meeting the learning target(s).
recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. *For example, the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n)+ f(n-1) for n ≥ 1.* M.1HS8.LER.9	Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. (e.g., The Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n)+ f(n-1) for n ≥ 1.) Instructional Note: Students should experience a variety of types of situations modeled by functions. Detailed analysis of any particular class of function at this stage is not advised. Students should apply these concepts throughout their future mathematics courses. Constrain to linear functions and exponential functions having integral domains. Draw connection to M.1HS8.26, which requires students to write arithmetic and geometric sequences. M.1HS8.17	Relevant information has been added to clarify the introductory and foundational nature of this standard and to assist teachers with meeting the learning target(s).
graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. graph linear and quadratic functions and show intercepts, maxima, and minima. b. graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. M.1HS8.LER.15	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima. b. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. Instructional Note: Focus on linear	Relevant information limits the focus of this standard to linear and exponential functions while making the vertical progression of the skills and understandings evident.

	and exponential functions. Include comparisons of two functions presented algebraically. For example, compare the growth of two linear functions, or two exponential functions such as $y = 3^n$ and $y = 100 \times 2^n$. M.1HS8.23	
compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.* M.1HS8.LER.16	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). (e.g., Given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.) Instructional Note: Focus on linear and exponential functions. Include comparisons of two functions presented algebraically. For example, compare the growth of two linear functions, or two exponential functions such as $y = 3^n$ and $y = 100 \times 2^n$. M.1HS8.24	Relevant information limits the focus of this standard to linear and exponential functions while making the vertical progression of the skills and understandings evident.
write a function that describes a relationship between two quantities. a. determine an explicit expression, a recursive process or steps for calculation from a context. b. combine standard function types using arithmetic operations. *For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.* M.1HS8.LER.17	Write a function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process or steps for calculation from a context. b. Combine standard function types using arithmetic operations. (e.g., Build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.) Instructional Note: Limit to linear and exponential functions. M.1HS8.25	Relevant information limits the focus of the standard to linear and exponential functions.
identify the effect on the graph of replacing *f(x)* by *f(x) + k, k f(x), f(kx),* and *f(x + k)* for specific values of *k* (both positive and negative); find the value of *k* given the graphs. Experiment with cases and illustrate an explanation of the	Identify the effect on the graph of replacing f(x) by f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the	Relevant information limits the focus to vertical translations of graphs of linear and exponential functions.

effects on the graph using technology. *Include recognizing even and odd functions from their graphs and algebraic expressions for them.* M.1HS8.LER.19	effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. Instructional Note: Focus on vertical translations of graphs of linear and exponential functions. Relate the vertical translation of a linear function to its y-intercept. While applying other transformations to a linear graph is appropriate at this level, it may be difficult for students to identify or distinguish between the effects of the other transformations included in this standard. M.1HS8.27	
interpret the parameters in a linear or exponential function in terms of a context. M.1HS8.LER.23	Interpret the parameters in a linear or exponential function in terms of a context. Instructional Note: Limit exponential functions to those of the form $f(x) = b^x + k$. M.1HS8.31	Relevant information limits the form of exponential functions.
explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. M.1HS8.RWE.1	Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. Instructional Note: Students should focus on linear equations and be able to extend and apply their reasoning to other types of equations in future courses. Students will solve exponential equations with logarithms in Mathematics III. M.1HS8.32	Relevant information limits the focus of this standard to linear and exponential functions while making the vertical progression of the skills and understandings evident.
solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. M.1HS8.RWE.2	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. Instructional Note: Extend earlier work with solving linear equations to solving linear inequalities in one variable and to solving literal equations that are linear in the variable being solved for. Include simple exponential equations that	Relevant information highlights connections with prior skills and limits the focus of this standard to linear and exponential functions.

	rely only on application of the laws of exponents, such as $5^x = 125$ or $2^x = 1/16$. M.1HS8.33	
analyze and solve pairs of simultaneous linear equations. a. understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. b. solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6. c. solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair. M.1HS8.RWE.3	Analyze and solve pairs of simultaneous linear equations. a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6. c. Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair. Instructional Note: While this content is likely subsumed by M.1HS8.33, 35, and 36, it could be used for scaffolding instruction to the more sophisticated content found there. M.1HS8.34	Relevant information highlights the need to make connections among standards to assist teachers with meeting the learning target(s).
prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. M.1HS8.RWE.4	Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. Instructional Note: Include cases where two equations describe the same line (yielding infinitely many solutions) and cases where two equations describe parallel lines (yielding no solution). M.1HS8.35	Relevant information clarifies the need to address systems with no solution or with infinitely many solutions.

solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. M.1HS8.RWE.5	Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. Instructional Note: Include cases where two equations describe the same line (yielding infinitely many solutions) and cases where two equations describe parallel lines (yielding no solution). M.1HS8.36	Relevant information clarifies the need to address systems with no solution or with infinite solutions.
use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. M.1HS8.DST.2	Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. Instructional Note: In grades 6 – 7, students describe center and spread in a data distribution. Here they choose a summary statistic appropriate to the characteristics of the data distribution, such as the shape of the distribution or the existence of extreme data points. M.1HS8.40	Relevant information clarifies the intent of the standard and makes connections to students' prior work with statistics.
interpret differences in shape, center and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). M.1HS8.DST.3	Interpret differences in shape, center and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). Instructional Note: In grades 6 – 7, students describe center and spread in a data distribution. Here they choose a summary statistic appropriate to the characteristics of the data distribution, such as the shape of the distribution or the existence of extreme data points. M.1HS8.39	Relevant information clarifies the intent of the standard and makes connections to students' prior work with statistics.
represent data on two quantitative variables on a scatter plot, and describe how the variables are related. a. fit a function to the data; use functions fitted to data to solve problems in the context of the data. *Use given functions or choose a function suggested by the context. Emphasize linear and exponential models.*	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear and exponential models.	Relevant information makes connections to students' prior knowledge and highlights the vertical progression of skills and understandings.

b. informally assess the fit of a function by plotting and analyzing residuals. *(Focus should be on situations for which linear models are appropriate.)* c. fit a linear function for scatter plots that suggest a linear association. M.1HS8.DST.9	b. Informally assess the fit of a function by plotting and analyzing residuals. (Focus should be on situations for which linear models are appropriate.) c. Fit a linear function for scatter plots that suggest a linear association. Instructional Note: Students take a more sophisticated look at using a linear function to model the relationship between two numerical variables. In addition to fitting a line to data, students assess how well the model fits by analyzing residuals. M.1HS8.45	
compute (using technology) and interpret the correlation coefficient of a linear fit. M.1HS8.DST.11	Compute (using technology) and interpret the correlation coefficient of a linear fit. Instructional Note: Build on students' work with linear relationships and introduce the correlation coefficient. The focus here is on the computation and interpretation of the correlation coefficient as a measure of how well the data fit the relationship. M.1HS8.47	Relevant information clarifies the intent of the standards, identifies connections to students' prior knowledge and highlights the vertical progression of skills and understandings.
represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). M.1HS8.CPC.2	Represent transformations in the plane using, example, transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS8.50	Relevant information identifies connections to students' prior knowledge of transformations and highlights the vertical progression of skills and understandings.

given a rectangle, parallelogram, trapezoid or regular polygon, describe the rotations and reflections that carry it onto itself. M.1HS8.CPC.3	Given a rectangle, parallelogram, trapezoid or regular polygon, describe the rotations and reflections that carry it onto itself. Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS8.51	Relevant information identifies connections to students' prior knowledge of transformations and highlights the vertical progression of skills and understandings.
develop definitions of rotations, reflections and translations in terms of angles, circles, perpendicular lines, parallel lines and line segments. M.1HS8.CPC.4	Develop definitions of rotations, reflections and translations in terms of angles, circles, perpendicular lines, parallel lines and line segments. Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS8.52	Relevant information identifies connections to students' prior knowledge of transformations and highlights the vertical progression of skills and understandings.
given a geometric figure and a rotation, reflection or translation draw the transformed figure using, e.g., graph paper, tracing paper or geometry software. Specify a sequence of transformations that will carry a given figure onto another. M.1HS8.CPC.5	Given a geometric figure and a rotation, reflection or translation draw the transformed figure using, e.g., graph paper, tracing paper or geometry software. Specify a sequence of transformations that will carry a given figure onto another. Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS8.53	Relevant information identifies connections to students' prior knowledge of transformations and highlights the vertical progression of skills and understandings.

use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. M.1HS8.CPC.6	Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. Instructional Note: Rigid motions are at the foundation of the definition of congruence. Students reason from the basic properties of rigid motions (that they preserve distance and angle), which are assumed without proof. Rigid motions and their assumed properties can be used to establish the usual triangle congruence criteria, which can then be used to prove other theorems. M.1HS8.54	Relevant information highlights the foundation nature that an understanding of the properties of rigid motions serves.
use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. M.1HS8.CPC.7	Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. Instructional Note: Rigid motions are at the foundation of the definition of congruence. Students reason from the basic properties of rigid motions (that they preserve distance and angle), which are assumed without proof. Rigid motions and their assumed properties can be used to establish the usual triangle congruence criteria, which can then be used to prove other theorems. M.1HS8.55	Relevant information highlights the foundation nature that an understanding of the properties of rigid motions serves.
explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. M.1HS8.CPC.8	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. Instructional Note: Rigid motions are at the foundation of the definition of congruence. Students reason from the basic properties of rigid motions (that they preserve distance and angle), which are assumed without proof. Rigid motions and their assumed properties can be used to establish the usual triangle congruence	Relevant information highlights the foundation nature that an understanding of the properties of rigid motions serves.

	criteria, which can then be used to prove other theorems. M.1HS8.56	
make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). *Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.* M.1HS8.CPC.9	Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line. Instructional Note: Build on prior student experience with simple constructions. Emphasize the ability to formalize and defend how these constructions result in the desired objects. Some of these constructions are closely related to previous standards and can be introduced in conjunction with them. M.1HS8.57	Relevant information highlights the need to build on students' prior construction skills and to make connections with related standards.
construct an equilateral triangle, a square and a regular hexagon inscribed in a circle. M.1HS8.CPC.10	Construct an equilateral triangle, a square and a regular hexagon inscribed in a circle. Instructional Note: Build on prior student experience with simple constructions. Emphasize the ability to formalize and defend how these constructions result in the desired objects. Some of these constructions are closely related to previous standards and can be introduced in conjunction with them. M.1HS8.58	Relevant information highlights the need to build on students' prior construction skills and to make connections with related standards.
use coordinates to prove simple geometric theorems algebraically. *For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point (1, √3) lies on the circle centered at the origin and containing the point (0, 2).* M.1HS8.CAG.1	Use coordinates to prove simple geometric theorems algebraically. (e.g., Prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point (1, √3) lies on the circle centered at the origin and containing the point (0, 2).) Instructional Note: Reasoning with triangles in this unit is limited to	Relevant information limits reasoning with triangles to right triangles to assist teachers with meeting the learning target(s).

	right triangles (e.g., derive the equation for a line through two points using similar right triangles). M.1HS8.62	
prove the slope criteria for parallel and perpendicular lines; use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). (*Relate work on parallel lines to work on M1.RWE.3 involving systems of equations having no solution or infinitely many solutions.)* M.1HS8.CAG.2	Prove the slope criteria for parallel and perpendicular lines; use them to solve geometric problems. (e.g., Find the equation of a line parallel or perpendicular to a given line that passes through a given point.) Instructional Note: Reasoning with triangles in this unit is limited to right triangles (e.g., derive the equation for a line through two points using similar right triangles). Relate work on parallel lines to work on M.1HS8.35 involving systems of equations having no solution or infinitely many solutions. M.1HS8.63	Relevant information limits reasoning with triangles to right triangles to assist teachers with meeting the learning target(s).
use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula. (*Provides practice with the distance formula and its connection with the Pythagorean theorem.)* M.1HS8.CAG.3	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, (e.g., using the distance formula). Instructional Note: Reasoning with triangles in this unit is limited to right triangles (e.g., derive the equation for a line through two points using similar right triangles). This standard provides practice with the distance formula and its connection with the Pythagorean theorem. M.1HS8.64	Relevant information limits reasoning with triangles to right triangles to assist teachers with meeting the learning target(s).
apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. M.1HS8.CAG.5	Apply the Pythagorean theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. Instructional Note: Discuss applications of the Pythagorean theorem and its connections to radicals, rational exponents, and irrational numbers. M.1HS8.60	Relevant information identifies connections to make between applications of the Pythagorean Theorem and radicals, rational exponents, and irrational numbers to assist teachers with meeting the learning target(s)..
apply the Pythagorean Theorem to find the distance between two points in a coordinate system. M.1HS8.CAG.6	Apply the Pythagorean theorem to find the distance between two points in a coordinate system. Instructional Note: Discuss applications of the Pythagorean theorem and its connections to radicals, rational exponents, and	Relevant information identifies connections to make between applications of the Pythagorean Theorem and radicals, rational exponents, and irrational numbers to assist teachers with meeting the learning target(s).

	irrational numbers. M.1HS8.61	
Math I		
NxG CSO	WV CCRS	Implications
define appropriate quantities for the purpose of descriptive modeling. M.1HS.RBQ.2	Define appropriate quantities for the purpose of descriptive modeling. Instructional Note: Working with quantities and the relationships between them provides grounding for work with expressions, equations, and functions. M.1HS.2	Relevant information highlights the foundational nature of this standard.
understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If *f* is a function and *x* is an element of its domain, then *f(x)* denotes the output of *f* corresponding to the input *x*. The graph of *f* is the graph of the equation *y = f(x)*. M.1HS.LER.4	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then f(x) denotes the output of f corresponding to the input x. The graph of f is the graph of the equation y = f(x). Instructional Note: Students should experience a variety of types of situations modeled by functions. Detailed analysis of any particular class of function at this stage is not advised. Students should apply these concepts throughout their future mathematics courses. Draw examples from linear and exponential functions. M.1HS.12	Relevant information clarifies the introductory and foundational nature of this standard.
use function notation, evaluate functions for inputs in their domains and interpret statements that use function notation in terms of a context. M.1HS.LER.5	Use function notation, evaluate functions for inputs in their domains and interpret statements that use function notation in terms of a context. Instructional Note: Students should experience a variety of types of situations modeled by functions. Detailed analysis of any particular class of function at this stage is not advised. Students should apply these concepts throughout their future mathematics courses. Draw examples from linear and exponential functions. M.1HS.13	Relevant information clarifies the introductory and foundational nature of this standard.

recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. *For example, the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n)+ f(n-1) for n ≥ 1.* M.1HS.LER.6	Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n)+ f(n-1) for n ≥ 1. Instructional Note: Students should experience a variety of types of situations modeled by functions. Detailed analysis of any particular class of function at this stage is not advised. Students should apply these concepts throughout their future mathematics courses. Draw examples from linear and exponential functions. Draw connection to M.1HS.21, which requires students to write arithmetic and geometric sequences. Emphasize arithmetic and geometric sequences as examples of linear and exponential functions. M.1HS.14	Relevant information clarifies the introductory and foundational nature of this standard.
graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. graph linear and quadratic functions and show intercepts, maxima, and minima. b. graph exponential and logarithmic functions, showing intercepts and end behavior and trigonometric functions, showing period, midline and amplitude. M.1HS.LER.10	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima. b. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. Instructional Note: Focus on linear and exponential functions. Include comparisons of two functions presented algebraically. For example, compare the growth of two linear functions, or two exponential functions such as $y = 3^n$ and $y = 100 \cdot 2^n$. M.1HS.18	Relevant information limits the focus of this standard to linear and exponential functions while making the vertical progression of the skills and understandings evident to assist teachers with meeting the learning target(s).
compare properties of two functions each represented in a different way (algebraically,	Compare properties of two functions each represented in a different way (algebraically,	Relevant information limits the focus of this standard to linear and exponential functions while making

graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.* M.1HS.LER.11	graphically, numerically in tables, or by verbal descriptions). (e.g., Given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.) Instructional Note: Focus on linear and exponential functions. Include comparisons of two functions presented algebraically. For example, compare the growth of two linear functions, or two exponential functions such as $y = 3^n$ and $y = 100 \cdot 2^n$. M.1HS.19	the vertical progression of the skills and understandings evident to assist teachers with meeting the learning target(s).
write a function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process, or steps for calculation from a context. b. Combine standard function types using arithmetic operations. *For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.* M.1HS.LER.12	Write a function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process or steps for calculation from a context. b. Combine standard function types using arithmetic operations. (e.g., Build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.) Instructional Note: Limit to linear and exponential functions. M.1HS.20	Relevant information limits the focus of the standard to linear and exponential functions.
identify the effect on the graph of replacing *f(x)* by *f(x) + k, k f(x), f(kx),* and *f(x + k)* for specific values of *k* (both positive and negative); find the value of *k* given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. *Include recognizing even and odd functions from their graphs and algebraic expressions for them.* M.1HS.LER.14	Identify the effect on the graph of replacing f(x) by f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. Instructional Note: Focus on vertical translations of graphs of linear and exponential functions. Relate the vertical translation of a linear function to its y-intercept. While applying other transformations to a linear	Relevant information limits the focus to vertical translations of graphs of linear and exponential functions.

	graph is appropriate at this level, it may be difficult for students to identify or distinguish between the effects of the other transformations included in this standard. M.1HS.22	
interpret the parameters in a linear or exponential function in terms of a context. M.1HS.LER.18	Interpret the parameters in a linear or exponential function in terms of a context. Instructional Note: Limit exponential functions to those of the form $f(x) = b^x + k$. M.1HS.26	Relevant information limits the form of exponential functions to be addressed.
explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. M.1HS.RWE.1	Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. Instructional Note: Students should focus on linear equations and be able to extend and apply their reasoning to other types of equations in future courses. Students will solve exponential equations with logarithms in Mathematics III. M.1HS.27	Relevant information limits the focus of this standard to linear and exponential functions while making the vertical progression of the skills and understandings evident to assist teachers with meeting the learning target(s).
solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. M.1HS.RWE.2	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. Instructional Note: Extend earlier work with solving linear equations to solving linear inequalities in one variable and to solving literal equations that are linear in the variable being solved for. Include simple exponential equations that rely only on application of the laws of exponents, such as $5^x = 125$ or $2^x = 1/16$. M.1HS.28	Relevant information highlights connections with prior skills and limits the focus of this standard to linear and exponential functions.
prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. M.1HS.RWE.3	Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. Instructional Note: Build on student experiences graphing and solving	Relevant information clarifies the need to address systems with no solution or with infinite solutions.

	systems of linear equations from middle school to focus on justification of the methods used. Include cases where the two equations describe the same line (yielding infinitely many solutions) and cases where two equations describe parallel lines (yielding no solution); connect to M.1HS.50, which requires students to prove the slope criteria for parallel lines. M.1HS.29	
solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. M.1HS.RWE.4	Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. Instructional Note: Build on student experiences graphing and solving systems of linear equations from middle school to focus on justification of the methods used. Include cases where the two equations describe the same line (yielding infinitely many solutions) and cases where two equations describe parallel lines (yielding no solution); connect to M.1HS.50, which requires students to prove the slope criteria for parallel lines. M.1HS.30	Relevant information clarifies the need to address systems with no solution or with infinite solutions to assist teachers with meeting the learning target(s).
use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. M.1HS.DST.2	Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. Instructional Note: In grades 6 – 8, students describe center and spread in a data distribution. Here they choose a summary statistic appropriate to the characteristics of the data distribution, such as the shape of the distribution or the existence of extreme data points. M.1HS.32	Relevant information clarifies the intent of the standard, makes connections to students' prior work with statistics, and highlights vertical progression.
interpret differences in shape, center and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). M.1HS.DST.3	Interpret differences in shape, center and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). Instructional Note: In grades 6 – 8, students describe center and spread in a	Relevant information clarifies the intent of the standard, makes connections to students' prior work with statistics, and highlights vertical progression.

	data distribution. Here they choose a summary statistic appropriate to the characteristics of the data distribution, such as the shape of the distribution or the existence of extreme data points. M.1HS.33	
represent data on two quantitative variables on a scatter plot and describe how the variables are related. a. fit a function to the data; use functions fitted to data to solve problems in the context of the data. *Use given functions or choose a function suggested by the context. Emphasize linear and exponential models.* b. informally assess the fit of a function by plotting and analyzing residuals. *(Focus should be on situations for which linear models are appropriate.)* fit a linear function for scatter plots that suggest a linear association. M.1HS.DST.5	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear and exponential models. b. Informally assess the fit of a function by plotting and analyzing residuals. (Focus should be on situations for which linear models are appropriate.) c. Fit a linear function for scatter plots that suggest a linear association. Instructional Note: Students take a more sophisticated look at using a linear function to model the relationship between two numerical variables. In addition to fitting a line to data, students assess how well the model fits by analyzing residuals. M.1HS.35	Relevant information highlights the vertical progression of skills and understandings.
compute (using technology) and interpret the correlation coefficient of a linear fit. M.1HS.DST.7	Compute (using technology) and interpret the correlation coefficient of a linear fit. Instructional Note: Build on students' work with linear relationships in eighth grade and introduce the correlation coefficient. The focus here is on the computation and interpretation of the correlation coefficient as a measure of how well the data fit the relationship. M.1HS.37	Relevant information clarifies the intent of the standard, makes connections to students' prior work with statistics, and highlights vertical progression.
represent transformations in the plane using, e.g., transparencies and geometry software; describe	Represent transformations in the plane using, for example, transparencies and geometry	Relevant information highlights connections with students' prior

transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). M.1HS.CPC.2	software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch). Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS.40	experience with transformations and vertical progression.
given a rectangle, parallelogram, trapezoid or regular polygon, describe the rotations and reflections that carry it onto itself. M.1HS.CPC.3	Given a rectangle, parallelogram, trapezoid or regular polygon, describe the rotations and reflections that carry it onto itself. Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS.41	Relevant information highlights connections with students' prior experience with transformations and vertical progression.
develop definitions of rotations, reflections and translations in terms of angles, circles, perpendicular lines, parallel lines and line segments. M.1HS.CPC.4	Develop definitions of rotations, reflections and translations in terms of angles, circles, perpendicular lines, parallel lines and line segments. Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS.42	Relevant informaiton highlights connections with students' prior experience with transformations and vertical progression.

given a geometric figure and a rotation, reflection or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another. M.1HS.CPC.5	Given a geometric figure and a rotation, reflection or translation draw the transformed figure using, e.g., graph paper, tracing paper or geometry software. Specify a sequence of transformations that will carry a given figure onto another. Instructional Note: Build on student experience with rigid motions from earlier grades. Point out the basis of rigid motions in geometric concepts, (e.g., translations move points a specified distance along a line parallel to a specified line; rotations move objects along a circular arc with a specified center through a specified angle). M.1HS.43	Relevant information highlights connections with students' prior experience with transformations and vertical progression.
use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. M.1HS.CPC.6	Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent. Instructional Note: Rigid motions are at the foundation of the definition of congruence. Students reason from the basic properties of rigid motions (that they preserve distance and angle), which are assumed without proof. Rigid motions and their assumed properties can be used to establish the usual triangle congruence criteria, which can then be used to prove other theorems. M.1HS.44	Relevant information highlights the foundational nature that an understanding of the properties of rigid motions serves to assist teachers with meeting the learning target(s).
use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. M.1HS.CPC.7	Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. Instructional Note: Rigid motions are at the foundation of the definition of congruence. Students reason from the basic properties of rigid motions (that they preserve distance and angle), which are assumed without proof. Rigid motions and their assumed	Relevant information highlights the foundational nature that an understanding of the properties of rigid motions serves to assist teachers with meeting the learning target(s).

	properties can be used to establish the usual triangle congruence criteria, which can then be used to prove other theorems. M.1HS.45	
explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. M.1HS.CPC.8	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. Instructional Note: Rigid motions are at the foundation of the definition of congruence. Students reason from the basic properties of rigid motions (that they preserve distance and angle), which are assumed without proof. Rigid motions and their assumed properties can be used to establish the usual triangle congruence criteria, which can then be used to prove other theorems. M.1HS.46	Relevant information highlights the foundational nature that an understanding of the properties of rigid motions serves to assist teachers with meeting the learning target(s).
make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). *Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.* M.1HS.CPC.9	Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line. Instructional Note: Build on prior student experience with simple constructions. Emphasize the ability to formalize and defend how these constructions result in the desired objects. Some of these constructions are closely related to previous standards and can be introduced in conjunction with them. M.1HS.47	Relevant information highlights the need to build on students' prior construction skills and to make connections with related standards.
construct an equilateral triangle, a square and a regular hexagon inscribed in a circle. M.1HS.CPC.10	Construct an equilateral triangle, a square and a regular hexagon inscribed in a circle. Instructional Note: Build on prior student experience with simple constructions. Emphasize the ability to formalize and defend how these constructions result in the	Relevant information highlights the need to build on students' prior construction skills and to make connections with related standards.

	desired objects. Some of these constructions are closely related to previous standards and can be introduced in conjunction with them. M.1HS.48	
use coordinates to prove simple geometric theorems algebraically. *For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point (1, √3) lies on the circle centered at the origin and containing the point (0, 2).* M.1HS.CAG.1	Use coordinates to prove simple geometric theorems algebraically. (e.g., Prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point (1, √3) lies on the circle centered at the origin and containing the point (0, 2).) Instructional Note: Reasoning with triangles in this unit is limited to right triangles (e.g., derive the equation for a line through two points using similar right triangles). M.1HS.49	Relevant information limits reasoning with triangles to right triangles.
prove the slope criteria for parallel and perpendicular lines; use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point). (*Relate work on parallel lines to work on M.1HS.RWE.3 involving systems of equations having no solution or infinitely many solutions.)* M.1HS.CAG.2	Prove the slope criteria for parallel and perpendicular lines; use them to solve geometric problems. (e.g., Find the equation of a line parallel or perpendicular to a given line that passes through a given point.) Instructional Note: Reasoning with triangles in this unit is limited to right triangles (e.g., derive the equation for a line through two points using similar right triangles). Relate work on parallel lines to work on M.1HS.29 involving systems of equations having no solution or infinitely many solutions. M.1HS.50	Relevant information limits reasoning with triangles to right triangles.
use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula. (*Provides practice with the distance formula and its connection with the Pythagorean theorem.)* M.1HS.CAG.3	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, (e.g., using the distance formula). Instructional Note: Reasoning with triangles in this unit is limited to right triangles (e.g., derive the equation for a line through two points using similar right triangles). This standard provides practice with the distance formula and its connection with the Pythagorean theorem. M.1HS.51	Relevant informaiton limits reasoning with triangles to right triangles.
Math II		
NxG CSO	WV CCRS	Implications

for a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.* M.2HS.QFM.1	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. Instructional Note: Focus on quadratic functions; compare with linear and exponential functions studied in Mathematics I. M.2HS.7	Relevant information highlights a focus on quadratic functions, the need to make connections with prior work on linear and exponential functions, and vertical progression.
relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. *For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.* M.2HS.QFM.2	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. (e.g., If the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.) Instructional Note: Focus on quadratic functions; compare with linear and exponential functions studied in Mathematics I. M.2HS.8	Relevant information highlights a focus on quadratic functions, the need to make connections with prior work on linear and exponential functions, and vertical progression.
graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. graph linear and quadratic functions and show intercepts, maxima, and minima. b. graph square root, cube root and piecewise-defined functions, including step functions and absolute value functions. *Compare and contrast absolute value, step and piecewise defined functions with linear, quadratic, and exponential functions. Highlight issues of domain, range and usefulness when examining piecewise-*	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima. b. Graph square root, cube root and piecewise-defined functions, including step functions and absolute value functions. Instructional Note: Compare and contrast absolute value, step and piecewise defined functions with linear, quadratic, and exponential functions. Highlight issues of domain, range and usefulness when	Relevant information highlights work with quadratic functions and the relationship between coefficients and roots while making the vertical progression of the skills and understandings evident.

defined functions. M.2HS.QFM.4	examining piecewise-defined functions. Instructional Note: Extend work with quadratics to include the relationship between coefficients and roots and that once roots are known, a quadratic equation can be factored. M.2HS.10	
write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. a. use the process of factoring and completing the square in a quadratic function to show zeros, extreme values and symmetry of the graph and interpret these in terms of a context. b. use the properties of exponents to interpret expressions for exponential functions. *For example, identify percent rate of change in functions such as* $y = (1.02)^{t}$, $y = (0.97)^{t}$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, *and classify them as representing exponential growth or decay. M.2HS.QFM.5b extends the work begun in Mathematics I on exponential functions with integer exponents.* M.2HS.QFM.5	Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values and symmetry of the graph and interpret these in terms of a context. b. Use the properties of exponents to interpret expressions for exponential functions. (e.g., Identify percent rate of change in functions such as $y = (1.02)^{t}$, $y = (0.97)^{t}$, $y = (1.01)^{12t}$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay.) Instructional Note: This unit and, in particular, this standard extends the work begun in Mathematics I on exponential functions with integer exponents. Instructional Note: Extend work with quadratics to include the relationship between coefficients and roots and that once roots are known, a quadratic equation can be factored. M.2HS.11	Relevant information highlights the work with quadratic functions and the relationship between coefficients and roots and between roots and the factored form of a quadratic equation.
using graphs and tables, observe that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically; or (more generally) as a polynomial function. M.2HS.QFM.10	Using graphs and tables, observe that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically; or (more generally) as a polynomial function. Instructional Note: Compare linear and exponential growth studied in	Relevant information highlights the vertical progression of skills and understandings and the need to make these connections evident.

	Mathematics I to quadratic growth. M.2HS.16	
use the structure of an expression to identify ways to rewrite it. For example, see $x^4 – y^4$ as $(x^2)^2 – (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 – y^2)(x^2 + y^2)$. M.2HS.EE.2	Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 – y^4$ as $(x^2)^2 – (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 – y^2)(x^2 + y^2)$. Instructional Note: Focus on quadratic and exponential expressions. M.2HS.18	Relevant information highlights the need to focus on quadratic and exponential expressions.
create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. M.2HS.EE.5	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. Instructional Note: Extend work on linear and exponential equations in Mathematics I to quadratic equations. M.2HS.21	Relevant information identifies the focus of the standard on quadratic equations, the need to make connections to students' prior knowledge, and vertical progression.
rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *For example, rearrange Ohm's law V = IR to highlight resistance R. Extend to formulas involving squared variables.* M.2HS.EE.6	Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. (e.g., Rearrange Ohm's law V = IR to highlight resistance R.) Instructional Note: Extend to formulas involving squared variables. Extend work on linear and exponential equations in Mathematics I to quadratic equations. M.2HS.22	Relevant information identifies the focus of the standard on quadratic equations, the need to make connections to students' prior knowledge, and vertical progression.
solve quadratic equations with real coefficients that have complex solutions. M.2HS.EE.8	Solve quadratic equations with real coefficients that have complex solutions. Instructional Note: Limit to quadratics with real coefficients. M.2HS.24	Relevant information limits the focus of the standard to quadratics with real coefficients.
extend polynomial identities to the complex numbers. *For example, rewrite $x^2 + 4$ as $(x + 2i)(x – 2i)$.* M.2HS.EE.9(+)	Extend polynomial identities to the complex numbers. For example, rewrite $x^2 + 4$ as $(x + 2i)(x – 2i)$. Instructional Note: Limit to quadratics with real coefficients. M.2HS.25(+)	Relevant information limits the focus of the standard to quadratics with real coefficients.
know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. M.2HS.EE.10(+)	Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials. Instructional Note: Limit to quadratics with real coefficients. M.2HS.26(+)	Relevant information limits the focus of the standard to quadratics with real coefficients.
prove theorems about lines and angles. *Theorems include: vertical angles are congruent; when a*	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a	Relevant information clarifies the focus on the validity of the reasoning and the variety of

transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints. Implementation may be extended to include concurrence of perpendicular bisectors and angle bisectors as preparation for M.2HS.C.3. M.2HS.STP.4	transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints. Implementation may be extended to include concurrence of perpendicular bisectors and angle bisectors as preparation for M.2HS.C.3. Instructional Note: Encourage multiple ways of writing proofs, such as in narrative paragraphs, using flow diagrams, in two-column format, and using diagrams without words. Students should be encouraged to focus on the validity of the underlying reasoning while exploring a variety of formats for expressing that reasoning. M.2HS.42	formats that can be used to present this reasoning.
prove theorems about triangles. *Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. Encourage multiple ways of writing proofs, such as in narrative paragraphs, using flow diagrams, in two-column format, and using diagrams without words. Students should be encouraged to focus on the validity of the underlying reasoning while exploring a variety of formats for expressing that reasoning.* M.2HS.STP.5	Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point. Instructional Note: Encourage multiple ways of writing proofs, such as in narrative paragraphs, using flow diagrams, in two-column format, and using diagrams without words. Students should be encouraged to focus on the validity of the underlying reasoning while exploring a variety of formats for expressing that reasoning. Implementation of this standard may be extended to include concurrence of perpendicular bisectors and angle bisectors in preparation for the unit on Circles With and Without Coordinates. M.2HS.43	Relevant information clarifies that the focus is on the validity of the reasoning and the variety of formats that can be used to present this reasoning.

derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. M.2HS.C.5	Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation. Instructional Note: Connect the equations of circles and parabolas to prior work with quadratic equations. M.2HS.57	Relevant information identifies connections that can be made among standards.
derive the equation of a parabola given the focus and directrix. M.2HS.C.6	Derive the equation of a parabola given the focus and directrix. Instructional Note: The directrix should be parallel to a coordinate axis. M.2HS.58	Relevant information limits the focus of the standard.
Math III		
evaluate reports based on data. M.3HS.IC.7 (*,^)	Evaluate reports based on data. Instructional Note: In earlier grades, students are introduced to different ways of collecting data and use graphical displays and summary statistics to make comparisons. These ideas are revisited with a focus on how the way in which data is collected determines the scope and nature of the conclusions that can be drawn from that data. The concept of statistical significance is developed informally through simulation as meaning a result that is unlikely to have occurred solely as a result of random selection in sampling or random assignment in an experiment. M.3HS.7 (*,^)	Relevant information clarifies the need to build on and develop students' prior knowledge and highlights vertical progression.
interpret expressions that represent a quantity in terms of its context. a. interpret parts of an expression, such as terms, factors, and coefficients. b. interpret complicated expressions by viewing one or more of their parts as a single entity. *For example, interpret P(1+r)n as the product of P and a factor not depending on P.* M.3HS.PR.3 (*)	Interpret expressions that represent a quantity in terms of its context. a. Interpret parts of an expression, such as terms, factors, and coefficients. b. Interpret complicated expressions by viewing one or more of their parts as a single entity. (e.g., Interpret $P(1 + r)^n$ as the product of P and a factor not depending on P.)	Relevant information clarifies the focus of the standard and highlights vertical progression.

	Instructional Note: Extend to polynomial and rational expressions. M.3HS.12 (*)	
know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle M.3HS.PR.10 (+,^)	Know and apply the Binomial Theorem for the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined for example by Pascal's Triangle. Instructional Note: This cluster has many possibilities for optional enrichment, such as relating the example in M.A2HS.10 to the solution of the system $u^2 + v^2 = 1$, $v = t(u+1)$, relating the Pascal triangle property of binomial coefficients to $(x + y)^{n+1} = (x + y)(x + y)^n$, deriving explicit formulas for the coefficients, or proving the binomial theorem by induction. M.3HS.19 (+,^)	Relevant information note suggests opportunities for enrichment.
relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. *For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.* M.3HS.MM.6 (*)	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. (e.g., If the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.) Instructional Note: Emphasize the selection of a model function based on behavior of data and context. M.3HS.36 (*)	Relevant information highlights a need to relate model selection with the behavior of data and the context to assist teachers with meeting the learning target(s).
calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. M.3HS.MM.7 (*)	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. Instructional Note: Emphasize the selection of a model function based on behavior of data and context. M.3HS.37 (*)	Relevant information highlights a need to relate model selection with the behavior of data and the context to assist teachers with meeting the learning target(s).
write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. M.3HS.MM.9 (*,^)	Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. Instructional Note: Focus on applications and how key features relate to characteristics of	Relevant information highlights the focus on applications and the need to relate characteristics of a situation to the selection of a model to assist teachers with meeting the learning target(s).

	a situation, making selection of a particular type of function model appropriate. M.3HS.39 (*,^)	
compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). *For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.* M.3HS.MM.10 (*,^)	Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). (e.g., Given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.) Instructional Note: Focus on applications and how key features relate to characteristics of a situation, making selection of a particular type of function model appropriate. M.3HS.40 (*,^)	Relevant information highlights the focus on applications and the need to relate characteristics of a situation to the selection of a model.
Math IV		
NxG CSO	WV CCRS	Implications
find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers. (*Instructional Note: In Math II students extended the number system to include complex numbers and performed the operations of addition, subtraction, and multiplication.)* M.4HS.CVM.1	Find the conjugate of a complex number; use conjugates to find moduli (magnitude) and quotients of complex numbers. Instructional Note: In Math II students extended the number system to include complex numbers and performed the operations of addition, subtraction, and multiplication. (M.4HSTP.1)	Clarifying language was added.
Algebra I		
NxG CSO	WV CCRS	Implications
Standard is in the new proposed traditional pathway.	Recognize that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). Instructional Note: Focus on linear and exponential equations and be able to adapt and apply that learning to other types of equations in future courses. M.A1HS.15	Following the 30-day comment period, language changes were made to specify measurable outcomes.
Standard is in the new proposed traditional pathway.	Recognize that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then f(x) denotes the	Following the 30-day comment period, language changes were made to specify measurable outcomes.

	output of f corresponding to the input x. The graph of f is the graph of the equation y = f(x). Instructional Note: Students should experience a variety of types of situations modeled by functions. Detailed analysis of any particular class of function at this stage is not advised. Students should apply these concepts throughout their future mathematics courses. Draw examples from linear functions and exponential functions having integral domains. M.A1HS.18	
Standard is in the new proposed traditional pathway.	Recognize that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. Instructional Note: Focus on polynomial expressions that simplify to forms that are linear or quadratic in a positive integer power of x. M.A1HS.44	Following the 30-day comment period, language changes were made to specify measurable outcomes.
Geometry		
NxG CSO	WV CCRS	Implications
Standard is in the new proposed traditional pathway.	Recognize the conditional probability of A given B as P(A and B)/P(B), and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B. Instructional Note: Build on work with two-way tables from Algebra I to develop understanding of conditional probability and independence. M.GHS.44	Following the 30-day comment period, language changes were made to specify measurable outcomes.

<table>
<tr><th colspan="3">Additional Policy Implications</th></tr>
<tr><th colspan="3">Grade Level Introductions</th></tr>
<tr><td>WV CCRS</td><td>Revisions</td><td>Implications</td></tr>
<tr><td>All West Virginia teachers are responsible for classroom instruction that integrates content standards and process goals. Students in kindergarten will focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. Mathematical process goals should be integrated in these content areas. Mathematical process goals, or habits of mind, include: reasoning abstractly and quantitatively; constructing viable arguments and critiquing the reasoning of others; modeling with mathematics; using appropriate tools strategically; attending to precision, looking for and making use of structure; and looking for and expressing regularity in repeated reasoning. The skill progressions begin in kindergarten as foundational understanding of numeracy. The following chart represents the mathematical understandings that will be developed in kindergarten:</td><td>All West Virginia teachers are responsible for classroom instruction that integrates content standards and mathematical habits of mind. Students in kindergarten will focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. Mathematical habits of mind, which should be integrated in these content areas, include: making sense of problems and persevering in solving them, reasoning abstractly and quantitatively; constructing viable arguments and critiquing the reasoning of others; modeling with mathematics; using appropriate tools strategically; attending to precision, looking for and making use of structure; and looking for and expressing regularity in repeated reasoning. The skill progressions begin in kindergarten as foundational understanding of numeracy. The following chart represents the mathematical understandings that will be developed in kindergarten:</td><td>Following the 30-day comment period, the typographical error was corrected and the phrase “process goals” was replaced by “mathematical habits of mind” in each grade level or course introduction. Changes similar to those found in the Kindergarten Introduction have been made to all grade level and course introduction.</td></tr>
<tr><th colspan="3">Skill Progression Charts</th></tr>
<tr><th colspan="3">Kindergarten</th></tr>
<tr><td>WV CCRS</td><td>Revisions</td><td>Implications</td></tr>
<tr><td>Operations and Algebraic Thinking
Understand addition as putting together and adding to.
Understand subtraction as taking apart and taking from.
Add and subtract very small numbers quickly and accurately (e.g., 3 + 1).</td><td>Numbers and Operations in Base Ten
Act out addition and subtraction word problems and draw diagrams to represent them.
Add with a sum of 10 or less; subtract from a number 10 or less; and solve addition and subtraction word problems.
Group objects by tens and ones. (1 group of 10 and 3 ones makes 13)</td><td>Following the 30-day comment period, the typographical error was corrected.</td></tr>
<tr><td>Classify objects and count the number of objects in each category. (e.g., Sort and classify pennies into groups of 5s or 10s.)</td><td>Classify objects and count the number of objects in each category. (e.g., Identify coins and</td><td>Following the 30-day comment period, identification of coins was added.</td></tr>
</table>

	sort them into groups of 5s or 10s.)	
1st Grade		
WV CCRS	Proposed Revisions	Implications
• Add quickly and accurately with a sum of 10 or less, and quickly and accurately subtract from a number 10 or less (e.g., 2 + 5, 7 – 5).	• Add fluently with a sum of 10 or less, and accurately subtract from a number 10 or less (e.g., 2 + 5, 7 – 5).	Following the 30-day comment period, the phrase "quickly and accurately" was replaced with "fluently."
• Use understanding of place value to add and subtract (e.g., 38 + 5, 29 + 20, 64 + 27, 80 – 50). •	• Use understanding of place value and properties of operations to add and subtract (e.g., 38 + 5, 29 + 20, 64 + 27, 80 – 50).	Following the 30-day comment period, the phrase "and properties of operations" was added.
• Sort and classify pennies, nickels and dimes into groups of tens.	• Identify the value of pennies, nickels and dimes.	Following the 30-day comment period, identification of the value of pennies, nickels, and dimes was added.
2nd Grade		
WV CCRS	Proposed Revisions	Implications
• Quickly and accurately add with a sum of 20 or less (e.g., 11 + 8); quickly and accurately subtract from a number 20 or less (e.g., 16 – 9); and know all sums of one-digit numbers from memory by the end of the year.	• Fluently add with a sum of 20 or less (e.g., 11 + 8); fluently subtract from a number 20 or less (e.g., 16 – 9); and know all sums of one-digit numbers from memory by the end of the year.	Following the 30-day comment period, the phrase "quickly and accurately" was replaced with "fluently."
• Use an understanding of place value to add and subtract three-digit numbers (e.g., 811 – 367); add and subtract two-digit numbers quickly and accurately (e.g., 77 – 28).	• Use an understanding of place value to add and subtract three-digit numbers (e.g., 811 – 367); add and subtract two-digit numbers fluently (e.g., 77 – 28).	Following the 30-day comment period, the phrase "quickly and accurately" was replaced with "fluently."
3rd Grade		
WV CCRS	Proposed Revisions	Implications
• Multiply and divide up to 10 × 10 fluently and accurately, including knowing the multiplication tables from memory.	• Understand and know from memory how to multiply and divide numbers up to 10 x 10 fluently.	Following the 30-day comment period, language clarifications were added.
• Understand fractions and relate them to the familiar system of while numbers (e.g., recognizing that 3/1 and 3 are the same number).	• Understand fractions and relate them to the familiar system of whole numbers (e.g., recognizing that 3/1 and 3 are the same number).	Following the 30-day comment period, the typographical error was corrected.
• Understand the connection between parts of a shape being a unit of the whole.	• Understand the connection between equal parts of a shape being a unit of the whole.	Following the 30-day comment period, the word "equal" was added for clarification.
4th Grade		
WV CCRS	Proposed Revisions	Implications
• Understand, order, and apply equivalent fractions (e.g., recognize that 1⁄4 is less than	• Use equivalent fractions to understand and order fractions (e.g., recognize that 1⁄4 is less	Following the 30-day comment period, language clarifications were added.

3⁄8 because 2⁄8 is less than 3⁄8).	than 3⁄8 because 2⁄8 is less than 3⁄8).	
• Measure angles and finding unknown angles in a diagram.	• Measure angles and find unknown angles in a diagram.	Following the 30-day comment period, the typographical error was corrected.
5th Grade		
WV CCRS	Proposed Revisions	Implications
• Represent and interpret data by creating a line plot to display a data set of measurement in fractions of a unit (1/2, 1/4, 1/8) and use operations on fractions for fifth grade to solve problems involving information presented in line plots.	• Make a line plot to display a data set with fractional units of measure and interpret the data to solve problems.	Following the 30-day comment period, language clarifications were added.
Cluster Charts		
5th Grade		
WV CCRS	Revisions	Implications
Concrete geometric representation (physical modeling).	Graph points on the coordinate plane to solve real-world and mathematical problems.	Following the 30-day comment period, the typographical error was corrected.
Abstract geometric representation (matrix modeling).	Classify two-dimensional figures into categories based on their properties.	Following the 30-day comment period, the typographical error was corrected.

Addition of the following Mathematics courses and standards	
Algebra I	Algebra I for 8th Grade
Geometry	Algebra II
Calculus	

Number of Mathematical Standards by Grade/Course as a Result of the Repeal and Replace of WVBE Policy 2520.2B

Grade/Course	Number of Standards
Mathematics – Kindergarten	22
Mathematics – Grade 1	21
Mathematics – Grade 2	26
Mathematics – Grade 3	25
Mathematics – Grade 4	28
Mathematics – Grade 5	26
Mathematics – Grade 6	29
Mathematics – Grade 7	26
Mathematics – Grade 8	28

Integrated Pathway		Traditional Pathway	
Grade/Course	**Number of Standards**	**Grade/Course**	**Number of Standards**
8th Grade High School Mathematics I	64	Algebra I – Grade 8	73
High School Mathematics I	51	Algebra I	60
High School Mathematics II	61	Geometry	55
High School Mathematics III	48	Algebra II	45

Fourth Course Options	
Grade/Course	**Number of Standards**
Advanced Mathematical Modeling	38
Calculus	23
Mathematics IV - Trigonometry/Pre-calculus	40
STEM Readiness	31
Transition Mathematics for Seniors	52
AP® Calculus AP® Computer Science AP® Statistics	
Additional course options include dual credit mathematics courses and advanced mathematics courses offered through WV Virtual School. School teams, including counselors, teachers and administrators, should confer with the student and his/her parents to decide what fourth year mathematics course best meets the needs of the student.	

Overview of English Language Arts Skills Progressions

Introductory charts found at each grade level

Overview of Skill Progressions in West Virginia College- and Career-Readiness Standards for English Language Arts by Grade Level

<table>
<tr><th colspan="2">Kindergarten</th></tr>
<tr><th colspan="2">Early Learning Foundations</th></tr>
<tr><td colspan="2">• Name upper-and lower-case letters, matching those letters with their sounds, and printing them.</td></tr>
<tr><th>Reading</th><th>Writing</th></tr>
<tr><td>• Compare the adventures and experiences of characters in familiar stories, such as fairy tales and folktales.
• Retell familiar stories and talking about stories read to them using details from the text.
• Ask and answer questions about key details in stories or other information read aloud.</td><td>• State an opinion or preference about a topic or book in writing (e.g., “My favorite book is . . .”).
• Use a combination of drawing, dictating, and writing to describe an event, including his or her reaction to what happened.</td></tr>
<tr><th>Speaking/Listening</th><th>Language</th></tr>
<tr><td>• Take part in classroom conversations and following rules for discussions (e.g., learning to listen to others and taking turns when speaking).
• Speak clearly to express thoughts, feelings, and ideas, including descriptions of familiar people, places, things, and events</td><td>• Understand and use question words (e.g., who, what, where, when, why, how) in discussions.
• Learn to recognize, spell, and properly use those little grammatical words that hold the language together (e.g., a, the, to, of, from, I, is, and are).</td></tr>
</table>

<table>
<tr><th colspan="2">1st Grade</th></tr>
<tr><th colspan="2">Early Learning Foundations</th></tr>
<tr><td colspan="2">• Read stories and poems aloud with sufficient fluency to support comprehension.
• Use phonics (matching letters and sounds) and word analysis skills to figure out unfamiliar words when reading and writing.
• Be able to hear and orally reproduce sounds used to make words.
• Understand the basic features of print.</td></tr>
<tr><th>Reading</th><th>Writing</th></tr>
<tr><td>• Get facts and information from different writings.</td><td>• Write about a topic, supplying some facts and providing some sense of opening and closing.</td></tr>
<tr><th>Speaking/Listening</th><th>Language</th></tr>
<tr><td>• Take part in conversations about topics and texts being studied by responding to the comments of others and asking questions to clear up any confusion.</td><td>• Produce and expanding complete simple and compound statements, questions, commands, and exclamations.
• Identify the correct meaning for a word with multiple meanings, based on the sentence or paragraph in which the word is used (e.g., deciding whether the word bat means a flying mammal or a club used in baseball).
• Learn to think about finer distinctions in the meanings of near-synonyms (e.g., marching, prancing, strutting, strolling, and walking).</td></tr>
</table>

2nd Grade	
Early Learning Foundations	
• Read stories and poems aloud fluently, without pausing to figure out what each word means. • Use word analysis skills and phonics to decode words. • Create readable documents with legible print.	
Reading	**Writing**
• Pay close attention to details, including illustrations and graphics, in stories and books to answer who, what, where, when, why, and how questions. • Determine the lesson or moral of stories, fables, and folktales. • Use text features (e.g., captions, bold print, and indexes) to locate key facts or information efficiently.	• Write an opinion about a book he or she has read, using important details from the materials to support that opinion. • Write stories that include a short sequence of events and include a clear beginning, middle, and end.
Speaking/Listening	**Language**
• Take part in conversations by linking his or her comments to the remarks of others and asking and answering questions to gather additional information or deepen understanding of the topic. • Retell key information or ideas from media or books read aloud.	• Produce, expanding, and rearranging sentences (e.g., "The boy watched the movie;" "The little boy watched the movie;" "The action movie was watched by the little boy"). • Determine the meaning of the new word formed when a known prefix or suffix is added to a known word (happy/unhappy and pain/painful/painless).

3rd Grade	
Early Learning Foundations	
• Read with accuracy, appropriate rate, and expression. • Use word analysis skills and phonics to decode words. • Begin cursive writing.	
Reading	**Writing**
• Read closely to find main ideas and supporting details in a story. • Describe the logical connection between particular sentences and paragraphs in stories (e.g., first, second, and third; cause and effect). • Compare the most important points and key details presented in two books on the same topic.	• Write opinions or explanations that group related information and develop topics with facts and details. • Write stories that establish a situation and include details and clear sequences of events that describe the actions, thoughts, and feelings of characters. • Independently conduct short research projects that build knowledge about various topics.
Speaking/Listening	**Language**
• Paraphrase and respond to information presented in discussions, such as comparing and contrasting ideas and analyzing evidence that speakers use to support particular points. • Report orally on a topic or telling a story with enough facts and details.	• Write complete sentences with correct capitalization and spelling. • Relate words that are common in reading to words with similar meanings (synonyms) and to their opposites (antonyms).

4th Grade	
Early Learning Foundations	
• Read with accuracy, appropriate rate, and expression. • Use word analysis skills and phonics to decode words. • Write in cursive.	
Reading	**Writing**
• Describe the basic elements of stories — such as characters, events, and settings — by drawing on specific details in the text. • Pay close attention to key features of informational books and articles. These include understanding the main and supporting ideas; being able to compare and contrast information; and explaining how the author uses facts, details, and evidence to support particular points. • Compare ideas, characters, events, and settings in stories and myths from different cultures.	• Write summaries or opinions about topics supported with a set of well-organized facts, details, and examples. • Independently conduct short research projects on different aspects of a topic using evidence from books and the Internet.
Speaking/Listening	**Language**
• Paraphrase and respond to information presented in discussions, such as comparing and contrasting ideas and analyzing evidence that speakers use to support particular points. • Report orally on a topic or telling a story with enough facts and details.	• Write complete sentences with correct capitalization and spelling. • Relate words that are common in reading to words with similar meanings (synonyms) and to their opposites (antonyms).

5th Grade	
Early Learning Foundations	
• Read with accuracy, appropriate rate, and expression. • Use word analysis skills and phonics to decode words.	
Reading	**Writing**
• Summarize the key details of stories, dramas, poems, and nonfiction materials, including their themes or main ideas. • Identify and judge evidence that supports particular ideas in an author's argument to change a reader's point of view. • Integrating information from several print and digital sources to answer questions and solve problems.	• Write opinions that offer reasoned arguments and provide facts and examples that are logically grouped to support the writer's point of view. • Write stories, real or imaginary, that unfold naturally and developing the plot with dialogue, description, and effective pacing of the action.
Speaking/Listening	**Language**
• Come to classroom discussions prepared, then engaging fully and thoughtfully with others (e.g., contributing accurate, relevant information; elaborating on the remarks of others; synthesizing ideas). • Report on a topic or present an opinion with his or her own words, a logical sequence of ideas, sufficient facts and details, and formal English when appropriate.	• Expand, combine, and reduce sentences to improve meaning, interest, and style of writing. • Build knowledge of academic words with an emphasis on those that signal a contrast in ideas or logical relationships, such as on the other hand, similarly, and therefore. • Produce writing on the computer.

6th Grade	
Reading	**Writing**
• Gain knowledge from materials that make extensive use of elaborate diagrams and data to convey information and illustrate concepts. • Evaluate the argument and specific claims in written materials or a speech, and distinguish claims that are supported by reasons and evidence from claims that are not.	• Write brief reports and arguments that examine a topic, have a clear focus, and include relevant facts, details, and quotations. • Conduct short research projects to answer a question; draw on several sources and sharpen the focus based on the research findings. • Write narratives with logical sequences of events.
Speaking/Listening	**Language**
• Present claims and findings to others orally; sequence ideas logically and accentuate main ideas or themes. • Review and paraphrase key ideas and multiple perspectives of a speaker.	• Determine the correct meaning of a word based on the context in which it is used (e.g., the rest of the sentence or paragraph; a word's position or function in a sentence).

7th Grade	
Reading	**Writing**
• Cite several sources of specific evidence from a piece when offering an oral or written analysis of a book, essay, article, or play.	• Organize and focus writing; include supporting statements and conclusions with evidence and show that evidence is accurate and reliable. • Conduct research in response to a specific question by drawing on evidence from several credible literary or informational sources to support an analysis or reflection. • Avoid plagiarism and follow a standard format for citations (e.g., footnotes or bibliography).
Speaking/Listening	**Language**
• Evaluate a speaker's key points and reasoning; ask questions and state well-supported ideas in discussion. • Present claims and findings to others; emphasize main points; make eye contact; speak loudly; pronounce words clearly and use formal English when the situation calls for it.	• Use common, grade-appropriate Greek or Latin affixes and roots as clues to define the meaning of a word (e.g., *semi-*, *semiannual, and semicircle*).

8th Grade	
Reading	**Writing**
• Cite the evidence that most strongly supports an analysis of what is explicitly stated and/or implied from a book, article, poem, or play. • Analyze where materials on the same topic disagree on matters of fact, interpretation, or point of view.	• Build writing around strong central ideas or points of view; support the ideas with sound reasoning and evidence, precise word choices, smooth transitions, and different sentence structures. • Plan and conduct research projects that include several steps and use many credible and documented print and digital sources.
Speaking/Listening	**Language**
• Analyze the purpose of information presented in diverse media (e.g., print, TV, or web) and evaluate its social, political, and/or commercial motives. • Present findings and claims to others; emphasize key points with relevant evidence and sound reasoning; adapt speech to the audience and the formality of the setting; respond to questions and comments with relevant observations and ideas.	• Use strong, active verbs to create a clear picture for the reader (e.g., *walk, skip, meander, lurch, or limp*). • Interpret figures of speech (e.g., irony or puns) and develop a large vocabulary of general academic words and phrases.

9th Grade	
Reading	**Writing**
• Understand the relationship between historical writings and literature that draws upon them. • Read and analyze literature reflecting the cultural experience and point of view of authors from outside the United States. • Assess claims and arguments; make judgments about whether evidence is trustworthy and reasoning is logical.	• Complete in-depth research projects with material from multiple sources. • Use complex ideas, strong evidence and cohesive structure to express a point of view in argumentative writing. • Expand writing of observational, situational or conflict-centered stories or essays.
Speaking/Listening	**Language**
• Use observations, facts and arguments from different perspectives to understand multiple sides of an issue; respond thoughtfully. • Connect a discussion to larger themes or ideas; clarify and challenge conclusions. • Enhance findings and evidence using digital media.	• Demonstrate an understanding of figures of speech and analyze their role in a text. • Build a comprehensive vocabulary; learn new words and phrases using context and related words. • Learn and use new techniques to make writing compelling, such as parallel structure and a variety of clauses/phrases.

10th Grade	
Reading	**Writing**
• Understand the relationship between historical writings and literature that draws upon them. • Read and analyze literature reflecting the cultural experience and point of view of authors from outside the United States. • Assess claims and arguments; make judgments about whether evidence is trustworthy and reasoning is logical.	• Complete in-depth research projects with material from multiple sources. • Use complex ideas, strong evidence, and cohesive structure to express a point of view in argumentative writing. • Expand writing of observational, situational, or conflict-centered stories or essays.
Speaking/Listening	**Language**
• Use observations, facts, and arguments from different perspectives to understand multiple sides of an issue; respond thoughtfully. • Connect a discussion to larger themes or ideas; clarify and challenge conclusions. • Enhance findings and evidence using digital media.	• Demonstrate an understanding of figures of speech and analyze their role in a text. • Build a comprehensive vocabulary; learn new words and phrases using context and related words. • Learn and use new techniques to make writing compelling, such as parallel structure and a variety of clauses/phrases.

11th Grade	
Reading	**Writing**
• Evaluate how word choices and phrasing convey meaning and add complexity to works of historical and modern authors. • Read increasingly challenging texts; examine themes and use evidence to support summaries and analyses literary and informational texts.	• Write argumentative pieces that include fairly used arguments and counterarguments; use accurate information from trustworthy sources. • When writing a narrative, establish characters' points of view, depict a central conflict, and provide descriptive details, dialogue, and settings.
Speaking/Listening	**Language**
• Evaluate others' points of view during class discussions; give thoughtful feedback on the effectiveness of arguments, veracity of evidence, and overall strength of viewpoint; accept feedback graciously. • Give class presentations that contain an original perspective on a subject, use evidence to support arguments, and address opposing points of view.	• Understand and use complex phrases and figures of speech including hyperbole; use a range of techniques to determine an unfamiliar word's meaning. • Use proper spelling, capitalization, and punctuation in written arguments; demonstrate knowledge of Standard English conventions when speaking and writing.

12th Grade	
Reading	**Writing**
• Evaluate how word choices and phrasing convey meaning and add complexity to works of historical and modern authors. • Read increasingly challenging texts, examine themes, and use evidence to support summaries and analyses literary and informational texts.	• Write argumentative pieces that include fairly used arguments and counterarguments; use accurate information from trustworthy sources. • When writing a narrative, establish characters' points of view, depict a central conflict, and provide descriptive details, dialogue, and settings.
Speaking/Listening	**Language**
• Evaluate others' points of view during class discussions; give thoughtful feedback on the effectiveness of arguments, veracity of evidence, and overall strength of viewpoint; accept feedback graciously. • Give class presentations that contain an original perspective on a subject, use evidence to support arguments, and address opposing points of view.	• Understand and use complex phrases and figures of speech including hyperbole; use a range of techniques to determine an unfamiliar word's meaning. • Use proper spelling, capitalization, and punctuation in written arguments; demonstrate knowledge of Standard English conventions when speaking and writing.

Transition English Language Arts for Seniors	
Reading	**Writing**
• Evaluate how word choices and phrasing convey meaning and add complexity to works of historical and modern authors. • Read increasingly challenging texts; examine themes and use evidence to support summaries and analyses literary and informational texts.	• Write argumentative pieces that include fairly used arguments and counterarguments; use accurate information from trustworthy sources. • When writing a narrative, establish characters' points of view, depict a central conflict, and provide descriptive details, dialogue, and settings.
Speaking/Listening	**Language**
• Evaluate others' points of view during class discussions; give thoughtful feedback on the effectiveness of arguments, veracity of evidence, and overall strength of viewpoint; accept feedback graciously. • Give class presentations that contain an original perspective on a subject, use evidence to support arguments, and address opposing points of view.	• Understand and use complex phrases and figures of speech including hyperbole; use a range of techniques to determine an unfamiliar word's meaning. • Use proper spelling, capitalization, and punctuation in written arguments; demonstrate knowledge of Standard English conventions when speaking and writing.

English language Arts Skills Progressions

Skill Progressions in West Virginia College- and Career-Readiness Standards for English Language Arts

The following pages contain the skill progressions found in the West Virginia College- and Career Readiness Standards for English language arts (ELA). In ELA, each grade level consists of 41 standards; these standards have been organized in K-12 order to show the advancing rigor and complexity of the expectations for what students should know, understand, and be able to do.

This document is intended to be a resource that fosters and supports discussion among teachers as they look at the vertical alignment found within the standards that creates a meaningful progression of skills toward college- and career-readiness.

Standard 1	
K.1	With prompting and support, ask and answer questions about key details in a literary text.
1.1	Ask and answer questions about key details in a literary text.
2.1	Ask and answer key ideas such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in literary text.
3.1	Ask and answer questions to demonstrate understanding of a literary text, referring explicitly to the text as the basis for the answers.
4.1	Refer to details and examples in a literary text when explaining what the text says explicitly and when drawing inferences from the text.
5.1	Quote accurately from a literary text when explaining what the text says explicitly and when drawing inferences from the text.
6.1	Cite textual evidence to support analysis of what the literary text says explicitly as well as inferences drawn from the text.
7.1	Cite several pieces of textual evidence to support analysis of what the literary text says explicitly as well as inferences drawn from the text.
8.1	Cite the textual evidence that most strongly supports an analysis of what the literary text says explicitly as well as inferences drawn from the text.
9.1	Cite strong and thorough textual evidence to support analysis of what the literary text says explicitly as well as inferences drawn from the literary text.
10.1	Cite strong and thorough textual evidence to support analysis of what the literary text says explicitly as well as inferences drawn from the text, recognizing when the text leaves matters uncertain.
11.1	Cite strong and thorough textual evidence to support analysis of what the literary text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
12.1	Cite strong and thorough textual evidence to support analysis of what the literary text says explicitly as well as inferences drawn from the text and a variety of other sources, including determining where and why the literary text leaves matters uncertain.
Standard 2	
K.2	With prompting and support, retell familiar stories, including key details in literary texts.
1.2	Retell stories, including key details, and demonstrate understanding of their central message or lesson in literary texts.
2.2	Recount stories, including fables and folktales from diverse cultures and determine their

	central message, lesson, or moral in literary text.
3.2	Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the literary text.
4.2	Determine a theme of a story, drama, or poem from details in the literary text; summarize the text.
5.2	Determine a theme of a story, drama, or poem from details in a literary text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
6.2	Determine a theme or central idea of a literary text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
7.2	Determine a theme or central idea of a literary text and analyze its development over the course of the text; provide an objective summary of the text.
8.2	Determine a theme or central idea of a literary text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.
9.2	Determine a theme or central idea of a literary text and analyze in detail its development over the course of the literary text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the literary text.
10.2	Determine two themes or central ideas of a literary text and analyze in detail their development over the course of the literary text, including how they emerge and are shaped and refined by specific details; provide an objective summary of the literary text.
11.2	Determine two or more themes or central ideas of a literary text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.
12.2	Determine two or more themes or central ideas of a literary text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective and critical analysis of the literary text.
Standard 3	
K.3	With prompting and support, identify characters, settings, and major events in a literary text.
1.3	Describe characters, settings, and major events in a story, using key details in literary texts.
2.3	Describe how characters in a story respond to major events and challenges in literary text.
3.3	Describe characters in a literary story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
4.3	Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the literary text (e.g., a character's thoughts, words, or actions).
5.3	Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the literary text (e.g., how characters interact).
6.3	Describe how a particular story's or drama's plot unfolds in a series of events and how the characters respond or change as the plot moves toward a resolution.
7.3	Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).
8.3	Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.
9.3	Analyze how complex characters (e.g., those with multiple or conflicting motivations)

	develop over the course of a literary text, interact with other characters, and advance the plot or develop the theme.
10.3	Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a literary text, interact with other characters, and affect the plot or develop the theme.
11.3	Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, and/or how the characters are introduced and developed).
12.3	Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, and/or how the characters are introduced and developed).
Standard 4	
K.4	With prompting and support, ask and answer questions about key details in an informational text.
1.4	Ask and answer questions about key details in an informational text.
2.4	Ask and answer such questions as *who, what, where, when, why,* and *how* to demonstrate understanding of key details in informational text.
3.4	Ask and answer questions to demonstrate understanding of an informational text, referring explicitly to the text as the basis for the answers.
4.4	Refer to details and examples in an informational text when explaining what the text says explicitly and when drawing inferences from the text.
5.4	Quote accurately from an informational text when explaining what the text says explicitly and when drawing inferences from the text.
6.4	Cite textual evidence to support analysis of what the informational text says explicitly as well as inferences drawn from the text.
7.4	Cite several pieces of textual evidence to support analysis of what the informational text says explicitly as well as inferences drawn from the text.
8.4	Cite the textual evidence that most strongly supports an analysis of what the informational text says explicitly as well as inferences drawn from the text.
9.4	Cite strong and thorough textual evidence to support analysis of what the informational text says explicitly as well as inferences drawn from the informational text.
10.4	Cite strong and thorough textual evidence to support analysis of what the informational text says explicitly as well as inferences drawn from the informational text, recognizing when the text leaves matters uncertain.
11.4	Cite strong and thorough textual evidence to support analysis of what the informational text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
12.4	Cite strong and thorough textual evidence to support analysis of what the informational text says explicitly as well as inferences drawn from the text, including determining where and why the informational text leaves matters uncertain.
Standard 5	
K.5	With prompting and support, identify the main topic and retell key details of an informational text.
1.5	Identify the main topic and retell key details of an informational text.
2.5	Identify the main topic of a multi-paragraph text as well as the focus of specific paragraphs within informational text.
3.5	Determine the main idea of an informational text; recount the key details and explain how

	they support the main idea.
4.5	Determine the main idea of an informational text and explain how it is supported by key details; summarize the text.
5.5	Determine two or more main ideas of an informational text and explain how they are supported by key details; summarize the text.
6.5	Determine a central idea of an informational text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
7.5	Determine two or more central ideas in an informational text and analyze their development over the course of the text; provide an objective summary of the text.
8.5	Determine a central idea of an informational text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
9.5	Determine a central idea of an informational text and analyze its development over the course of the informational text, including how it is developed and refined by specific details; provide an objective summary of the informational text.
10.5	Determine two central ideas of an informational text and analyze their development over the course of the informational text, including how they emerge and are shaped and refined by specific details; provide an objective summary of the informational text.
11.5	Determine two or more central ideas of an informational text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.
12.5	Determine two or more central ideas of an informational text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex and critical analysis; provide an objective summary of the informational text.
Standard 6	
K.6	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in an informational text.
1.6	Describe the connection between two individuals, events, ideas, or pieces of information in an informational text.
2.6	Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in an informational text.
3.6	Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in an informational text, using language that pertains to time, sequence, and cause/effect.
4.6	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the informational text.
5.6	Using an informational text, explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
6.6	Analyze in detail how a key individual, event, or idea is introduced, illustrated, and developed in an informational text (e.g., through examples or anecdotes).
7.6	Analyze the interactions between individuals, events, and ideas in an informational text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).
8.6	Analyze how an informational text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).
9.6	Analyze how the author unfolds an analysis or series of ideas or events in an informational text, including the order in which the points are made, how they are introduced and

	developed, and the connections that are drawn between them.
10.6	Analyze how the author unfolds an analysis or series of complex ideas or events in informational texts, including the order in which the points are made, how they are developed, and how they interact.
11.6	Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the informational text.
12.6	Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the informational text and media.
Standard 7	
K.7	With prompting and support, ask and answer questions about unknown words in a literary text.
1.7	In literary texts, identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
2.7	Describe how words and phrases (e.g., regular beats, alliteration, rhymes, and repeated lines) in literary text supply rhythm and meaning in a story, poem, or song.
3.7	Determine the meaning of words and phrases as they are used in a literary text, distinguishing literal from nonliteral language.
4.7	Determine the meaning of words and phrases as they are used in a literary text, including words that allude to significant characters such as those found in mythology (e.g., herculean).
5.7	Determine the meaning of words and phrases as they are used in a literary text, including figurative language such as metaphors and similes.
6.7	Determine the meaning of words and phrases as they are used in a literary text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.
7.7	Determine the meaning of words and phrases as they are used in a literary text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.
8.7	Determine the meaning of words and phrases as they are used in a literary text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
9.7	Determine the meaning of words and phrases as they are used in the literary text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place or how it sets a formal or informal tone).
10.7	Determine the meaning of multiple-meaning words and phrases as they are used in a literary text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place or how it sets a formal or informal tone).
11.7	Determine the meaning of words and phrases as they are used in the literary text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)
12.7	Determine the meaning of words and phrases as they are used in a variety of literary texts, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is

	particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)
Standard 8	
K.8	With prompting and support, recognize common types of texts (e.g., storybooks or poems).
1.8	Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of literary text types.
2.8	Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action in literary text.
3.8	Refer to parts of stories, dramas, and poems when writing or speaking about a literary text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.
4.8	Explain major differences between poems, drama, and prose; refer to the structural elements of poems (e.g., verse, rhythm, and meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, and stage directions) when writing or speaking about a literary text.
5.8	Explain how a series of chapters, scenes, or stanzas fits together in a literary text to provide the overall structure of a particular story, drama, or poem.
6.8	Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a literary text and contributes to the development of the theme, setting, or plot.
7.8	Analyze how a drama's or poem's form or structure (e.g., soliloquy or sonnet) contributes to its meaning.
8.8	Compare and contrast the structure of two or more literary texts and analyze how the differing structure of each text contributes to its meaning and style.
9.8	Analyze how an author's choices concerning how to structure a literary text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing or flashbacks) create such effects as mystery, tension, or surprise.
10.8	Analyze how an author's choices concerning how to structure a literary text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing or flashbacks) contribute to its overall structure and create such effects as mystery, tension, or surprise.
11.8	Analyze how an author's choices concerning how to structure specific parts of a literary text (e.g., the choice of where to begin or end a story, or the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.
12.8	Analyze how an author's choices concerning how to structure specific parts of a literary text (e.g., the choice of where to begin or end a story, or the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.
Standard 9	
K.9	With prompting and support, name the author and illustrator of a story and define the role of each in telling the story in a literary text.
1.9	Identify who is telling the story at various points in a literary text.
2.9	Acknowledge differences in the points of view of characters, including speaking in a different voice for each character when reading dialogue aloud from literary text.
3.9	Distinguish one's point of view from that of the narrator or those of the characters in a literary text.
4.9	Compare and contrast the point of view from which different literary texts are narrated, including the difference between first- and third-person narrations.
5.9	Describe how a narrator's or speaker's point of view influences how events are described in

	a literary text.
6.9	Explain how an author develops the point of view of the narrator or speaker in a literary text.
7.9	Analyze how an author develops and contrasts the points of view of different characters or narrators in a literary text.
8.9	Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor in a literary text.
9.9	Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.
10.9	Analyze and defend a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.
11.9	Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a literary text from what is really meant (e.g., satire, sarcasm, irony, or understatement).
12.9	Analyze and defend a case in which grasping a point of view requires distinguishing what is directly stated in a literary text from what is really meant (e.g., satire, sarcasm, irony, or understatement).
Standard 10	
K.10	With prompting and support, ask and answer questions about unknown words in an informational text.
1.10	Ask and answer questions to help determine or clarify the meaning of words and phrases in an informational text.
2.10	Determine the meaning of words and phrases in informational text relevant to a *grade 2 topic or subject area*.
3.10	Determine the meaning of general academic and domain-specific words and phrases in an informational text relevant to a *grade 3 topic or subject area*.
4.10	Determine the meaning of general academic and domain-specific words or phrases in an informational text relevant to a *grade 4 topic or subject area*.
5.10	Determine the meaning of general academic and domain-specific words and phrases in an informational text relevant to a *grade 5 topic or subject area*.
6.10	Determine the meaning of words and phrases as they are used in an informational text, including figurative, connotative, and technical meanings.
7.10	Determine the meaning of words and phrases as they are used in an informational text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.
8.10	Determine the meaning of words and phrases as they are used in an informational text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
9.10	Determine the meaning of words and phrases as they are used in an informational text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
10.10	Determine the meaning of words and phrases as they are used in an informational text, including figurative, connotative, and technical meanings; analyze and defend the cumulative impact of specific word choices on meaning and tone (e.g. how the language of a court opinion differs from that of a newspaper).
11.10	Determine the meaning of words and phrases as they are used in an informational text,

	including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines "faction" in *Federalist No. 10*).
12.10	Determine the meaning of words and phrases as they are used in an informational text, including figurative, connotative, and technical meanings; analyze how and why an author uses and refines the meaning of a key term or terms over the course of an informational text (e.g., how Madison defines "faction" in *Federalist No. 10*).
Standard 11	
K.11	With prompting and support, identify the front cover, back cover, and title page of a book.
1.11	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, and/or icons) to locate key facts or information in an informational text.
2.11	Know and use various informational text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, and icons) to locate key facts or information in a text efficiently.
3.11	Use informational text features and search tools (e.g., key words, sidebars, and hyperlinks) to locate information relevant to a given topic efficiently
4.11	Describe the overall structure (e.g., chronology, comparison, cause/effect, or problem/solution) of events, ideas, concepts, or information in all or part of an informational text.
5.11	Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, and problem/solution) of events, ideas, concepts, or information in two or more informational texts.
6.11	Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of an informational text and contributes to the development of the ideas.
7.11	Analyze the structure an author uses to organize an informational text, including how the major sections contribute to the whole and to the development of the ideas.
8.11	Analyze in detail the structure of a specific paragraph in an informational text, including the role of particular sentences in developing and refining a key concept.
9.11	Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of an informational text (e.g., a section or chapter).
10.11	Analyze and defend in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of an informational text (e.g., a section or chapter).
11.11	In informational text, analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.
12.11	In informational text, analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including how the author uses structure to make points clear, convincing, and engaging.
Standard 12	
K.12	With prompting and support, name the author and illustrator of a text and define the role of each in presenting the ideas or information in an informational text.
1.12	Distinguish between information provided by pictures or other illustrations and information provided by the words in an informational text.
2.12	Identify the main purpose of informational text, including what the author wants to answer, explain, or describe
3.12	Distinguish one's own point of view from that of the author of an informational text.

4.12	Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in the focus and information provided in these informational texts.
5.12	Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent in informational texts.
6.12	Determine an author's point of view or purpose in an informational text and explain how it is communicated in the text.
7.12	Determine an author's point of view or purpose in an informational text and analyze how the author distinguishes his or her position from that of others.
8.12	Determine an author's point of view or purpose in an informational text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
9.12	Determine an author's point of view or purpose in an informational text and analyze how the author uses rhetoric to advance that point of view or purpose.
10.12	Determine an author's point of view or purpose in an informational text and evaluate how the author uses rhetoric to advance that point of view or purpose.
11.12	Determine an author's point of view or purpose in an informational text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.
12.12	Determine an author's point of view, purpose, and tone in an informational text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.
Standard 13	
K.13	With prompting and support, describe the relationship between illustrations and the literary story in which they appear (e.g., what moment in a story an illustration depicts).
1.13	Use illustrations and details in a story to describe its characters, setting, or events in literary texts.
2.13	Use information gained from the illustrations and words in a print or digital literary text to demonstrate understanding of its characters, setting, or plot.
3.13	Explain how specific aspects of a literary text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood or emphasize aspects of a character or setting).
4.13	Make connections between the text of a story or drama and a visual or oral presentation of the literary text, identifying where specific descriptions and directions in the text are reflected in the visual or oral presentation.
5.13	Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a literary text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, and/or poem).
6.13	Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the literary text, including contrasting what is "seen" and "heard" when reading the text to what is perceived when listening or watching.
7.13	Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).
8.13	Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.
9.13	Analyze the representation, in a literary text, of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Breughel's *Landscape with the Fall of Icarus*).
10.13	Analyze the representation, in a literary text, of a subject or a key scene in two or more

	different artistic mediums, including what is emphasized or absent in each treatment and why (e.g., Auden's "Musée des Beaux Arts" and Breughel's *Landscape with the Fall of Icarus*).
11.13	Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)
12.13	Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), critically evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)
Standard 14	
K.14	With prompting and support, compare and contrast the adventures and experiences of characters in familiar literary stories.
1.14	Compare and contrast the adventures and experiences of characters in stories in literary texts.
2.14	Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures in a literary text.
3.14	Compare and contrast the themes, settings, and plots of literary stories written by the same author about the same or similar characters (e.g., in books from a series).
4.14	Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., a journey) in stories, myths, traditional literature, and literary text from different cultures.
5.14	Compare and contrast stories in literary texts of the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
6.14	Compare and contrast literary texts in different forms or genres (e.g., stories, poems, historical novels, and fantasy stories) in terms of their approaches to similar themes and topics.
7.14	Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.
8.14	Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, such as the Bible, including describing how the material is transformed in the modern work (e.g., how a modern interpretation of a Shakespearean text draws from the original text).
9.14	Analyze how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible, or how a later author draws on a play by Shakespeare).
10.14	Analyze and defend how an author draws on and transforms source material in a specific literary work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible, or how a later author draws on a play by Shakespeare).
11.14	Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more literary texts from the same period treat similar themes or topics.
12.14	Demonstrate a deep knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how multiple literary texts from the same period treat similar themes or topics.
Standard 15	
K.15	With prompting and support, describe the relationship between illustrations and the

	informational text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
1.15	Use the illustrations and details in a text to describe its key ideas in informational texts.
2.15	Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify an informational text.
3.15	Use information gained from illustrations (e.g., maps or photographs) and the words in an informational text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
4.15	Interpret information presented visually orally or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on web pages) and explain how the information contributes to an understanding of the informational text in which it appears.
5.15	Draw on information from multiple print or digital informational sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
6.15	Integrate information presented in different media or formats (e.g., visually and/or quantitatively) and in words to develop a coherent understanding of a topic or issue.
7.15	Compare and contrast a text to an audio, video, or multimedia version of the informational text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the power of the words).
8.15	Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, and/or multimedia) to present a particular topic or idea.
9.15	Analyze various accounts of a subject told in different mediums of informational texts (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.
10.15	Analyze and defend various accounts of a subject told in different mediums of informational texts (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.
11.15	Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually and/or quantitatively) as well as in words in order to address a question or solve a problem.
12.15	Integrate, evaluate, and synthesize multiple sources of information presented in different media or formats (e.g., visually and/or quantitatively) as well as in words in order to address a question or solve a problem.
Standard 16	
K.16	With prompting and support, identify the reasons an author gives to support points in a literary or informational text.
1.16	Identify the reasons an author gives to support points in an informational text.
2.16	Describe how reasons support specific points the author makes in an informational text.
3.16	Describe the logical connection between particular sentences and paragraphs in an informational text (e.g., comparison, cause/effect, or first/second/third in a sequence).
4.16	Explain how an author uses reasons and evidence to support particular points in an informational text.
5.16	Explain how an author uses reasons and evidence to support particular points in an informational text, identifying which reasons and evidence support which point(s).
6.16	Trace and evaluate the argument and specific claims in an informational text, distinguishing claims that are supported by reasons and evidence from claims that are not.
7.16	Trace and evaluate the argument and specific claims in an informational text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the

	claims.
8.16	Delineate and evaluate the argument and specific claims in an informational text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.
9.16	Delineate and evaluate the argument and specific claims in an informational text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.
10.16	Delineate and evaluate the argument and specific claims and counterclaims in an informational text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.
11.16	Delineate and evaluate the reasoning in influential U.S. informational texts, including the application of constitutional principles (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist Papers* or presidential addresses).
12.16	Delineate and evaluate the reasoning in influential U.S. informational texts, including the application of constitutional principles (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist Papers* or presidential addresses).
Standard 17	
K.17	With prompting and support, identify basic similarities in and differences between two literary or informational texts on the same topic (e.g., in illustrations, descriptions, or procedures).
1.17	Identify basic similarities in and differences between two informational texts on the same topic (e.g., in illustrations, descriptions, or procedures).
2.17	Compare and contrast the most important points presented by two informational texts on the same topic.
3.17	Compare and contrast the most important points and key details presented in two informational texts on the same topic.
4.17	Integrate information from two informational texts on the same topic in order to write or speak about the subject knowledgeably.
5.17	Integrate information from several informational texts on the same topic in order to write or speak about the subject knowledgeably.
6.17	Compare and contrast two authors' presentations of events (e.g., a memoir written by and a biography on the same person) in informational text.
7.17	Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.
8.17	Analyze a case in which two or more informational texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.
9.17	Analyze influential U.S. documents of historical and literary significance (e.g., Washington's Farewell Address or The Gettysburg Address), including how they address related themes and concepts.
10.17	Analyze and defend influential U.S. documents of historical and literary significance (e.g. Roosevelt's Four Freedoms speech or King's "Letter from Birmingham Jail"), including how they address related themes and concepts.
11.17	Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. informational documents of historical and literary significance (e.g., *The Declaration of Independence*, the

	Preamble to the Constitution, the *Bill of Rights,* and Lincoln's *Second Inaugural Address*) for their themes, purposes, and rhetorical features.
12.17	Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. informational documents of historical and literary significance (e.g., *The Declaration of Independence,* the *Preamble to the Constitution,* the *Bill of Rights* and Lincoln's *Second Inaugural Address*) for their themes, purposes, rhetorical features, and current relevancy.
Standard 18	
K.18	Actively engage in group reading activities of literary texts with purpose and understanding.
1.18	With prompting and support, read prose and poetry of appropriate complexity for grade 1 in literary texts.
2.18	By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity range proficiently, with scaffolding as needed at the high end of the range.
3.18	By the end of the year, read and comprehend literature, including stories, dramas and poetry, at the high end of the grades 2–3 text complexity range independently and proficiently.
4.18	By the end of the year read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity range proficiently, with scaffolding as needed at the high end of the range.
5.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity range independently and proficiently.
6.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 6–8 text complexity range proficiently, with scaffolding as needed at the high end of the range.
7.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 6–8 text complexity range proficiently, with scaffolding as needed at the high end of the range.
8.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of grades 6–8 text complexity range independently and proficiently.
9.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grade 9-10 text complexity range proficiently, with scaffolding as needed at the high end of the range.
10.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, independently and proficiently, at the high end of the grade 9-10 text complexity range.
11.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 11–12 text complexity range proficiently, with scaffolding as needed at the high end of the range.
12.18	By the end of the year, read and comprehend literature, including stories, dramas, and poetry, independently and proficiently at the high end of the grades 11–12 text complexity range.
Standard 19	
K.19	Actively engage in group reading activities of informational texts with purpose and understanding.
1.19	With prompting and support, read informational texts appropriately complex for grade 1.
2.19	By the end of year, read and comprehend informational texts, including social studies,

	science, and technical texts, in the grades 2–3 text complexity range proficiently, with scaffolding as needed at the high end of the range.
3.19	By the end of the year, read and comprehend informational texts, including social studies, science, and technical texts, at the high end of the grades 2–3 text complexity range independently and proficiently.
4.19	By the end of the year read and comprehend informational texts, including social studies, science and technical texts, in the grades 4–5 text complexity range proficiently, with scaffolding as needed at the high end of the range.
5.19	By the end of the year, read and comprehend informational texts, including social studies, science, and technical texts, at the high end of the grades 4–5 text complexity range independently and proficiently.
6.19	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 6–8 text complexity range proficiently, with scaffolding as needed at the high end of the range.
7.19	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 6–8 text complexity range proficiently, with scaffolding as needed at the high end of the range.
8.19	By the end of the year, read and comprehend nonfiction and other informational texts at the high end of the grades 6–8 text complexity range independently and proficiently.
9.19	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 9-10 text complexity range proficiently, with scaffolding as needed at the high end of the range.
10.19	By the end of the year, read and comprehend nonfiction and other informational texts, independently and proficiently, at the high end of the grade 9-10 text complexity range.
11.19	By the end of the year, read and comprehend nonfiction and other informational texts in the grades 11-12 text complexity range proficiently, with scaffolding as needed at the high end of the range.
12.19	By the end of the year, read and comprehend nonfiction and other informational texts independently and proficiently at the high end of the grades 11-12 text complexity range.
Standard 20	
K.20	Use a combination of drawing, dictating, and writing to compose opinion pieces in which the topic or the name of the text being discussed is included; state an opinion or preference about the topic or book (e.g., "*My favorite book is..."*).
1.20	Write opinion pieces by introducing the topic or name of the text being discussed, stating an opinion, supplying a reason for the opinion, and providing some sense of closure.
2.20	Write opinion pieces by introducing the topic or text being discussed, stating an opinion, supplying reasons that support the opinion, using linking words (e.g., *because, and,* or *also*) to connect opinion and reasons, and providing a concluding statement or section.
3.20	Write opinion pieces on topics or texts, supporting a point of view with reasons. • Introduce the topic or text being discussed, state an opinion, and create an organizational structure that lists reasons. • Provide reasons that support the opinion. • Use linking words and phrases (e.g., *because*, *therefore*, *since*, or *for example*) to connect opinion and reasons. • Provide a concluding statement or section.
4.20	Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

	• Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. • Provide reasons that are supported by facts and details. • Link opinion and reasons using words and phrases (e.g., *for instance, in order to,* or *in addition*). • Provide a concluding statement or section related to the opinion presented.
5.20	Write opinion pieces on topics or texts, supporting a point of view with reasons and information. • Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. • Provide logically ordered reasons that are supported by facts and details. • Link opinion and reasons using words, phrases, and clauses (e.g., *consequently* and *specifically*). • Provide a concluding statement or section related to the opinion presented.
6.20	Write arguments to support claims with clear reasons and relevant evidence. • Introduce claim(s) and organize the reasons and evidence clearly. • Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text. • Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons. • Establish and maintain a formal style. • Provide a concluding statement or section that follows from the argument presented.
7.20	Write arguments to support claims with clear reasons and relevant evidence. • Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. • Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. • Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. • Establish and maintain a formal style. • Provide a concluding statement or section that follows from and supports the argument presented.
8.20	Write arguments to support claims with clear reasons and relevant evidence. • Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. • Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. • Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. • Establish and maintain a formal style. • Provide a concluding statement or section that follows from and supports the argument presented.
9.20	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. • Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s),

	counterclaims, reasons, and evidence. • Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. • Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the argument presented.
10.20	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. • Introduce precise, knowledgeable claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. • Develop claim(s) and counterclaims fairly, supplying relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. • Use a variety of words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence and between claim(s) and counterclaims. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the argument presented.
11.20	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. • Introduce precise, knowledgeable claim(s); establish the significance of the claim(s); distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. • Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. • Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the argument presented.
12.20	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. • Introduce precise, knowledgeable claim(s); establish the significance of the claim(s); distinguish the claim(s) from alternate or opposing claims and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. • Develop and justify claim(s) and counterclaims fairly and thoroughly, supplying the

	most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. • Analyze words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the argument presented.
Standard 21	
K.21	Use a combination of drawing, dictating, and writing to compose informative/ explanatory texts; name and supply some information about the topic.
1.21	Write informative/explanatory texts by naming a topic, supplying some facts about the topic, and providing some sense of closure.
2.21	Write informative/explanatory texts by introducing a topic, using facts and definitions to develop points, and providing a concluding statement or section.
3.21	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. • Introduce a topic and group related information together; include illustrations when useful to aid comprehension. • Develop the topic with facts, definitions, and details. • Use linking words and phrases (e.g., *also*, *another, and*, *more*, or *but*) to connect ideas within categories of information. • Provide a concluding statement or section.
4.21	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. • Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. • Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. • Link ideas within categories of information using words and phrases (e.g., *another, for example, also,* or *because*). • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Provide a concluding statement or section related to the information or explanation presented.
5.21	Write informative/explanatory texts to examine a topic and convey ideas and information clearly. • Introduce a topic clearly, provide a general observation, and focus and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aid comprehension. • Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. • Link ideas within and across categories of information using words, phrases, and clauses

	(e.g., *in contrast* and *especially*). • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Provide a concluding statement or section related to the information or explanation presented.
6.21	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. • Introduce a topic; organize ideas, concepts, and information using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts or tables), and multimedia when useful to aid comprehension. • Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. • Use appropriate transitions to clarify the relationships among ideas and concepts. • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Establish and maintain a formal style. • Provide a concluding statement or section that follows from the information or explanation presented.
7.21	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. • Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts or tables) and multimedia when useful to aid comprehension. • Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. • Use appropriate transitions to create cohesion and clarify the relationships among ideas and concepts. • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Establish and maintain a formal style. • Provide a concluding statement or section that follows from and supports the information or explanation presented.
8.21	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. • Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts or tables), and multimedia when useful to aid comprehension. • Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. • Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Establish and maintain a formal style. • Provide a concluding statement or section that follows from and supports the information or explanation presented.

9.21	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. • Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures and/or tables), and multimedia when useful to aid comprehension. • Develop the topic with well-chosen, relevant and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. • Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. • Use precise language and domain-specific vocabulary to manage the complexity of the topic. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).
10.21	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. • Introduce a topic; organize complex ideas, concepts, and information to analyze important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures and/or tables), and multimedia when useful to aid comprehension. • Develop the topic with well-chosen, relevant, significant, and sufficient facts; extended definitions; concrete details, quotations, or other information; and examples appropriate to the audience's knowledge of the topic. • Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. • Use precise language and domain-specific vocabulary to manage the complexity of the topic. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).
11.21	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. • Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures and/or tables), and multimedia when useful to aid comprehension. • Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. • Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and

	concepts. • Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).
12.21	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. • Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures and/or tables), and multimedia when useful to aid comprehension. • Evaluate the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. • Use and evaluate appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. • Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline. • Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).
Standard 22	
K.22	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.
1.22	Write narratives to recount two or more appropriately sequenced events, include some details regarding what happened, use transitional words to signal event order, and provide some sense of closure.
2.22	Write narratives to recount a well-elaborated event or short sequence of events, including details to describe actions, thoughts, and feelings, and using transitional words to signal event order and provide a sense of closure.
3.22	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. • Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. • Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. • Use transitional words and phrases to signal event order. • Provide a sense of closure.
4.22	Write narratives to develop real or imagined experiences or events using effective

	technique, descriptive details, and clear event sequences. • Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. • Use dialogue and description to develop experiences and events or show the responses of characters to situations. • Use a variety of transitional words and phrases to manage the sequence of events. • Use concrete words and phrases and sensory details to convey experiences and events precisely. • Provide a conclusion that follows from the narrated experiences or events.
5.22	Write a narrative to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. • Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. • Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. • Use a variety of transition words, phrases, and clauses to manage the sequence of events. • Use concrete words and phrases and sensory details to convey experiences and events precisely. • Provide a conclusion that follows from the narrated experiences or events.
6.22	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. • Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. • Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. • Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. • Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. • Provide a conclusion that follows from the narrated experiences or events.
7.22	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. • Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. • Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. • Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. • Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. • Provide a conclusion that follows from and reflects on the narrated experiences or events.
8.22	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences. • Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds

	naturally and logically. • Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. • Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. • Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. • Provide a conclusion that follows from and reflects on the narrated experiences or events.
9.22	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. • Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view and introducing a narrator and/or characters; create a smooth progression of experiences or events. • Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences events and/or characters. • Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. • Use precise words and phrases, effective details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. • Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
10.22	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. • Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view and introducing a narrator and/or characters; create a smooth progression of experiences or events. • Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. • Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build upon a particular outcome. • Use precise words and phrases, effective details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. • Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
11.22	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. • Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view and introducing a narrator and/or characters; create a smooth progression of experiences or events. • Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. • Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). • Use precise words and phrases, effective details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.

	• Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
12.22	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. • Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing multiple point(s) of view and introducing a narrator and/or characters; create a smooth progression of experiences or events. • Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. • Use and evaluate a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). • Use precise words and phrases, effective details, and sensory language to convey a vivid picture of the experiences events, setting, and/or characters. • Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.
Standard 23	
K.23	(Begins in grade 3.)
1.23	(Begins in Grade 3.)
2.23	(Begins in grade 3.)
3.23	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
4.23	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
5.23	Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
6.23	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
7.23	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
8.23	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
9.23	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
10.23	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
11.23	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)

12.23	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Text Types and Purposes.)
Standard 24	
K.24	With guidance and support from adults and collaborative discussions, add details to strengthen writing as needed.
1.24	With guidance and support from adults and collaborative discussions, focus on a topic and add details to strengthen writing as needed.
2.24	With guidance and support from adults and collaborative discussions, focus on a topic and strengthen writing as needed by revising and editing.
3.24	With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards up to and including grade 3).
4.24	With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards up to and including grade 4.)
5.24	With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards up to and including grade 5.)
6.24	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards up to and including grade 6.)
7.24	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards up to and including grade 7.)
8.24	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of the Language standards up to and including grade 8.)
9.24	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of all Language standards up to and including grade 9.)
10.24	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of all Language standards up to and including grade 10.)
11.24	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of all Language standards up to and including grade 11).
12.24	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of all Language standards up to and including grade 12.)

Standard 25	
K.25	With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including collaboration with peers.
1.25	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including collaboration with peers.
2.25	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including collaboration with peers.
3.25	With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.
4.25	With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills.
5.25	With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type accurately.
6.25	Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type efficiently and accurately.
7.25	Use technology, including the Internet, to produce and publish writing, link to and cite sources, and interact and collaborate with others.
8.25	Use technology, including the Internet, to produce and publish writing, present the relationships between information and ideas efficiently, and interact and collaborate with others.
9.25	Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
10.25	Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically in response to ongoing feedback.
11.25	Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
12.25	Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.
Standard 26	
K.26	With guidance and support, participate in shared research and writing (e.g., explore a number of books by a favorite author and express opinions about them).
1.26	Participate in shared research and writing (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).
2.26	Participate in shared research and writing (e.g., read a number of books on a single topic to produce a report; record science observations).
3.26	Conduct short research projects that build knowledge about a topic.
4.26	Conduct short research projects that build knowledge through investigation of different aspects of a topic.
5.26	Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.
6.26	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

7.26	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
8.26	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
9.26	Conduct short, as well as more sustained, research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
10.26	Conduct short, as well as more sustained, research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
11.26	Conduct short, as well as more sustained, research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
12.26	Conduct sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
Standard 27	
K.27	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
1.27	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
2.27	Recall information from experiences or gather information from provided sources to answer a question.
3.27	Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
4.27	Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information and provide a list of sources.
5.27	Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work and provide a list of sources.
6.27	Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
7.27	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., MLA or APA).
8.27	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation (e.g., MLA or APA).
9.27	Gather relevant information from multiple authoritative print and digital sources, using

	advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation (e.g., MLA or APA).
10.27	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in terms of task, purpose, and audience and in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation (e.g., MLA or APA).
11.27	Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (e.g., MLA or APA).
12.27	Gather and synthesize relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (e.g., MLA or APA).
Standard 28	
K.28	(Begins in grade 4.)
1.28	(Begins in grade 4.)
2.28	(Begins in grade 4.)
3.28	(Begins in grade 4.)
4.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply *grade 4 Reading standards* to literature (e.g., "describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions]."). • Apply *grade 4 Reading standards* to informational texts (e.g., "explain how an author uses reasons and evidence to support particular points in a text.").
5.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply *grade 5 Reading standards* to literature (e.g., "compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]"). • Apply *grade 5 Reading standards* to informational texts (e.g., "explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").
6.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply *grade 6 Reading standards* to literature (e.g., "compare and contrast texts in different forms or genres [e.g., stories, poems, historical novels, and fantasy stories] in terms of their approaches to similar themes and topics"). • Apply *grade 6 Reading standards* to nonfiction and other informational texts (e.g., "trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").
7.28	Draw evidence from literary or informational texts to support analysis, reflection, and

	research. • Apply *grade 7 Reading standards* to literature (e.g., "compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history"). • Apply *grade 7 Reading standards* to nonfiction and other informational texts (e.g. "trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims").
8.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply *grade 8 Reading standards* to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, such as the Bible, including describing how the material is transformed in the modern work (e.g., how a modern interpretation of a Shakespearean text draws from the original text)"). • Apply *grade 8 Reading standards* to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced").
9.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply *grade 9 Reading standards* to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible, or how a later author draws on a play by Shakespeare]"). • Apply *grade 9 Reading standards* to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").
10.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply *grade 10 Reading standards* to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]"). • Apply *grade 10 Reading standards* to nonfiction and other informational texts (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").
11.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade *11 Reading standards* to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics"). • Apply *grade 11 Reading standards* to nonfiction and other informational texts (e.g., "Delineate and evaluate the reasoning in influential U.S. texts, including the application of constitutional principles [e.g., in U.S. Supreme Court Case majority

	opinions and dissents] and the premises, purposes and arguments in works of public advocacy [e.g., *The Federalist Papers* or presidential addresses]").
12.28	Draw evidence from literary or informational texts to support analysis, reflection, and research. • Apply grade *12 Reading standards* to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth-, and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics"). • Apply *grade 12 Reading standards* to nonfiction and other informational texts (e.g., "Delineate and evaluate the reasoning in influential U.S. texts, including the application of constitutional principles [e.g., in U.S. Supreme Court Case majority opinions and dissents] and the premises, purposes and arguments in works of public advocacy [e.g., *The Federalist Papers* or presidential addresses]").
Standard 29	
K.29	(Begins in grade 3.)
1.29	(Begins in grade 3.)
2.29	(Begins in grade 3.)
3.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
4.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
5.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
6.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
7.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
8.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
9.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.
10.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.
11.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.
12.29	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Standard 30	
K.30	Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups. • Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). • Continue a conversation through multiple exchanges.
1.30	Participate in collaborative conversations with diverse partners about *grade 1 topics and texts* with peers and adults in small and larger groups. • Follow agreed-upon rules for discussions (e.g., listening to others with care and speaking one at a time about the topics and texts under discussion). • Build on others' talk in conversations by responding to the comments of others through multiple exchanges. • Ask questions to clear up any confusion about the topics and texts under discussion.
2.30	Participate in collaborative conversations with diverse partners about *grade 2 topics and texts* with peers and adults in small and larger groups. • Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, and speaking one at a time about the topics and texts under discussion). • Build on others' talk in conversations by linking comments to the remarks of others. • Ask for clarification and further explanation as needed about the topics and texts under discussion.
3.30	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 3 topics and texts*, building on others' ideas and expressing ideas clearly. • Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. • Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, and speaking one at a time about the topics and texts under discussion). • Ask questions to check understanding of information presented, stay on topic, and link comments to the remarks of others. • Explain ideas and understanding in light of the discussion.
4.30	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 4 topics and texts*, building on others' ideas and expressing ideas clearly. • Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. • Follow agreed-upon rules for discussions and carry out assigned roles. • Pose and respond to specific questions to clarify or follow up on information and make comments that contribute to the discussion and link to the remarks of others. • Review the key ideas expressed and explain ideas and understanding in light of the discussion.
5.30	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing ideas clearly.

	• Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. • Follow agreed-upon rules for discussions and carry out assigned roles. • Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. • Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
6.30	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 6 topics, texts, and issues*, building on others' ideas and expressing ideas clearly. • Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. • Follow rules for shared discussions, set specific goals and deadlines, and define individual roles as needed. • Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. • Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
7.30	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 7 topics, texts, and issues*, building on others' ideas and expressing ideas clearly. • Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. • Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. • Pose questions that elicit elaboration, and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. • Acknowledge new information expressed by others and, when warranted, modify former views.
8.30	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 8 topics, texts, and issues*, building on others' ideas and expressing ideas clearly. • Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. • Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed. • Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. • Acknowledge new information expressed by others and, when warranted, qualify or justify views in light of the evidence presented.
9.30	Initiate and effectively participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 9 topics, texts, and issues*, building on others' ideas and expressing ideas clearly and persuasively.

	• Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. • Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, or presentation of alternate views); set clear goals, deadlines, and individual roles as needed. • Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions. • Respond thoughtfully to diverse perspectives; summarize points of agreement and disagreement and, when warranted, qualify or justify views and understanding and make new connections in light of the evidence and reasoning presented.
10.30	Initiate and effectively participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 10 topics, texts, and issues*, building on others' ideas and expressing ideas clearly and persuasively. • Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. • Work with peers to set rules for democratic, collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views); establish clear goals, deadlines, and individual roles as needed. • Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others' perspectives into the discussion; and clarify, verify, or challenge ideas and conclusions. • Respond thoughtfully to diverse perspectives; analyze points of agreement and disagreement and, when warranted, qualify or justify views and understanding and make new connections in light of the evidence and reasoning presented.
11.30	Initiate and effectively participate in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 11 topics, texts, and issues*, building on others' ideas and expressing ideas clearly and persuasively. • Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. • Work with peers to promote civil, democratic discussions and decision-making; establish clear goals, deadlines, and individual roles as needed. • Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. • Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
12.30	Initiate and effectively participate in a range of collaborative discussions (one-on-one, in

	groups, and teacher-led) with diverse partners on *grade 12 topics, texts, and issues*, building on others' ideas and expressing ideas clearly and persuasively. • Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas. • Work with peers to promote civil, democratic discussions and decision-making; set clear goals and deadlines; establish norms and experience various individual roles. • Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives. • Respond thoughtfully to diverse perspectives; synthesize and evaluate comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.
Standard 31	
K.31	Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
1.31	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
2.31	Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
3.31	Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
4.31	Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
5.31	Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
6.31	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, and/or orally) and explain how it contributes to a topic, text, or issue under study.
7.31	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, and/or orally) and explain how the ideas clarify a topic, text, or issue under study.
8.31	Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, and/or orally) and evaluate the motives (e.g., social, commercial, or political) behind its presentation.
9.31	Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, and/or orally), evaluating the credibility and accuracy of each source.
10.31	Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, and/or orally), evaluating the credibility and accuracy of each source in order to make decisions and solve problems.
11.31	Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, and/or orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

12.31	Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, and/or orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and analyzing any discrepancies among the data.
Standard 32	
K.32	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
1.32	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
2.32	Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
3.32	Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
4.32	Identify the reasons and evidence a speaker provides to support particular points.
5.32	Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
6.32	Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.
7.32	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.
8.32	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence; identify when irrelevant evidence is introduced.
9.32	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.
10.32	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing any fallacious reasoning or exaggerated or distorted evidence.
11.32	Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
12.32	Evaluate a speaker's point of view, reasoning, and uses of evidence and rhetoric, in order to assess the stance, premises, links among ideas, word choice, points of emphasis, and tone used among multiple speakers.
Standard 33	
K.33	Describe familiar people, places, things, and events and, with prompting and support, provide additional details.
1.33	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
2.33	Tell a story or recount an experience with appropriate facts and relevant, descriptive details; speaking audibly and coherently.
3.33	Report on a topic or text; tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly and coherently.
4.33	Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
5.33	Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

6.33	Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details, to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
7.33	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
8.33	Present claims and findings, emphasizing significant points in a focused, coherent manner with relevant evidence, sound, valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
9.33	Present information, findings, and supporting evidence clearly, concisely, and logically, such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.
10.33	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.
11.33	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning; alternative or opposing perspectives are addressed and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
12.33	Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning; address alternative or opposing perspectives and determine if the organization, development, substance, and style are appropriate to purpose, audience and a range of formal and informal tasks.
Standard 34	
K.34	Add drawings or other visual displays to descriptions as desired to provide additional details.
1.34	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
2.34	Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
3.34	Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
4.34	Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.
5.34	Include multimedia components (e.g., graphics and/or sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
6.34	Include multimedia components (e.g., graphics, images, music, and/or sound) and visual displays in presentations to clarify information.
7.34	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
8.34	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
9.34	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
10.34	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence

	and to add interest.
11.34	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
12.34	Make strategic and engaging use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
Standard 35	
K.35	Speak audibly and express thoughts, feelings, and ideas clearly.
1.35	Produce complete sentences when appropriate to task and situation.
2.35	Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
3.35	Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.
4.35	Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. (See grade 4 Language standards for specific expectations.)
5.35	Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See grade 5 Language standards for specific expectations.)
6.35	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards for specific expectations.)
7.35	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 7 Language standards for specific expectations.)
8.35	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 8 Language standards for specific expectations.)
9.35	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 9 Language standards for specific expectations.)
10.35	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 10 Language standards for specific expectations.)
11.35	Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grade 11 Language standards for specific expectations.)
12.35	Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grade 12 Language standards for specific expectations.)
Standard 36	
K.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Use frequently occurring nouns and verbs. • Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog* and *dogs; wish* and *wishes*). • Understand and use question words (interrogatives) (e.g., *who, what, where, when, why,* and *how*). • Use the most frequently occurring prepositions (e.g., *to, from, in, out, on, off, for, of, by,* and *with*). • Produce and expand complete sentences in shared language activities.
1.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.

	• Use common, proper, and possessive nouns. • Use singular and plural nouns with matching verbs in basic sentences (e.g., *he hops; we hop*). • Use personal, possessive and indefinite pronouns (e.g., *I, me, and my; they, them,* and *their; anyone* and *everything*). • Use verbs to convey a sense of past, present, and future (e.g., *yesterday I walked home; today I walk home; tomorrow I will walk home*). • Use frequently occurring adjectives. • Use frequently occurring conjunctions (e.g. *and, but, or, so,* or *because*). • Use determiners (e.g., *articles* and *demonstratives*). • Use frequently occurring prepositions (e.g., *during, beyond,* or *toward*). • Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
2.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Use collective nouns (e.g., *group*). • Form and use frequently occurring irregular plural nouns (e.g., *feet, children, teeth, mice,* and *fish*). • Use reflexive pronouns (e.g., *myself* or *ourselves*). • Form and use the past tense of frequently occurring irregular verbs (e.g., *sat, hid,* or *told*). • Use adjectives and adverbs and choose between them depending on what is to be modified. • Produce, expand, and rearrange complete simple and compound sentences (e.g., *the boy watched the movies; the little boy watched the movie; the action movie was watched by the little boy*).
3.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. • Form and use regular and irregular plural nouns. • Use abstract nouns (e.g., *childhood*). • Form and use regular and irregular verbs. • Form and use the simple (e.g., *I walked; I walk; I will walk*) verb tenses. • Ensure subject-verb and pronoun-antecedent agreement. • Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. • Use coordinating and subordinating conjunctions. • Produce simple, compound, and complex sentences.
4.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Use relative pronouns (*who, whose, whom, which,* or *that*) and relative adverbs (*where, when,* or *why*). • Form and use the progressive (e.g., *I was walking; I am walking; I will be walking*) verb tenses. • Use modal auxiliaries (e.g., *can, may,* or *must*) to convey various conditions. • Order adjectives within sentences according to conventional patterns (e.g., *a small red bag* rather than *a red small bag*).

	• Form and use prepositional phrases. • Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. • Correctly use frequently confused words (e.g., *to, too,* and *two; there* and *their*).
5.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. • Form and use the perfect (e.g., *I had walked; I have walked; I will have walked*) verb tenses. • Use verb tense to convey various times, sequences, states, and conditions. • Recognize and correct inappropriate shifts in verb tense. • Use correlative conjunctions (e.g., *either/or* and *neither/nor*).
6.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Ensure that pronouns are in the proper case (subjective, objective, or possessive). • Use intensive pronouns (e.g., *myself or ourselves*). • Recognize and correct inappropriate shifts in pronoun number and person. • Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). • Recognize variations from Standard English in one's own and others' writing and speaking; identify and use strategies to improve expression in conventional language.
7.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Explain the function of phrases and clauses in general and their function in specific sentences. • Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas. • Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.
8.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Explain the function of verbals (gerunds, participles, and infinitives) in general and their function in particular sentences.
9.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Use parallel structure. • Use various types of phrases (noun, verb, adjectival, participial, prepositional, and absolute) and clauses (independent, dependent, noun, relative, and adverbial) to convey specific meanings and add variety and interest to writing or presentations
10.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, or absolute) and clauses (independent and dependent; noun, relative, and adverbial) to convey specific meanings and add variety and interest to writing or presentations.

11.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. • Resolve issues of complex or contested usage, consulting references (e.g., *Merriam-Webster's Dictionary of English Usage* or *Garner's Modern American Usage*) as needed.
12.36	Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking. • Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested. • Resolve issues of complex or contested usage, consulting references (e.g., *Merriam-Webster's Dictionary of English Usage* or *Garner's Modern American Usage*) as needed.
Standard 37	
K.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Capitalize the first word in a sentence and the pronoun *I*. • Recognize and name end punctuation. • Write a letter or letters for most consonant and short-vowel sounds (phonemes). • Spell simple words phonetically, drawing on knowledge of sound-letter relationships.
1.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Capitalize dates and names of people. • Use end punctuation for sentences. • Use commas in dates and to separate single words in a series. • Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.
2.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Capitalize holidays, product names, and geographic names. • Use commas in greetings and closings of letters. • Use an apostrophe to form contractions and frequently occurring possessives. • Generalize learned spelling patterns when writing words (e.g., cage / badge; boy / boil). • Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
3.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Capitalize appropriate words in titles. • Use commas in addresses. • Use commas and quotation marks in dialogue. • Form and use possessives. • Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., *sitting, smiled, cries,* or *happiness*). • Use spelling patterns and generalizations (e.g., word families, position-based spellings,

	syllable patterns, ending rules, and meaningful word parts) in writing words. • Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
4.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Use correct capitalization. • Use commas and quotation marks to mark direct speech and quotations from a text. • Use a comma before a coordinating conjunction in a compound sentence. • Spell grade-appropriate words correctly, consulting references as needed.
5.37	Demonstrate command of the conventions of Standard English capitalization, punctuation and spelling when writing. • Use punctuation to separate items in a series. • Use a comma to separate an introductory element from the rest of the sentence. • Use a comma to set off the words *yes* and *no* (e.g., *Yes, thank you.*), to set off a tag question from the rest of the sentence (e.g., *It's true, isn't it?*), and to indicate direct address (e.g., *Is that you, Steve?*). • Use underlining, quotation marks, or italics to indicate titles of works. • Spell grade-appropriate words correctly, consulting references as needed.
6.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Use punctuation (commas, parentheses, or dashes) to set off nonrestrictive/parenthetical elements. • Spell correctly.
7.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Use a comma to separate coordinate adjectives (e.g., *It was a fascinating, enjoyable movie.*). • Spell correctly.
8.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Use punctuation (comma, ellipsis, or dash) to indicate a pause or break. • Use an ellipsis to indicate an omission. • Spell correctly.
9.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. • Use a colon to introduce a list or quotation. • Spell correctly.
10.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Use a colon to introduce a list or quotation. • Spell correctly.
11.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Observe hyphenation conventions. • Spell correctly.

12.37	Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing. • Observe hyphenation conventions. • Spell correctly.
Standard 38	
K.38	(Begins in grade 2.)
1.38	(Begins in grade 2.)
2.38	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Compare formal and informal uses of English.
3.38	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Choose words and phrases for effect. • Recognize and observe differences between the conventions of spoken and written Standard English.
4.38	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Choose words and phrases to convey ideas precisely. • Choose punctuation for effect. • Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).
5.38	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Expand, combine, and reduce sentences for meaning, reader/listener interest, and style. • Compare and contrast the varieties of English (e.g., dialects and/or registers) used in stories, dramas, or poems.
6.38	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Vary sentence patterns for meaning, reader/listener interest, and style. • Maintain consistency in style and tone.
7.38	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.
8.38	Use knowledge of language and its conventions when writing, speaking, reading, or listening. • Use verbs in the active and passive voice (e.g., emphasizing the actor or the action). • Use verbs in the indicative, imperative, interrogative, conditional and subjunctive mood to achieve particular effects (e.g., expressing uncertainty or describing a state contrary to fact). • Recognize and correct inappropriate shifts in verb voice and mood.
9.38	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. • Write and edit work so that it conforms to the guidelines in a style manual (e.g., *MLA Handbook or APA Handbook*) appropriate for the discipline and writing type.
10.38	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. • Write and edit work so that it conforms to the guidelines in a style manual (e.g., *MLA Handbook or APA Handbook*) appropriate for the discipline and writing type.
11.38	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

	• Vary syntax for effect by consulting references (e.g., Tufte's *Artful Sentences*) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.
12.38	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening. • Vary syntax for effect, consulting references (e.g., Tufte's *Artful Sentences*) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.
Standard 39	
K.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *kindergarten reading and content*. • Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb *to duck*). • Introduce the most frequently occurring inflections and affixes (e.g., *-ed, -s, re-, un-, pre-, -ful,* and *-less*) as a clue to the meaning of an unknown word.
1.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases *based on grade 1 reading and content*, choosing flexibly from an array of strategies. • Use sentence-level context as a clue to the meaning of a word or phrase. • Use frequently occurring affixes as a clue to the meaning of a word. • Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g., *looks, looked,* and *looking*).
2.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 2 reading and content*, choosing flexibly from an array of strategies. • Use sentence-level context as a clue to the meaning of a word or phrase. • Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., *happy/unhappy,* and *tell/retell*). • Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *addition* and *additional*). • Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., *birdhouse, lighthouse,* and *housefly; bookshelf, notebook,* and *bookmark*). • Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
3.39	Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on *grade 3 reading and content*, choosing flexibly from a range of strategies. • Use sentence-level context as a clue to the meaning of a word or phrase. • Determine the meaning of the new word formed when a known affix is added to a known word (e.g., *agreeable/disagreeable, comfortable/uncomfortable, care/careless,* and *heat/preheat*). • Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *company* and *companion*). • Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.
4.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 4 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.

	• Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *telegraph, photograph,* and *autograph*). • Consult reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
5.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 5 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. • Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph* and *photosynthesis*). • Consult reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
6.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 6 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *audience, auditory,* and *audible*). • Consult reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
7.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 7 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence or paragraph or a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *belligerent, bellicose,* or *rebel*). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
8.39	Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on *grade 8 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence or paragraph or a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede, recede,* or *secede*). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).

9.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 9 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph or text or a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *analyze, analysis, analytical, advocate,* or *advocacy*). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
10.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 10 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph or text or a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *analyze, analysis, analytical, advocate,* or *advocacy*). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, part of speech, or etymology. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
11.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 11 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception,* or *conceivable*). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
12.39	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 12 reading and content*, choosing flexibly from a range of strategies. • Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception,* or *conceivable*). • Consult general and specialized reference materials (e.g., dictionaries, glossaries, and/or thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. • Verify the initial determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
Standard 40	

K.40	With guidance and support from adults, explore word relationships and nuances in word meanings. • Sort common objects into categories (e.g., shapes or foods) to gain a sense of the concepts the categories represent. • Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). • Identify real-life connections between words and their use (e.g., note places at home that are *cozy*). • Distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut,* and *prance*) by acting out the meanings.
1.40	With guidance and support from adults, demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Sort words into categories (e.g., *colors* and *clothing*) to gain a sense of the concepts the categories represent. • Define words by category and by one or more key attributes (e.g., *a duck is a bird that swims; a tiger is a large cat with stripes*). • Identify real-life connections between words and their use (e.g., note places at home that are *cozy*). • Distinguish shades of meaning among verbs differing in manner (e.g., *look, peek, glance, stare, glare,* and *scowl*) and adjectives differing in intensity (e.g., *large* and *gigantic*) by defining or choosing them or by acting out the meanings.
2.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Identify real-life connections between words and their use (e.g., describe foods that are *spicy* or *juicy*). • Distinguish shades of meaning among closely related verbs (e.g., *toss, throw,* and *hurl*) and closely related adjectives (e.g., *thin, slender, skinny,* and *scrawny*).
3.40	Demonstrate understanding of word relationships and nuances in word meanings. • Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., *take steps*). • Identify real-life connections between words and their use (e.g., describe people who are *friendly* or *helpful*). • Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., *knew, believed, suspected, heard,* and *wondered*).
4.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*) in context. • Recognize and explain the meaning of common idioms, adages, and proverbs. • Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).
5.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figurative language, including similes and metaphors, in context. • Recognize and explain the meaning of common idioms, adages, and proverbs. • Use the relationship between particular words (e.g., synonyms, antonyms, and homographs) to better understand each of the words.

6.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g., personification) in context. • Use the relationship between particular words (e.g., cause/effect, part/whole, or item/category) to better understand each of the words. • Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *stingy, scrimping, economical, frugal,* and *thrifty*).
7.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g., literary or mythological allusions) in context. • Use the relationship between particular words (e.g., synonym/antonym or analogy) to better understand each of the words. • Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic,* or *condescending*).
8.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g. verbal irony, and/or puns) in context. • Use the relationship between particular words to better understand each of the words. • Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *bullheaded, willful, firm, persistent,* or *resolute*).
9.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g., euphemism or oxymoron) in context and analyze their role in the text. • Analyze nuances in the meaning of words with similar denotations.
10.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g., euphemism or oxymoron) in context and analyze their role in the text. • Analyze nuances in the meaning of words with similar denotations.
11.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g., hyperbole or paradox) in context and analyze their role in the text. • Analyze nuances in the meaning of words with similar denotations.
12.40	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. • Interpret figures of speech (e.g., hyperbole and paradox) in context and analyze their role in the text. • Analyze nuances in the meaning of words with similar denotations.
Standard 41	
K.41	Use words and phrases acquired through conversations, reading, being read to, and responding to texts.
1.41	Use words and phrases acquired through conversations, reading, being read to, and responding to texts; use frequently occurring conjunctions to signal simple relationships (e.g., *because*).

2.41	Use words and phrases acquired through conversations, reading, being read to, and responding to texts; use adjectives and adverbs to describe (e.g., *when other kids are happy, that makes me happy*).
3.41	Acquire and accurately use grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and transitional relationships (e.g., *after dinner that night, we went looking for them*).
4.41	Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., *quizzed, whined,* and *stammered*) and that are basic to a particular topic (e.g., *wildlife, conservation,* and *endangered* when discussing animal preservation).
5.41	Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., *however, although, nevertheless, similarly, moreover,* and *in addition*).
6.41	Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
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8.41	Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
9.41	Acquire and accurately use general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
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Overview of Mathematics Skills Progressions

Introductory charts found at each grade level

Kindergarten	
Counting and Cardinality	**Operations and Algebraic Thinking**
• Count objects to tell how many there are by ones and by tens. • Write numbers from 0 to 20. • Compare two groups of objects to tell which group, if either, has more; compare two written numbers to tell which is greater. • Group pennies.	• Understand addition as putting together and adding to. • Understand subtraction as taking apart and taking from. • Add and subtract very small numbers quickly and accurately (e.g., 3 + 1).
Number and Operations in Base Ten	**Measurement and Data**
• Act out addition and subtraction word problems and draw diagrams to represent them. • Add with a sum of 10 or less; subtract from a number 10 or less; and solve addition and subtraction word problems. • Group objects by tens and ones. (1 group of 10 and 3 ones makes 13)	• Describe and compare objects as longer, shorter, larger, smaller, etc. • Classify objects and count the number of objects in each category. (e.g., Identify coins and sort them into groups of 5s or 10s.)
Geometry	
• Name shapes correctly regardless of orientation or size (e.g., a square oriented as a "diamond" is still a square).	

1st Grade	
Operations and Algebraic Thinking	**Number and Operations in Base Ten**
• Solve addition and subtraction word problems in situations of adding to, taking from, putting together, taking apart, and comparing (e.g., a taking from situation would be: "Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat?"). • Add fluently with a sum of 10 or less, and accurately subtract from a number 10 or less (e.g., 2 + 5, 7 – 5). • Understanding the relationship between addition and subtraction.	• Understand what the digits mean in two-digit numbers (place value). • Use understanding of place value to add and subtract (e.g., 38 + 5, 29 + 20, 64 + 27, 80 – 50). • Identify the value of pennies, nickels and dimes.
Measurement and Data	**Geometry**
• Measure lengths of objects by using a shorter object as a unit of length. • Tell and write time.	• Make composite shapes by joining shapes together, and dividing circles and rectangles into halves or fourths.

2nd Grade	
Operations and Algebraic Thinking	**Number and Operations in Base Ten**
• Solve challenging addition and subtraction word problems with one or two steps (e.g., a "one-step" problem would be: "Lucy has 23 fewer apples than Julie. Julie has 47 apples. How many apples does Lucy have?"). • Fluently add with a sum of 20 or less (e.g., 11 + 8); fluently subtract from a number 20 or less (e.g., 16 – 9); and know all sums of one-digit numbers from memory by the end of the year. • Work with equal groups of objects to gain foundations for multiplication.	• Understand what the digits mean in three-digit numbers (place value). • Use an understanding of place value to add and subtract three-digit numbers (e.g., 811 – 367); add and subtract two-digit numbers fluently (e.g., 77 – 28).
Measurement and Data	**Geometry**
• Solve addition and subtraction word problems involving length (e.g., "The pen is 2 cm longer than the pencil. If the pencil is 7 cm long, how long is the pen?"). • Tell time. • Count money.	• Build, draw, and analyze 2-D and 3-D shapes to develop foundations for area, volume, and geometry in later grades. • Divide shapes into equal shares to build the foundations for fractions in later grades.

3rd Grade	
Operations and Algebraic Thinking	**Number and Operations in Base Ten**
• Understand and know from memory how to multiply and divide numbers up to 10 x 10 fluently. • Solve word problems using addition, subtraction, multiplication, and division. • Begin to multiply numbers with more than one digit (e.g., multiplying 9 × 80).	• Understand place value and properties of operations to perform multi-digit arithmetic, such as 10 x 2, 50 x 3, and 40 x 7.
Number and Operations- Fractions	**Measurement and Data**
• Understand fractions and relate them to the familiar system of whole numbers (e.g., recognizing that 3/1 and 3 are the same number).	• Measure and estimate weights and liquid volumes, and solve word problems involving these quantities. • Tell time and write time to the nearest minute. • Recognize area as a quality of two-dimensional regions. • Understand that rectangular arrays can be broken into identical rows or into identical columns. By breaking rectangles into rectangular arrays of squares, students connect area to multiplication, and explain how multiplication is used to determine the area of a rectangle.
Geometry	
• Reason about shapes (e.g., all squares are rectangles but not all rectangles are squares). • Find areas of shapes, and relate area to multiplication (e.g., why is the number of square feet for a 9-foot by 7-foot room given by the product 9 × 7?). • Understand the connection between equal parts of a shape being a unit of the whole.	

4th Grade	
Operations and Algebraic Thinking	**Number and Operations in Base Ten**
• Use whole-number arithmetic to solve word problems, including problems with remainders and problems with measurements. • Add and subtract whole numbers quickly and accurately (numbers up to 1 million). • Multiply and divide multi-digit numbers in simple cases (e.g., multiplying 1,638 × 7 or 24 × 17, and dividing 6,966 by 6). • Gain familiarity with factors and multiples. • Generate and analyze patterns.	• Generalize place value understanding for multi-digit whole numbers. • Use place value understanding and properties of operations to perform multi-digit arithmetic.
Number and Operations- Fractions	**Measurement and Data**
• Use equivalent fractions to understand and order fractions (e.g., recognize that 1⁄4 is less than 3⁄8 because 2⁄8 is less than 3⁄8). • Add, subtract, and multiply fractions in simple cases (such as 2 3⁄4 − 1 1⁄4 or 3 × 5⁄8), and solve related word problems. • Understand and compare simple decimals in terms of fractions (e.g., rewriting 0.62 as 62⁄100).	• Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. • Represent and interpret data. • Geometric measurement: understand concepts of angle and measure angles.
Geometry	
• Draw and identify lines and angles, and classify shapes by properties of their lines and angles. • Measure angles and find unknown angles in a diagram.	

5th Grade	
Operations and Algebraic Thinking	**Number and Operations in Base Ten**
• Write and interpret numerical expressions. • Analyze mathematical patterns and relationships.	• Understand the place value system. • Generalize the place-value system to include decimals, and calculate with decimals to the hundredths place (two places after the decimal). • Multiply whole numbers quickly and accurately, for example 1,638 × 753, and divide whole numbers in simple cases, such as dividing 6,971 by 63.
Number and Operations- Fractions	**Measurement and Data**
• Add and subtract fractions with like and unlike denominators (e.g., 21⁄4 – 11⁄3), and solve word problems of this kind. • Multiply fractions; divide fractions in simple cases; and solve related word problems (e.g., find the area of a rectangle with fractional side lengths; determine how many 1⁄3-cup servings are in 2 cups of raisins; determine the size of a share if 9 people share a 50-pound sack of rice equally or if 3 people share 1⁄2 pound of chocolate equally).	• Convert like measurement units within a given measurement system. • Make a line plot to display a data set with fractional units of measure and interpret the data to solve problems. • Geometric measurement: Understand the concept of volume, and solve word problems that involve volume.
Geometry	
• Graph points on the coordinate plane to solve real-world and mathematical problems.	

• Classify two-dimensional figures into categories based on their properties.	

6th Grade	
Ratios and Proportional Reasoning	**The Number System**
• Understand ratios and rates, and solve problems involving proportional relationships (e.g., If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours?).	• Divide fractions and solve related word problems (e.g., How wide is a rectangular strip of land with length 3⁄4 mile and area 1⁄2 square mile?). • Use positive and negative numbers together to describe quantities; understand the ordering and absolute values of positive and negative numbers.
Expressions and Equations	**Geometry**
• Work with variables and expressions by generalizing the way numbers work (e.g., When adding numbers, the order doesn't matter, so x + y = y + x; likewise, properties of addition and multiplication can be used to rewrite 24x + 18y as 6(4x + 3y), or y + y + y as 3y). • Write equations to solve word problems and describe relationships between quantities (e.g., The distance D traveled by a train in time T might be expressed by an equation D = 85T, where D is in miles and T is in hours.).	• Reason about relationships between shapes to determine area, surface area, and volume.
Statistics and Probability	
• Create graphical representations of data and reason about statistical distributions.	

7th Grade	
Ratios and Proportional Reasoning	**The Number System**
• Analyze proportional relationships (e.g., by graphing in the coordinate plane), and distinguish proportional relationships from other kinds of mathematical relationships (e.g., Buying 10 times as many items will cost you 10 times as much, but taking 10 times as many aspirin will not lower your fever 10 times as much.).	• Solve percent problems (e.g., tax, tips, and markups and markdowns). • Solve word problems that have a combination of whole numbers, fractions, and decimals (e.g., A woman making $25 per hour receives a 10% raise; she will make an additional 1⁄10 of his or her salary an hour, or $2.50, for a new salary of $27.50.)
Expressions and Equations	**Geometry**
• Solve equations such as 1⁄2 (x – 3) = 3⁄4 quickly and accurately, and write equations of this kind to solve word problems.	• Solve problems involving scale drawings.
Statistics and Probability	
• Use statistics to draw inferences and make comparisons (e.g., deciding which candidate is likely to win an election based on a survey).	

8th Grade	
The Number System	**Expressions and Equations**
• Understand that every number has a decimal expansion and use these to compare the size of irrational numbers.	• Work with positive and negative exponents, square root and cube root symbols, and scientific notation (e.g., Evaluate $\sqrt{36} + 64$; estimate world population as 7×10^9). • Solve linear equations (e.g., $-x + 5(x + 1/3) = 2x - 8$); solve pairs of linear equations (e.g., $x + 6y = -1$ and $2x - 2y = 12$); and write equations to solve related word problems.
Functions	**Geometry**
• Understand slope, and relating linear equations in two variables to lines in the coordinate plane. • Understand functions as rules that assign a unique output number to each input number; use linear functions to model relationships.	• Understand congruence and similarity using physical models, transparencies, or geometry software (e.g., Given two congruent figures, show how to obtain one from the other by a sequence of rotations, translations, and/or reflections).
Statistics and Probability	
• Analyze statistical relationships by using a best-fit line (a straight line that models an association between two quantities).	

8th Grade High School Mathematics I	
Relationships between Quantities	**Linear and Exponential Relationships**
• Solve problems with a wide range of units and solve problems by thinking about units. (e.g., The Trans Alaska Pipeline System is 800 miles long and cost $8 billion to build. Divide one of these numbers by the other. What is the meaning of the answer? Greenland has a population of 56,700 and a land area of 2,175,600 square kilometers. By what factor is the population density of the United States, 80 persons per square mile, larger than the population density of Greenland?)	• Understand contextual relationships of variables and constants. (e.g., Annie is picking apples with her sister. The number of apples in her basket is described by n = 22t + 12, where t is the number of minutes Annie spends picking apples. What do the numbers 22 and 12 tell you about Annie's apple picking?)
Reasoning with Equations	**Descriptive Statistics**
• Translate between various forms of linear equations. (e.g., The perimeter of a rectangle is given by P = 2W + 2L. Solve for W and restate in words the meaning of this new formula in terms of the meaning of the other variables.). • Explore systems of equations, find and interpret their solutions. (e.g., The high school is putting on the musical Footloose. The auditorium has 300 seats. Student tickets are $3 and adult tickets are $5. The royalty for the musical is $1300. What combination of student and adult tickets do you need to fill the house and pay the royalty? How could you change the price of tickets so more students can go?)	• Use linear regression techniques to describe the relationship between quantities and assess the fit of the model. (e.g., Use the high school and university grades for 250 students to create a model that can be used to predict a student's university GPA based on his high school GPA.)
Congruence, Proof, and Constructions	**Connecting Algebra and Geometry through Coordinates**
• Given a transformation, work backwards to discover the sequence that led to the transformation. • Given two quadrilaterals that are reflections of each other, find the line of that reflection.	• Use a rectangular coordinate system and build on understanding of the Pythagorean Theorem to find distances. (e.g., Find the area and perimeter of a real-world shape using a coordinate grid and Google Earth.) • Analyze the triangles and quadrilaterals on the coordinate plane to determine their properties. (e.g., Determine whether a given quadrilateral is a rectangle.)

High School Mathematics I	
Relationships between Quantities	**Linear and Exponential Relationships**
• Solve problems with a wide range of units and solve problems by thinking about units. (e.g., "The Trans Alaska Pipeline System is 800 miles long and cost $8 billion to build. Divide one of these numbers by the other. What is the meaning of the answer?"; "Greenland has a population of 56,700 and a land area of 2,175,600 square kilometers. By what factor is the population density of the United States, 80 persons per square mile, larger than the population density of Greenland?")	• Understand contextual relationships of variables and constants. (e.g., Annie is picking apples with her sister. The number of apples in her basket is described by n = 22t + 12, where t is the number of minutes Annie spends picking apples. What do the numbers 22 and 12 tell you about Annie's apple picking?)
Reasoning with Equations	**Descriptive Statistics**
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Congruence, Proof, and Constructions	**Connecting Algebra and Geometry through Coordinates**
• Given a transformation, work backwards to discover the sequence that led to the transformation. • Given two quadrilaterals that are reflections of each other, find the line of that reflection.	• Use a rectangular coordinate system and build on understanding of the Pythagorean Theorem to find distances. (e.g., Find the area and perimeter of a real-world shape using a coordinate grid and Google Earth.) • Analyze the triangles and quadrilaterals on the coordinate plane to determine their properties. (e.g., Determine whether a given quadrilateral is a rectangle.)

High School Mathematics II	
Extending the Number System	**Quadratic Functions and Modeling**
• Apply and reinforce laws of exponents to convert between radical notation and rational exponent notation; extend the properties of integer exponents to rational exponents and use them to simplify expressions. (e.g., $\sqrt[3]{16} = \sqrt[3]{2^4} = 2^{4/3}$; $((2^{-4})(2^{-4})^{\frac{1}{4}} = 2^{-1} = \frac{1}{2}$.)	• Find an explicit algebraic expression or series of steps to model the context with mathematical representations. (e.g., The total revenue for a company is found by multiplying the price per unit by the number of units sold minus the production cost. The price per unit is modeled by $p(n) = -0.5n^2 + 6$. The number of units sold is n. Production cost is modeled by $c(n) = 3n + 7$. Write the revenue function.)
Expressions and Equations	**Applications of Probability**
• Solve a system consisting of a linear equation and a quadratic equation in two variables. (e.g., Find the intersection of the circle with a radius of 1 centered at the origin and the line $y = -3(x - 2)$. Show your work both graphically and algebraically.)	• Work with probability and using ideas from probability in everyday situations. (e.g., Compare the chance that a person who smokes will develop lung cancer to the chance that a person who develops lung cancer smokes.)
Similarity, Right Triangle Trigonometry, and Proof	**Circles With and Without Coordinates**
• Apply knowledge of trigonometric ratios and the Pythagorean Theorem to determine distances in realistic situations. (e.g., Determine heights of inaccessible objects using various instruments, such as clinometers, hypsometers, transits, etc.)	• Use coordinates and equations to describe geometric properties algebraically. (e.g., Write the equation for a circle in the plane with specified center and radius.)

High School Mathematics III	
Inferences and Conclusions from Data	**Polynomials, Rational, and Radical Relationships**
• Make inferences and justify conclusions from sample surveys, experiments, and observational studies. Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).	• Derive the formula for the sum of a geometric series, and use the formula to solve problems. (e.g., Calculate mortgage payments.)
Trigonometry of General Triangles and Trigonometric Functions	**Mathematical Modeling**
• Apply knowledge of the Law of Sines and the Law of Cosines to determine distances in realistic situations. (e.g., Determine heights of inaccessible objects.)	• Analyze real-world situations using mathematics to understand the situation better and optimize, troubleshoot, or make an informed decision. (e.g., Estimate water and food needs in a disaster area, or use volume formulas and graphs to find an optimal size for an industrial package.)

High School Algebra I for 8th Grade	
Relationships between Quantities and Reasoning with Equations	**Linear and Exponential Relationships**
• Solve problems with a wide range of units and solve problems by thinking about units. (e.g., The Trans Alaska Pipeline System is 800 miles long and cost $8 billion to build. Divide one of these numbers by the other. What is the meaning of the answer? Greenland has a population of 56,700 and a land area of 2,175,600 square kilometers. By what factor is the population density of the United States, 80 persons per square mile, larger than the population density of Greenland?)	• Understand contextual relationships of variables and constants. (e.g., Annie is picking apples with her sister. The number of apples in her basket is described by n = 22t + 12, where t is the number of minutes Annie spends picking apples. What do the numbers 22 and 12 tell you about Annie's apple picking?)
Descriptive Statistics	**Expressions and Equations**
• Use linear regression techniques to describe the relationship between quantities and assess the fit of the model. (e.g., Use the high school and university grades for 250 students to create a model that can be used to predict a student's university GPA based on his high school GPA.)	• Interpret algebraic expressions and transforming them purposefully to solve problems. (e.g., In solving a problem about a loan with interest rate r and principal P, seeing the expression $P(1+r)^n$ as a product of P with a factor not depending on P.)
Quadratic Functions and Modeling	
• Solve real-world and mathematical problems by writing and solving nonlinear equations, such as quadratic equations ($ax^2 + bx + c = 0$).	

High School Algebra I	
Relationships between Quantities and Reasoning with Equations	**Linear and Exponential Relationships**
• Solve problems with a wide range of units and solve problems by thinking about units. (e.g., The Trans Alaska Pipeline System is 800 miles long and cost $8 billion to build. Divide one of these numbers by the other. What is the meaning of the answer? Greenland has a population of 56,700 and a land area of 2,175,600 square kilometers. By what factor is the population density of the United States, 80 persons per square mile, larger than the population density of Greenland?)	• Understand contextual relationships of variables and constants. (e.g., Annie is picking apples with her sister. The number of apples in her basket is described by n = 22t + 12, where t is the number of minutes Annie spends picking apples. What do the numbers 22 and 12 tell you about Annie's apple picking?)
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• Use linear regression techniques to describe the relationship between quantities and assess the fit of the model. (e.g., Use the high school and university grades for 250 students to create a model that can be used to predict a student's university GPA based on his high school GPA.)	• Interpret algebraic expressions and transform them purposefully to solve problems. (e.g., In solving a problem about a loan with interest rate r and principal P, seeing the expression $P(1+r)^n$ as a product of P with a factor not depending on P.)
Quadratic Functions and Modeling	
• Solve real-world and mathematical problems by writing and solving nonlinear equations, such as quadratic equations ($ax^2 + bx + c = 0$).	

<table>
<tr><th colspan="2">High School Geometry</th></tr>
<tr><th>Congruence, Proof, and Constructions</th><th>Similarity, Proof, and Trigonometry</th></tr>
<tr><td>Prove theorems about triangles and other figures (e.g., that the sum of the measures of the angles in a triangle is 180^o).
Given a transformation, work backwards to discover the sequence that led to the transformation.
Given two quadrilaterals that are reflections of each other, find the line of that reflection.</td><td>Apply knowledge of trigonometric ratios and the Pythagorean Theorem to determine distances in realistic situations. (e.g., Determine heights of inaccessible objects using various instruments, such as clinometers, hypsometers, transits, etc.)</td></tr>
<tr><th>Extending to Three Dimensions</th><th>Connecting Algebra and Geometry Through Coordinates</th></tr>
<tr><td>Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone.</td><td>Use a rectangular coordinate system and build on understanding of the Pythagorean Theorem to find distances. (e.g., Find the area and perimeter of a real-world shape using a coordinate grid and Google Earth.)
Analyze the triangles and quadrilaterals on the coordinate plane to determine their properties. (e.g., Determine whether a given quadrilateral is a rectangle).</td></tr>
<tr><th>Circles With and Without Coordinates</th><th>Applications of Probability</th></tr>
<tr><td>Use coordinates and equations to describe geometric properties algebraically. (e.g., Write the equation for a circle in the plane with specified center and radius.)</td><td rowspan="2">Work with probability and using ideas from probability in everyday situations. (e.g., Compare the chance that a person who smokes will develop lung cancer to the chance that a person who develops lung cancer smokes.)</td></tr>
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<tr><td>Analyze real-world situations using mathematics to understand the situation better and optimize, troubleshoot, or make an informed decision (e.g., estimate water and food needs in a disaster area, or use volume formulas and graphs to find an optimal size for an industrial package).</td></tr>
</table>

High School Algebra II	
Polynomial, Rational, and Radical Relationships	**Trigonometric Functions**
• Derive the formula for the sum of a geometric series, and use the formula to solve problems. (e.g., Calculate mortgage payments.)	• Apply knowledge of trigonometric functions to determine distances in realistic situations. (e.g., Determine heights of inaccessible objects.)
Modeling with Functions	**Inferences and Conclusions from Data**
• Analyze real-world situations using mathematics to understand the situation better and optimize, troubleshoot, or make an informed decision. (e.g., Estimate water and food needs in a disaster area, or use volume formulas and graphs to find an optimal size for an industrial package.) • Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).	• Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

Advanced Mathematical Modeling	
Developing College and Career Skills	**Finance**
• Develop and apply skills used in college and careers, including reasoning, planning and communication, to make decisions and solve problems in applied situations.	• Create and analyze mathematical models to make decisions related to earning, investing, spending and borrowing money.
Probability	**Statistics**
• Use basic rules of counting and probability to analyze and evaluate risk and return in the context of everyday situations.	• Make decisions based on understanding, analysis and critique of reported statistical information and summaries.
Modeling	**Networks**
• Analyze numerical data in everyday situations using a variety of quantitative measures and numerical processes.	• Use a variety of network models represented graphically to organize data in quantitative situations, make informed decisions, and solve problems.
Social Decision Making	**Geometry**
• Analyze the mathematics behind various methods of ranking and selection and consider the advantages/disadvantages of each method.	• Solve geometric problems involving inaccessible distances. • Use vectors to solve applied problems.

Calculus

Algebra

- A utility company burns coal to generate electricity. The cost C in dollars of removing p% of the air pollutants emissions is $C = \frac{90{,}000p}{100 - p}, \quad 0 \le p < 100.$ Find the cost of removing (a) 10%, (b) 25%, and (c) 75% of the pollutants. Find the limit of C as $p \to 100^{-}$.
- A management company is planning to build a new apartment complex. Knowing the maximum number of apartments the lot can hold and given a function for the maintenance costs, determine the number of apartments that will minimize the maintenance costs.
- The velocity v of the flow of blood at a distance r from the central axis of an artery of radius R is $v = k\left(R^2 - r^2\right)$ where k is the constant of proportionality. Find the average rate of flow of blood along a radius of the artery. (Use 0 and R as the limits of integration.)

Data Analysis and Probability

- The average data entry speeds S (words per minute) of a business student after t weeks of lessons are recorded in the following table.

t	5	10	15	20	25	30
S	28	56	79	90	93	94

  A model for the data is $S = \frac{100t^2}{65 + t}, \quad t > 0.$

  Do you think that there is a limiting speed? If so, what is the limiting speed? If not, why?
- Identify a real life situation that involves quantities that change over time and develop a method to collect and analyze related data. Develop a continuous function to model the data and generalize the results to make a conclusion.
- A sheet of typing paper is ruled with parallel lines that are 2 inches apart. A two-inch needle is tossed randomly onto the sheet of paper. The probability that the needle will touch a line is $P = \frac{2}{\pi}\int_0^{\frac{\pi}{2}} \sin\theta \, d\theta$ where θ is the acute angle between the needle and any one of the parallel lines. Find the probability.

Geometry

- The radius of a right circular cylindrical balloon is given by $\sqrt{t+2}$ and its height is $\frac{1}{2}\sqrt{t}$, where t is time in seconds and the dimensions are in inches. Find the rate of change of the volume with respect to time.
- Given 50 meters of framing material, construct a window that will let in the most light if the middle of the window is a rectangle and the top and bottom of the window are semi-circles.
- The graph of f consists of the three line segments joining the points $(0,0),\ (2-2),\ (6,2),$ and $(8,3)$. The function F is defined as follows $F(x) = \int_0^x f(t)\,dt.$ Find the total enclosed areas generated by f and the X-axis. Determine the points of inflection of F on the interval $(0,8)$.

High School Mathematics IV – Trigonometry/Pre-calculus	
Building Relationships among Complex Numbers, Vectors, and Matrices	**Analysis and Synthesis of Functions**
• Represent abstract situations involving vectors symbolically.	• Write a function that describes a relationship between two quantities. (e.g., if T(y) is the temperature in the atmosphere as a function of height, and h(t) is the height of a weather balloon as a function of time, then T(h(t)) is the temperature at the location of the weather balloon as a function of time.)
Trigonometric and Inverse Trigonometric Functions of Real Numbers	**Derivations in Analytic Geometry**
• Make sense of the symmetry, periodicity, and special values of trigonometric functions using the unit circle. • Prove trigonometric identities and apply them problem solving situations.	• Make sense of the derivations of the equations of an ellipse and a hyperbola.
Modeling with Probability	**Series and Informal Limits**
• Develop a probability distribution. (e.g., Find the theoretical probability distribution for the number of correct answers obtained by guessing on all five questions of a multiple-choice test where each question has four choices, and find the expected grade under various grading schemes.)	• Apply mathematical induction to prove summation formulas.

STEM Readiness	
Arithmetic and Algebra of Complex Numbers	**Polynomial, Rational, and Radical Relationships**
• Understand that the arithmetic and algebra of expressions involving rational numbers is governed by the same rules as the arithmetic and algebra of real numbers.	• Derive the formula for the sum of a geometric series, and use the formula to solve problems. (e.g., Calculate mortgage payments.)
Probability for Decisions	**Trigonometry of General Triangles**
• Make inferences and justify conclusions from sample surveys, experiments, and observational studies.	• Apply knowledge of the Law of Sines and the Law of Cosines to determine distances in realistic situations. (e.g., Determine heights of inaccessible objects.)
Functions and Modeling	
• Analyze real-world situations using mathematics to understand the situation better and optimize, troubleshoot, or make an informed decision. (e.g., Estimate water and food needs in a disaster area, or use volume formulas and graphs to find an optimal size for an industrial package.)	

Mathematics – Transition Mathematics for Seniors	
Number and Quantity: The Real Number System The Complex Number System	**Algebra:** Seeing Structure in Expressions Arithmetic with Polynomials and Rational Expressions Creating Equations Reasoning with Equations and Inequalities
• Develop an understanding of basic operations, equivalent representations, and properties of the real and complex number systems.	• Create equations or inequalities that model physical situations. • Solve systems of equations, with an emphasis on efficiency of solution as well as reasonableness of answers, given physical limitations.
Functions: Interpreting Functions Building Functions	**Geometry:** Geometric Measuring and Dimension Expressing Geometric Properties with Equations Modeling with Geometry
• Develop knowledge and understanding of the concept of functions as they use, analyze, represent and interpret functions and their applications.	• Use coordinates and to prove geometric properties algebraically.
Statistics and Probability: Interpreting Categorical and Quantitative Data Making Inferences and Justifying Conclusions	
• Make inferences and justify conclusions from sample surveys, experiments, and observational studies.	

Mathematics Skills Progressions

Skill Progressions in West Virginia College- and Career-Readiness Standards for Mathematics

The following pages outline the skill progressions found in the West Virginia College- and Career Readiness Standards for Mathematics. In Mathematics, the sequence of topics follow a programmatic progression that are reflected in the domains. These domains have been organized into programmatic levels where grade-level clusters provide detail about the skill progressions. The language of the clusters illustrates the advancing rigor and complexity of the expectations for what students should know, understand, and be able to do.

The organization of this document is as follows: Kindergarten through Grade 5, Grade 6 through Grade 8, the Integrated Pathway for Grades 9 – 11; and the Traditional Pathway for Grades 9 – 11. Because the diversity of the mathematics in the Fourth Course Options does not support a similar skills progression alignment for these course, the document ends with a listing of the Fourth Course Options in Mathematics.

This document is intended to be a resource that fosters and supports discussion among teachers as they look at the vertical alignment found within the standards that creates a meaningful progression of skills toward college- and career-readiness.

Mathematics Skills Progressions – Kindergarten through Grade 5

Domain: Number – Counting and Cardinality	
Grade	**Clusters**
Kindergarten (Only)	• Know number names and the count sequence. • Counting to tell the number of objects. • Compare numbers.
Domain: Operations and Algebraic Thinking	
Grade	**Clusters**
Kindergarten	• Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
Grade 1	• Represent and solve problems involving addition and subtraction. • Understand and apply properties of operations and the relationship between addition and subtraction. • Add within 20. • Work with addition and subtraction equations.
Grade 2	• Represent and solve problems involving addition and subtraction. • Add and subtract within 20. • Work with equal groups of objects to gain foundations for multiplication.
Grade 3	• Represent and solve problems involving multiplication and division. • Understand properties of multiplication and the relationship between multiplication and division. • Multiply and divide within 100. • Solve problems involving the four operations, and identify and explain patterns in arithmetic.
Grade 4	• Use the four operations with whole numbers to solve problems. • Gain familiarity with factors and multiples. • Generate and analyze patterns.
Grade 5	• Write and interpret numerical expressions. • Analyze patterns and relationships.
Domain: Number – Base Ten	
Grade	**Clusters**
Kindergarten	• Work with numbers 11-19 to gain foundations for place value
Grade 1	• Extend the counting sequence. • Understand place value. • Use place value understanding and properties of operations to add and subtract
Grade 2	• Understand place value. • Use place value understanding and properties of operations to add and subtract.
Grade 3	• Use place value understanding and properties of operations to perform multi-digit arithmetic.
Grade 4	• Generalize place value understanding for multi-digit whole numbers.

	• Use place value understanding and properties of operations to perform multi-digit arithmetic.
Grade 5	• Understand the place value system. • Perform operations with multi-digit whole numbers and with decimals to hundredths.
Domain: Number – Fractions	
Grade	**Clusters**
Kindergarten	Initial focus begins in Grade 3
Grade 1	Initial focus begins in Grade 3
Grade 2	Initial focus begins in Grade 3
Grade 3	• Develop understanding of fractions as numbers.
Grade 4	• Extend understanding of fraction equivalence and ordering. • Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. • Understand decimal notation for fractions, and compare decimal fractions.
Grade 5	• Use equivalent fractions as a strategy to add and subtract fractions. • Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
Domain: Measurement and Data	
Grade	**Clusters**
Kindergarten	• Describe and compare measurable attributes. • Classify objects and count the number of objects in categories.
Grade 1	• Measure lengths indirectly and by iterating length units. • Tell and write time. • Represent and interpret data.
Grade 2	• Measure and estimate lengths in standard units. • Relate addition and subtraction to length. • Work with time and money. • Represent and interpret data.
Grade 3	• Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. • Represent and interpret data. • Geometric measurement: understand concepts of area and relate area to multiplication and to addition. • Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Grade 4	• Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. • Represent and interpret data. • Geometric measurement: understand concepts of angle and measure angles.
Grade 5	• Convert like measurement units within a given measurement system. • Represent and interpret data. • Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
Domain: Number – Geometry	
Grade	**Clusters**

Kindergarten	• Identify and describe shapes. • Analyze, compare, create, and compose shapes.
Grade 1	• Reason with shapes and their attributes.
Grade 2	• Reason with shapes and their attributes.
Grade 3	• Reason with shapes and their attributes.
Grade 4	• Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
Grade 5	• Graph points on the coordinate plane to solve real-world and mathematical problems. • Classify two-dimensional figures into categories based on their properties

Mathematics Progressions – Grade 6 through Grade 8

Domain: Number – Ratios and Proportional Relationships	
Grade	**Clusters**
Grade 6	• Understand ratio concepts and use reasoning to solve problems.
Grade 7	• Analyzing proportional relationships and use them to solve real-world and mathematical problems.
Grade 8	Not a primary focus of Grade 8
Domain: Number – The Number System	
Grade	**Clusters**
Grade 6	• Apply and extend previous understandings of multiplication and division to divide fractions by fractions. • Compute fluently with multi-digit numbers and find common factors and multiples. • Apply previous understandings of numbers to the system of rational numbers.
Grade 7	• Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
Grade 8	• Know that there are numbers that are not rational, and approximate them by rational numbers.
Domain: Number – Expressions and Equations	
Grade	**Clusters**
Grade 6	• Apply and extend previous understandings of arithmetic to algebraic expressions. • Reason about and solve one-variable equations and inequalities. • Represent and analyze quantitative relationships between dependent and independent variables.
Grade 7	• Use properties of operations to generate equivalent expressions. • Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
Grade 8	• Work with radicals and integer exponents. • Understand the connections between proportional relationships, lines, and linear equations. • Analyze and solve linear equations and pairs of simultaneous linear equations.
Domain: Number – Functions	
Grade	**Clusters**
Grade 6	Initial focus begins in Grade 8
Grade 7	Initial focus begins in Grade 8
Grade 8	• Define, evaluate, and compare functions. • Use functions to model relationships between quantities.
Domain: Number – Geometry	
Grade	**Clusters**
Grade 6	• Solve real-world and mathematical problems involving area, surface area, and volume.

Grade 7	• Draw, construct, and describe geometrical figures and describe the relationships between them. • Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
Grade 8	• Understand congruence and similarity using physical models, transparencies, or geometric software. • Understand and apply the Pythagorean Theorem. • Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.
Domain: Number – Statistics and Probability	
Grade	**Clusters**
Grade 6	• Develop understanding of statistical variability. • Summarize and describe distributions.
Grade 7	• Use random sampling to draw inferences about a population. • Draw informal comparative inferences about two populations. • Investigate change processes and develop, use, and evaluate probability models.
Grade 8	• Investigate patterns of association in bivariate data.

Mathematics Progressions – High School
Integrated Pathway

Domain: The Real Number System	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics II	• Extend the properties of exponents to rational exponents. • Use properties of rational and irrational numbers.
High School Mathematics III	Not a primary focus of High School Mathematics III
Domain: Quantities	
Course	**Clusters**
8th Grade High School Mathematics I	• Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions.)
High School Mathematics I	• Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions.)
High School Mathematics II	Not a primary focus of High School Mathematics II
High School Mathematics III	Not a primary focus of High School Mathematics III
Domain: The Complex Number System	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics II	• Perform arithmetic operations with complex numbers. (i^2 as the highest power of i) • Use complex numbers in polynomial identities and equations (Quadratics with real coefficients)
High School Mathematics III	• Use complex numbers in polynomial identities and equations. (Polynomials with real coefficients)
Domain: Seeing Structure in Expressions	
Course	**Clusters**
8th Grade High School Mathematics I	• Interpret the structure of expressions. (Linear expressions and exponential expressions with integer exponents)
High School Mathematics I	• Interpret the structure of expressions. (Linear expressions and exponential expressions with integer exponents)
High School Mathematics II	• Interpret the structure of expressions. (Quadratic and exponential) • Write expressions in equivalent forms to solve problems. (Quadratic and exponential)
High School Mathematics III	• Interpret the structure of expressions. (Polynomial and rational) • Write expressions in equivalent forms to solve problems.
Domain: Arithmetic with Polynomials and Rational Expressions	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics II	• Perform arithmetic operations on polynomials. (Polynomials that simplify to quadratics.)

High School Mathematics III	• Perform arithmetic operations on polynomials. (Beyond quadratics) • Understand the relationship between zeros and factors of polynomials. • Use polynomial identities to solve problems. • Rewrite rational expressions. (Linear and quadratic denominators)
Domain: Creating Equations	
Course	**Clusters**
8th Grade High School Mathematics I	• Create equations that describe numbers or relationships. (Linear and exponential (integer inputs only))
High School Mathematics I	• Create equations that describe numbers or relationships. (Linear and exponential (integer inputs only)
High School Mathematics II	• Create equations that describe numbers or relationships. (Include formulas involving quadratic terms)
High School Mathematics III	• Create equations that describe numbers or relationships. (Equations using all available types of expressions, including simple root functions.)
Domain: Reasoning with Equations and Inequalities	
Course	**Clusters**
8th Grade High School Mathematics I	• Understand solving equations as a process of reasoning and explain the reasoning. (Master linear, learn as a general principle) • Solve equations and inequalities in one variable. (Linear inequalities; literal equations that are linear in the variables being solved for; exponential of a form, such as $2^x = 1/16$) • Analyze and solve linear equations and pairs of simultaneous linear equations. (Systems of linear equations) • Solve systems of equations (Linear systems) • Represent and solve equations and inequalities graphically. (Linear and exponential; learn as a general principle)
High School Mathematics I	• Understand solving equations as a process of reasoning and explain the reasoning. (Master linear, learn as a general principle) • Solve equations and inequalities in one variable. (Linear inequalities; literal equations that are linear in the variables being solved for; exponential of a form, such as $2^x = 1/16$) • Analyze and solve linear equations and pairs of simultaneous linear equations. (Systems of linear equations) • Solve systems of equations (Linear systems) • Represent and solve equations and inequalities graphically. (Linear and exponential; learn as a general principle)
High School Mathematics II	• Solve equations and inequalities in one variable. (Quadratics with real coefficients) • Solve systems of equations. (Linear-quadratic systems)
High School Mathematics III	• Understand solving equations as a process of reasoning and explain the reasoning. (Simple radical and rational) • Represent and solve equations and inequalities graphically. (Combine polynomial, rational, radical, absolute value, and exponential functions)

Domain: Interpreting Functions	
Course	**Clusters**
8th Grade High School Mathematics I	• Define, evaluate, and compare functions. • Understand the concept of a function and use function notation. (Learn as a general principle. Focus on linear and exponential (integer domains) and on arithmetic and geometric sequences.) • Use function to model relationships between quantities. • Interpret functions that arise in applications in terms of a context. (Linear and exponential (linear domain)) • Analyze functions using different representations. (Linear and exponential)
High School Mathematics I	• Understand the concept of a function and use function notation. (Learn as a general principle. Focus on linear and exponential (integer domains) and on arithmetic and geometric sequences.) • Interpret functions that arise in applications in terms of a context. (Linear and exponential (linear domain)) • Analyze functions using different representations. (Linear and exponential)
High School Mathematics II	• Interpret functions that arise in applications in terms of a context. (Include rational, square root and cube root; emphasize selection of appropriate models) • Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined)
High School Mathematics III	• Interpret functions that arise in applications in terms of a context. (Quadratic) • Analyze functions using different representations. (Include rational and radical; focus on using key features to guide selection of appropriate types of model function)
Domain: Building Functions	
Course	**Clusters**
8th Grade High School Mathematics I	• Build a function that models a relationship between two quantities. (Linear and exponential (integer inputs)) • Build new functions from existing functions. (Linear and exponential; focus on vertical translations for exponential)
High School Mathematics I	• Build a function that models a relationship between two quantities. (Linear and exponential (integer inputs)) • Build new functions from existing functions. (Linear and exponential; focus on vertical translations for exponential)
High School Mathematics II	• Build a function that models a relationship between two quantities. (Quadratic and exponential) • Build new functions from existing functions. (Quadratic, all exponential, absolute value)
High School Mathematics III	• Build a function that models a relationship between two quantities. (Include all types of functions studied) • Build new functions from existing functions. (Include simple radical, rational, and exponential functions; emphasize common effect of each transformation across function types)

Domain: Linear, Quadratic, and Exponential Models	
Course	**Clusters**
8th Grade High School Mathematics I	• Construct and compare linear, quadratic, and exponential models and solve problems. (Linear and exponential) • Interpret expressions for functions in terms of the situation they model. (Linear and exponential of form $f(x) = b^x + k$)
High School Mathematics I	• Construct and compare linear, quadratic, and exponential models and solve problems. (Linear and exponential) • Interpret expressions for functions in terms of the situation they model. (Linear and exponential of form $f(x) = b^x + k$)
High School Mathematics II	• Construct and compare linear, quadratic, and exponential models and solve problems. (Include quadratic)
High School Mathematics III	• Construct and compare linear, quadratic, and exponential models and solve problems. (Logarithms as solutions for exponentials)
Domain: Trigonometric Functions	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics II	• Prove and apply trigonometric identities.
High School Mathematics III	• Extend the domain of trigonometric functions using the unit circle. • Model periodic phenomena with trigonometric functions.
Domain: Congruence	
Course	**Clusters**
8th Grade High School Mathematics I	• Experiment with transformations in the plane. • Understand congruence in terms of rigid motions. (Build on rigid motions as a familiar starting point for development of concept of geometric proof) • Make geometric constructions. (Formalize and explain processes)
High School Mathematics I	• Experiment with transformations in the plane. • Understand congruence in terms of rigid motions. (Build on rigid motions as a familiar starting point for development of concept of geometric proof) • Make geometric constructions. (Formalize and explain processes)
High School Mathematics II	• Prove geometric theorems. (Focus on validity of underlying reasoning while using variety of ways of writing proofs)
High School Mathematics III	Not a primary focus of High School Mathematics III
Domain: Similarity, Right Triangles, and Trigonometry	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics II	• Understand similarity in terms of similarity transformations. • Prove theorems involving similarity. (Focus on validity of underlying reasoning while using variety of formats) • Define trigonometric ratios and solve problems involving right triangles.
High School Mathematics III	• Apply trigonometry to general triangles.

Domain: Circles	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics I	Initial focus begins in High School Mathematics II
High School Mathematics II	• Understand and apply theorems about circles. • Find arc lengths and area of sectors of circles. (Radian introduced only as a unit of measure)
High School Mathematics III	Not a primary focus of High School Mathematics III
Domain: Expressing Geometric Properties with Equations	
Course	**Clusters**
8th Grade High School Mathematics I	• Use coordinates to prove simple geometric theorems algebraically. (Include distance formula; relate to Pythagorean Theorem)
High School Mathematics I	• Use coordinates to prove simple geometric theorems algebraically. (Include distance formula; relate to Pythagorean Theorem)
High School Mathematics II	• Translate between the geometric description and the equation for a conic section. • Use coordinates to prove simple geometric theorems algebraically. (Include simple circle theorems)
High School Mathematics III	Not a primary focus of High School Mathematics III
Domain: Geometric Measurement and Dimension	
Course	**Clusters**
8th Grade High School Mathematics I	• Understand and apply the Pythagorean Theorem. (Connect to radicals, rational exponents, and irrational numbers)
High School Mathematics I	Not a primary focus of Mathematics I
High School Mathematics II	• Explain volume formulas and use them to solve problems.
High School Mathematics III	• Visualize the relation between two-dimensional and three-dimensional objects.
Domain: Interpreting Categorical and Quantitative Data	
Course	**Clusters**
8th Grade High School Mathematics I	• Summarize, represent, and interpret data on a single count or measurement variable. • Investigate patterns of association in bivariate data. • Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus; discuss general principle) • Interpret linear models.
High School Mathematics I	• Summarize, represent, and interpret data on a single count or measurement variable. • Investigate patterns of association in bivariate data. • Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus; discuss general principle) • Interpret linear models.
High School Mathematics II	• Summarize, represent, and interpret data on two categorical and quantitative variables.
High School Mathematics III	Not a primary focus of High School Mathematics III
Domain: Making Inferences and Justifying Conclusions	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in Mathematics III

High School Mathematics I	Initial focus begins in Mathematics III
High School Mathematics II	Initial focus begins in Mathematics III
High School Mathematics III	• Understand and evaluate random processes underlying statistical experiments. • Make inferences and justify conclusions from sample surveys, experiments, and observational studies.
Domain: Conditional Probability and the Rules of Probability	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in Mathematics II
High School Mathematics I	Initial focus begins in Mathematics II
High School Mathematics II	• Understand independence and conditional probability and use them to interpret data. (Link to data simulations or experiments) • Use the rules of probability to compute probabilities of compound events in a uniform probability model.
High School Mathematics III	Not a primary focus of High School Mathematics III
Domain: Using Probability to Make Decisions	
Course	**Clusters**
8th Grade High School Mathematics I	Initial focus begins in Mathematics II
High School Mathematics I	Initial focus begins in Mathematics II
High School Mathematics II	• Use probability to evaluate outcomes of decisions. (Introductory; apply counting rules)
High School Mathematics III	• Use probability to evaluate outcomes of decisions. (Include more complex situations)

Mathematics Progressions – High School
Traditional Pathway

Domain: The Real Number System	
Course	**Clusters**
8th Grade High School Algebra I	• Extend the properties of exponents to rational exponents. • Use properties of rational and irrational numbers.
High School Algebra I	• Extend the properties of exponents to rational exponents. • Use properties of rational and irrational numbers.
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	Not a primary focus of High School Algebra II
Domain: Quantities	
Course	**Clusters**
8th Grade High School Algebra I	• Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions.)
High School Algebra I	• Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions.)
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	Not a primary focus of High School Algebra II
Domain: The Complex Number System	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Algebra II
High School Algebra I	Initial focus begins in High School Algebra II
High School Geometry	Initial focus begins in High School Algebra II
High School Algebra II	• Perform arithmetic operations with complex numbers. • Use complex numbers in polynomial identities and equations. (Polynomials with real coefficients)
Domain: Seeing Structure in Expressions	
Course	**Clusters**
8th Grade High School Algebra I	• Interpret the structure of expressions. (Linear, exponential, quadratic) • Write expressions in equivalent forms to solve problems. (Quadratic and exponential)
High School Algebra I	• Interpret the structure of expressions. (Linear, exponential, quadratic) • Write expressions in equivalent forms to solve problems. (Quadratic and exponential)
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	• Interpret the structure of expressions. (Polynomial and rational) • Write expressions in equivalent forms to solve problems.
Domain: Arithmetic with Polynomials and Rational Expressions	
Course	**Clusters**
8th Grade High School Algebra I	• Perform arithmetic operations on polynomials. (Linear and quadratic.)
High School Algebra I	• Perform arithmetic operations on polynomials. (Polynomials that simplify to quadratics.)
High School Geometry	Not a primary focus of High School Geometry

High School Algebra II	• Perform arithmetic operations on polynomials. (Beyond quadratics) • Understand the relationship between zeros and factors of polynomials. • Use polynomial identities to solve problems. • Rewrite rational expressions. (Linear and quadratic denominators)
Domain: Creating Equations	
Course	**Clusters**
8th Grade High School Algebra I	• Create equations that describe numbers or relationships. (Linear, quadratic, and exponential (integer inputs only))
High School Algebra I	• Create equations that describe numbers or relationships. (Linear, quadratic, and exponential (integer inputs only))
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	• Create equations that describe numbers or relationships. (Equations using all available types of expressions, including simple root functions.)
Domain: Reasoning with Equations and Inequalities	
Course	**Clusters**
8th Grade High School Algebra I	• Understand solving equations as a process of reasoning and explain the reasoning. (Master linear, learn as a general principle) • Solve equations and inequalities in one variable. (Linear inequalities; literal equations that are linear in the variables being solved for; quadratics with real solutions) • Analyze and solve linear equations and pairs of simultaneous linear equations. • Solve systems of equations (Linear-linear and linear-quadratic) • Represent and solve equations and inequalities graphically. (Linear and exponential; learn as a general principle)
High School Algebra I	• Understand solving equations as a process of reasoning and explain the reasoning. (Master linear, learn as a general principle) • Solve equations and inequalities in one variable. (Linear inequalities; literal equations that are linear in the variables being solved for; quadratics with real solutions) • Solve systems of equations (Linear-linear and linear-quadratic) • Represent and solve equations and inequalities graphically. (Linear and exponential; learn as a general principle)
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	• Understand solving equations as a process of reasoning and explain the reasoning. (Simple radical and rational) • Represent and solve equations and inequalities graphically. (Combine polynomial, rational, radical, absolute value, and exponential functions)
Domain: Interpreting Functions	
Course	**Clusters**
8th Grade High School Algebra I	• Define, evaluate, and compare functions. • Understand the concept of a function and use function notation. (Learn as a general principle. Focus on linear and

	exponential (integer domains) and on arithmetic and geometric sequences.) • Use functions to model relationships between quantities. • Interpret functions that arise in applications in terms of a context. (Linear, exponential, and quadratic) • Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined)
High School Algebra I	• Understand the concept of a function and use function notation. (Learn as a general principle. Focus on linear and exponential (integer domains) and on arithmetic and geometric sequences.) • Interpret functions that arise in applications in terms of a context. (Linear, exponential, and quadratic) • Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined)
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	• Interpret functions that arise in applications in terms of a context. (Emphasize selection of appropriate models) • Analyze functions using different representations. (Focus on using key features to guide selection of appropriate types of model function)
Domain: Building Functions	
Course	**Clusters**
8th Grade High School Algebra I	• Build a function that models a relationship between two quantities. (Linear, exponential, and quadratic) • Build new functions from existing functions. (Linear, exponential, quadratic, and absolute value)
High School Algebra I	• Build a function that models a relationship between two quantities. (Linear, exponential, and quadratic) • Build new functions from existing functions. (Linear, exponential, quadratic, and absolute value)
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	• Build a function that models a relationship between two quantities. (Include all types of functions studied) • Build new functions from existing functions. (Include simple radical, rational, and exponential functions; emphasize common effect of each transformation across function types)
Domain: Linear, Quadratic, and Exponential Models	
Course	**Clusters**
8th Grade High School Algebra I	• Construct and compare linear, quadratic, and exponential models and solve problems. • Interpret expressions for functions in terms of the situation they model. (Linear and exponential of form $f(x) = b^x + k$)
High School Algebra I	• Construct and compare linear, quadratic, and exponential models and solve problems. • Interpret expressions for functions in terms of the situation they model. (Linear and exponential of form $f(x) = b^x + k$)
High School Geometry	Not a primary focus of High School Geometry

High School Algebra II	• Construct and compare linear, quadratic, and exponential models and solve problems. (Logarithms as solutions for exponentials)
Domain: Trigonometric Functions	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Algebra II
High School Algebra I	Initial focus begins in High School Algebra II
High School Geometry	Initial focus begins in High School Algebra II
High School Algebra II	• Extend the domain of trigonometric functions using the unit circle. • Model periodic phenomena with trigonometric functions. • Prove and apply trigonometric identities.
Domain: Congruence	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Geometry
High School Algebra I	Initial focus begins in High School Geometry
High School Geometry	• Experiment with transformations in the plane. • Understand congruence in terms of rigid motions. (Build on rigid motions as a familiar starting point for development of concept of geometric proof) • Prove geometric theorems. (Focus on validity of underlying reasoning while using variety of ways of writing proofs) • Make geometric constructions. (Formalize and explain processes)
High School Algebra II	Not a primary focus of High School Algebra II
Domain: Similarity, Right Triangles, and Trigonometry	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Geometry
High School Algebra I	Initial focus begins in High School Geometry
High School Geometry	• Understand similarity in terms of similarity transformations. • Prove theorems involving similarity. (Focus on validity of underlying reasoning while using variety of formats) • Define trigonometric ratios and solve problems involving right triangles. • Apply trigonometry to general triangles.
High School Algebra II	Not a primary focus of High School Algebra II
Domain: Circles	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Geometry
High School Algebra I	Initial focus begins in High School Geometry
High School Geometry	• Understand and apply theorems about circles. • Find arc lengths and area of sectors of circles. (Radian introduced only as a unit of measure)
High School Algebra II	Not a primary focus of High School Algebra II
Domain: Expressing Geometric Properties with Equations	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Geometry
High School Algebra I	Initial focus begins in High School Geometry
High School Geometry	• Translate between the geometric description and the equation for a conic section.

	• Use coordinates to prove simple geometric theorems algebraically. (Include distance formula; relate to Pythagorean Theorem)
High School Algebra II	Not a primary focus of High School Algebra II
Domain: Geometric Measurement and Dimension	
Course	**Clusters**
8th Grade High School Algebra I	• Understand and apply the Pythagorean Theorem. (Connect to radicals, rational exponents, and irrational numbers)
High School Algebra I	Not a primary focus of High School Algebra I
High School Geometry	• Explain volume formulas and use them to solve problems. • Visualize the relation between two-dimensional and three-dimensional objects. • Apply geometric concepts in modeling situations.
High School Algebra II	Not a primary focus of High School Algebra II
Domain: Interpreting Categorical and Quantitative Data	
Course	**Clusters**
8th Grade High School Algebra I	• Summarize, represent, and interpret data on a single count or measurement variable. • Investigate patterns of association in bivariate data. • Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus; discuss general principle) • Interpret linear models.
High School Algebra I	• Summarize, represent, and interpret data on a single count or measurement variable. • Investigate patterns of association in bivariate data. • Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus; discuss general principle) • Interpret linear models.
High School Geometry	Not a primary focus of High School Geometry
High School Algebra II	• Summarize, represent, and interpret data on two categorical and quantitative variables.
Domain: Making Inferences and Justifying Conclusions	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Algebra II
High School Algebra I	Initial focus begins in High School Algebra II
High School Geometry	Initial focus begins in High School Algebra II
High School Algebra II	• Understand and evaluate random processes underlying statistical experiments. • Make inferences and justify conclusions from sample surveys, experiments, and observational studies.
Domain: Conditional Probability and the Rules of Probability	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Geometry
High School Algebra I	Initial focus begins in High School Geometry
High School Geometry	• Understand independence and conditional probability and use them to interpret data. (Link to data simulations or experiments) • Use the rules of probability to compute probabilities of compound events in a uniform probability model.

High School Algebra II	Not a primary focus of High School Algebra II
Domain: Using Probability to Make Decisions	
Course	**Clusters**
8th Grade High School Algebra I	Initial focus begins in High School Geometry
High School Algebra I	Initial focus begins in High School Geometry
High School Geometry	• Use probability to evaluate outcomes of decisions. (Introductory; apply counting rules)
High School Algebra II	• Use probability to evaluate outcomes of decisions. (Include more complex situations)

FOURTH COURSE OPTIONS

Fourth course options available to students in either pathway:

- Advanced Mathematical Modeling
- Calculus
- High School Mathematics IV - Trigonometry/Pre-calculus
- STEM Readiness
- Transition Mathematics for Seniors
- AP® Calculus
- AP® Computer Science
- AP® Statistics
- Dual credit mathematics courses and advanced mathematics courses offered through WV Virtual School.

Cross-state comparison of sample standards

The following provides a cross-state comparison of what standards look like across various states.

Selected English Language Arts Samples					
Grade Level Samples	***West Virginia, 2015 WV CCR Standards Proposed**	**Massachusetts, 2004 Standards**	**Alaska, Current standards**	**Virginia, Current standards**	**Texas, Current Standards**
Grade One Reading Sample: This ELA standard is a goal set for students to understand the elements of literary fiction at the first grade level.	ELA.1.3. Describe characters, settings, and major events in a story, using key details in literary texts.	12.1 Identify the elements of plot, character, and setting in a favorite story.PK-2	3. Describe characters, settings, major events, and problem-solution in a story, play, or poem, using key details.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. a) Preview the selection. b) Set a purpose for reading. c) Relate previous experiences to what is read. d) Make and confirm predictions. e) Ask and answer who, what, when, where, why, and how questions about what is read. f) Identify characters, setting, and important events. g) Retell stories and events, using beginning, middle, and end. h) Identify the main idea or theme. i) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.	(9) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to: (A) describe the plot (problem and solution) and retell a story's beginning, middle, and end with attention to the sequence of events; and (B) describe characters in a story and the reasons for their actions and feelings.
Grade Level Samples	***West Virginia, 2015 WV CCR Standards Proposed**	**Massachusetts, 2004 Standards**	**Alaska, Current standards**	**Virginia, Current standards**	**Texas, Current Standards**
Grade Three Reading Sample: This ELA standard is a goal set for students to understand the elements of literary fiction at the third grade level.	ELA 3.3. Describe characters in a literary story (e.g., their traits, motivations, for feelings) and explain how their actions contribute to a sequence of events.	12.2Identify and analyze the elements of plot, character, and setting in the stories they read and write.	3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events (e.g., creating or solving a problem).	3.5 The student will read and demonstrate comprehension of fictional text and poetry. a) Set a purpose for reading. b) Make connections between previous experiences and reading selections. c) Make, confirm, or revise predictions. d) Compare and contrast settings, characters, and events. e) Identify the author's purpose. f) Ask and answer questions about what is read. g) Draw conclusions about text. h) Identify the problem and solution. i) Identify the main idea. j) Identify supporting details.	(8) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to: (A) sequence and summarize the plot's main events and explain their influence on future events; (B) describe the interaction of characters including their relationships and the changes they undergo; and (C) identify whether the narrator or speaker of a story is first or third person.

				k) Use reading strategies to monitor comprehension throughout the reading process. l) Differentiate between fiction and nonfiction. m) Read with fluency and accuracy.	
Grade Level Samples	***West Virginia, 2015 WV CCR Standards Proposed**	**Massachusetts, 2004 Standards**	**Alaska, Current standards**	**Virginia, Current standards**	**Texas, Current Standards**
Grade Six Reading Sample: This ELA standard is a goal set for students to understand the elements of literary fiction at the sixth grade level.	Describe how a particular story's or drama's plot unfolds in a series of events and how the characters respond or change as the plot moves toward a resolution.	12.3Identify and analyze the elements of setting, characterization, and plot (including conflict).	3. Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution or as the narrative advances.	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. a) Identify the elements of narrative structure, including setting, character, plot, conflict, and theme. b) Make, confirm, and revise predictions. c) Describe how word choice and imagery contribute to the meaning of a text. d) Describe cause and effect relationships and their impact on plot. e) Use prior and background knowledge as context for new learning. f) Use information in the text to draw conclusions and make inferences. g) Explain how character and plot development are used in a selection to support a central conflict or story line. h) Identify the main idea. i) Identify and summarize supporting details. j) Identify and analyze the author's use of figurative language. k) Identify transitional words and phrases that signal an author's organizational pattern. l) Use reading strategies to monitor comprehension throughout the reading process.	(6) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to: (A) summarize the elements of plot development (e.g., rising action, turning point, climax, falling action, denouement) in various works of fiction; (B) recognize dialect and conversational voice and explain how authors use dialect to convey character; and (C) describe different forms of point-of-view, including first- and third-person.

Grade Level Samples	*West Virginia, 2015 WV CCR Standards Proposed	Massachusetts, 2004 Standards	Alaska, Current standards	Virginia, Current standards	Texas, Current Standards
Grade Nine Reading Sample: This ELA standard is a goal set for students to understand the elements of literary fiction at the ninth grade level.	ELA.9.3. Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a literary text, interact with other characters, and advance the plot or develop the theme.	13.25Analyze and explain the structure and elements of nonfiction works. 9-10	Grades 9-10: Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a literary text, interact with other characters, and advance the plot or develop the theme.	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. a) Identify author's main idea and purpose. b) Summarize text relating supporting details. c) Identify the characteristics that distinguish literary forms. d) Use literary terms in describing and analyzing selections. e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme. f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion. g) Analyze the cultural or social function of a literary text. h) Explain the relationship between the author's style and literary effect. i) Explain the influence of historical context on the form, style, and point of view of a written work. j) Compare and contrast author's use of literary elements within a variety of genres. k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose. l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension. m) Use reading strategies to monitor comprehension throughout the reading process.	(5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to: (A) analyze non-linear plot development (e.g., flashbacks, foreshadowing, sub-plots, parallel plot structures) and compare it to linear plot development; (B) analyze how authors develop complex yet believable characters in works of fiction through a range of literary devices, including character foils; (C) analyze the way in which a work of fiction is shaped by the narrator's point of view; and (D) demonstrate familiarity with works by authors from non-English-speaking literary traditions with emphasis on classical literature.

Grade Level Samples	*West Virginia, 2015 WV CCR Standards Proposed	Massachusetts, 2004 Standards	Alaska, Current standards	Virginia, Current standards	Texas, Current Standards
Grade Twelve Reading Sample: This ELA standard is a goal set for students to understand the elements of literary fiction at the twelfth grade level.	ELA.12.3. Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, and/or how the characters are introduced and developed.	12.6Analyze, evaluate, and apply knowledge of how authors use techniques and elements in fiction for rhetorical and aesthetic purposes.11-12	Grades 11-12: Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, and/or how the characters are introduced and developed.	12.5 The student will read and analyze a variety of nonfiction texts. a) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts. b) Analyze and synthesize information in order to solve problems, answer questions, and generate new knowledge. c) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions. d) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text. e) Identify false premises in persuasive writing. f) Draw conclusions and make inferences on explicit and implied information using textual support.	(5) Reading/Comprehension of Literary Text/Fiction. Students understand, make inferences and draw conclusions about the structure and elements of fiction and provide evidence from text to support their understanding. Students are expected to: (A) analyze how complex plot structures (e.g., subplots) and devices (e.g., foreshadowing, flashbacks, suspense) function and advance the action in a work of fiction; (B) analyze the moral dilemmas and quandaries presented in works of fiction as revealed by the underlying motivations and behaviors of the characters; (C) compare and contrast the effects of different forms of narration across various genres of fiction; and (D) Demonstrate familiarity with works of fiction by British authors from each major literary period.
Selected Mathematics Standards Examples					
Grade Level Samples	***West Virginia, 2015 WV CCR Standards Proposed**	**Massachusetts, 2004 Standards**	**Alaska, Current standards**	**Virginia, Current standards**	**Texas, Current Standards**
Grade One Math Sample: This math standard addresses fluency with multiplication and division at the first grade level	M.1.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10 and use strategies such as: • Counting on • Making ten (e.g., 8+6=8+2+4=10+4=14); • Decomposing a number leading to a ten (e.g., 13-4=13-3-1=10-1=9); • Using the relationship between addition and subtraction	2. N.9.Know addition facts (addends to ten) and related subtraction facts, and use them to solve problems. 1-2	1.OA.6. Add and subtract using numbers up to 20, demonstrating fluency for addition and subtraction up to 10. Use strategies such as • counting on • making ten (8 + 6 = 8 + 2 + 4 = 10 + 4 = 14) • decomposing a number leading to a ten (13 - 4 = 13 - 3 - 1 = 10 - 1 = 9) • using the relationship between addition and subtraction, such as	1.5The student will recall basic addition facts with sums to 18 or less and the corresponding subtraction facts.	(3) Number and operations. The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. The student is expected to: (A) use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99; (B) use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as 2 + 4 = [ ]; 3 + [ ] = 7; and 5 = [ ] - 3; (C) compose 10 with two or more addends with and without concrete objects;

	(e.g., knowing that 8+4=12, one knows 12-8=4); and • Creating equivalent but easier or known sums (e.g., adding 6+7 by creating the known equivalent 6+6+1=12+1=13).		fact families, (8 + 4 = 12 and 12 - 8 = 4) • creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).		(D) apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10; (E) explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences; and (F) generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.
Grade Level Samples	***West Virginia, 2015 WV CCR Standards Proposed**	**Massachusetts, 2004 Standards**	**Alaska, Current standards**	**Virginia, Current standards**	**Texas, Current Standards**
Grade Three Math Sample: This math standard addresses fluency with multiplication and division at the third grade level.	M.3.7. Learn multiplication tables (fact) with speed and memory in order to fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8x5 =40, one knows that 40/5=8) or properties of operations by the end of grade 3.	3.N.9Know multiplication facts through 10 x 10 and related division facts, e.g., 9 x 8 = 72 and 72 ÷ 9 = 8. Use these facts to solve related problems, e.g., 3 x 5 is related to 3 x 50. 3	3.OA.7. Fluently multiply and divide numbers up to 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 ×5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	3.5The student will recall multiplication facts through the twelves table, and the corresponding division facts.	(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to: (A) solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction; (B) round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems; (C) determine the value of a collection of coins and bills; (D) determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10; (E) represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting; (F) recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts; (G) use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial

					products, and the commutative, associative, and distributive properties; (H) determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally; (I) determine if a number is even or odd using divisibility rules; (J) determine a quotient using the relationship between multiplication and division; and (K) solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts.
Grade Level Samples	***West Virginia, 2015 WV CCR Standards Proposed**	**Massachusetts, 2004 Standards**	**Alaska, Current standards**	**Virginia, Current standards**	**Texas, Current Standards**
Grade Six Math Sample: This math standard addresses fluency with multiplication of decimals and division at the sixth grade level.	M.6.6. fluently add, subtract, multiply and divide multi-digit decimals using the standard algorithm for each operation.	6.N.13 Accurately and efficiently add, subtract, multiply, and divide (with double-digit divisors) whole numbers and positive decimals. 6	6.NS.2. Fluently multiply and divide multi-digit whole numbers using the standard algorithm. Express the remainder as a whole number, decimal, or simplified fraction; explain or justify your choice based on the context of the problem.	6.7 The student will solve single-step and multistep practical problems involving addition, subtraction, multiplication, and division of decimals.	(3) Number and operations. The student applies mathematical process standards to represent addition, subtraction, multiplication, and division while solving problems and justifying solutions. The student is expected to: (A) recognize that dividing by a rational number and multiplying by its reciprocal result in equivalent values; (B) determine, with and without computation, whether a quantity is increased or decreased when multiplied by a fraction, including values greater than or less than one; (C) represent integer operations with concrete models and connect the actions with the models to standardized algorithms; (D) add, subtract, multiply, and divide integers fluently; and (E) multiply and divide positive rational numbers fluently.

Grade Level Samples	*West Virginia, 2015 WV CCR Standards Proposed	Massachusetts, 2004 Standards	Alaska, Current standards	Virginia, Current standards	Texas, Current Standards
Grade Nine Math Sample: This Algebra Standard is a goal for students to investigate linear functions and corresponding relationships in linear functions.	M.1HS.23 Distinguish between situations that can be modeled with linear functions and with exponential functions. a. prove that linear functions grow by equal factors over equal intervals. b. recognize situations in which one quantity changes at a constant rate per unit interval relative to another. c. recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.	10.N.1Identify and use the properties of operations on real numbers, including the associative, commutative, and distributive properties; the existence of the identity and inverse elements for addition and multiplication; the existence of nth roots of positive real numbers for any positive integer n; and the inverse relationship between taking the nth root of and the nth power of a positive real number. (AI.N.1) 9-10	Algebra 1 F-IF.1. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If *f* is a function and *x* is an element of its domain, then *f*(*x*) denotes the output of *f* corresponding to the input *x*. The graph of *f* is the graph of the equation *y* = *f*(*x*). F-IF.2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. F-IF.3. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. *For example, the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n + 1) = f(n) + f(n - 1) for n ≥ 1.*	Algebra 1 A.7The student will investigate and analyze function (linear and quadratic) families and their characteristics both algebraically and graphically, including a)determining whether a relation is a function; b)domain and range; c)zeros of a function; d)*x*- and *y*-intercepts; e)finding the values of a function for elements in its domain; and f)making connections between and among multiple representations of functions including concrete, verbal, numeric, graphic, and algebraic.	Algebra 1: (2) Linear functions, equations, and inequalities. The student applies the mathematical process standards when using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations. The student is expected to: (A) determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations, both continuous and discrete; and represent domain and range using inequalities; (B) write linear equations in two variables in various forms, including y = mx + b, Ax + By = C, and y - y1 = m(x - x1), given one point and the slope and given two points; (C) write linear equations in two variables given a table of values, a graph, and a verbal description; (D) write and solve equations involving direct variation; (E) write the equation of a line that contains a given point and is parallel to a given line; (F) write the equation of a line that contains a given point and is perpendicular to a given line; (G) write an equation of a line that is parallel or perpendicular to the X or Y axis and determine whether the slope of the line is zero or undefined; (H) write linear inequalities in two variables given a table of values, a graph, and a verbal description; and (I) write systems of two linear equations given a table of values, a graph, and a verbal description.