Wisconsin Priority Instructional Content in English Language Arts and Mathematics 2020-2021

Wisconsin Department of Public Instruction
Carolyn Stanford Taylor, State Superintendent
Madison, Wisconsin
September, 2020

2020 - 2021 Wisconsin Priority Instructional Content: English Language Arts and Mathematics

This document explains and identifies the suggested priority academic content for English language arts and mathematics during the 2020-2021 school year when student learning has been and will continue to be impacted by extended school closures due to COVID-19. It is based on the work of Student Achievement Partners under the Creative Commons license.

Table of contents:

Introduction

> Since time is a scarce commodity in classrooms—made more limited by anticipated closures and distance or hybrid learning models in the fall of 2020—strategic instructional choices about which content to prioritize, and what and how to assess, must be made.
>
> Student Achievement Partners, p. 4

There is no one reality students have experienced as they were out of school. Nor was anybody static. Everyone has experiences that will influence them and that they can draw from. Flexibility, creativity, and empathy—and above all else, knowing what students and their families have faced—are all key to serving our students well. This has always been true, but today's circumstances have allowed us to shine a spotlight on this truth in new ways. Yes, there will be plentiful stories of unresolved, unrelenting anxiety and heartache, but connected to those will be countless examples of students' valor, resilience, accountability to family, and chances to have absorbed vital life lessons. All students will come to school having learned, whether learning entrenched in academics or focused more squarely on pragmatic life lessons. All learning and experiences have value. All deserve respect and attention as we consider the approach to K–12 instruction in 2020–21.

Time is a scarce commodity in educating students—now made more compressed by months of school closures. With greater variability in returning students' experiences, how can we best accelerate all students' learning, amplify what matters most, and foster students' social-emotional development? What should be the nucleus of daily instruction when the school year starts, regardless of varying school conditions? Whether school starts back with students learning in buildings, remotely, or through hybrid offerings, each of our students in every learning community needs to be engaged in college- and career-ready study. What's always been important is especially important now.

Priority Content Explained

In Wisconsin's standards for English language arts and mathematics, each academic standard is important and deserves adequate instructional time. However, in these unprecedented times, identifying and teaching priority content allows systems to ensure students simultaneously learn grade-level content *and* unfinished learning from prior grades. This document, modified from a similar document created by Student Achievement Partners, identifies priority content by grade-band for mathematics (K - 8) and English language arts (K - 12). This document is for use during the 2020 - 2021 school year.

Priority content represents the major work of the discipline; it is labeled as "priority", in part, because it is critical to college and career readiness. Understanding of priority content is developed through and by teaching all standards. Therefore, this document is not intended to replace *Wisconsin's Standards for Mathematics* or *Wisconsin's Standards for English Language Arts*.

Student Achievement Partners (SAP) writes, "... the pandemic has further illuminated inequities that have always existed. Rich, engaging instruction at grade level has typically not been offered to students of color, students experiencing poverty, and emerging bilingual students" (p. 4). Priority instructional content ensures that all learners - particularly those who are parts of populations that have historically been marginalized - experience success in grade-level standards along with unfinished learning from prior years.

Besides proficiency in grade-level standards, priority instructional content allows us to support students in developing social emotional learning competencies. We are living in a time of great uncertainty. Mathematics and English language arts instruction can be intentionally designed and delivered in ways that support every learner in developing behaviors that support learning and behaviors that support over-all health and well-being.

It is important to emphasize that priority content should not be the only focus of instruction. Narrowing of curriculum narrows learning opportunities for students and puts a ceiling on student growth. Additionally, the U.S. Department of Education has informed states that they will not grant any waivers from state summative assessments in the 2020-2021 school year. Narrowing of curriculum, then, will place students at a disadvantage on this measure of learning and growth.

Priority Instructional Content IS. . .	**Priority Instructional Content IS NOT. . .**
● For use during 2020 - 2021	● A permanent narrowing of curriculum
● One way to address educational equity by ensuring meaningful instruction for all learners	
● Major content likely to lead to college and career readiness	● The only content that should be taught
● A way for all learners to access grade-level content while completing unfinished learning from previous years	● Replacing universal instruction and grade-level content with remediation or intervention
● One way to use academic instruction to meet students' social emotional learning needs	

Why is Priority Content Necessary Right Now?

One of the most powerful things a school can do to support student achievement is provide a guaranteed and viable learning experience for all (Marzano, 20110). This experience ensures that specific content is taught in specific courses and at specific grade levels as well as provides enough instructional time to teach that important content. The use of priority content at this time supports the need for an agreed upon sharper content focus so that there is sufficient time for both the in-depth grade level instruction and just in time learning of essential content from the prior grade.

Accelerating student learning as well as attending to social emotional learning are also supported by the use of priority content. The need to accelerate student learning by providing grade level content to all students while also addressing unfinished learning is not new to educators, but unfinished learning will look different this year due to learning interruptions. It will be critical that students consistently receive grade-level instruction along with appropriate scaffolds that make the work accessible throughout the 2020-21 school year. Educators must focus on addressing the necessary content knowledge students need to engage in their learning exactly when it is needed rather than as review before grade level instruction begins. Priority content provides both suggestions for the standards of highest priority as well as ways to bring in prior grade level concepts and skills that will support the grade level work. In addition, priority content includes practical ideas for attending to social-emotional learning. "Emotional health and well-being of students is a central concern of educators, particularly given the pandemic, and these suggestions demonstrate ways in which social, emotional, and academic development can be fostered in the context of grade-level college-and career-ready content" (SAP 2020, 6-7). The social-emotional learning suggestions promote discourse, belonging, agency, and identity. In mathematics specifically, the Standards for Mathematical Practice provide a natural connection to social-emotional learning. When these practices are done well, they both enhance the teaching and learning of mathematics and support social-emotional learning.

How is Priority Content the Same as and Different From Essential Standards?

Solution Tree identifies essential standards (sometimes also referred to as priority or power standards) as those that have:

- Endurance: value beyond a single test
- Leverage: value in multiple disciplines
- Readiness: necessary for success in future grades

Common assessments are sometimes based on essential standards, and educators can work in professional learning communities (PLCs) to determine which learners may benefit from intervention or enrichment. Because of the time investment needed to identify essential standards, define proficiency, and create common assessments, essential standards, generally, remain static. Over time, this can lead to a narrowing of curriculum.

There are several significant differences between the priority instructional content outlined in this document and essential standards.

1. Priority instructional content is temporary. It is suggested for use during 2020 - 2021 in response to instability in learning at the end of 2019 - 2020 and uncertainty about 2020 - 21.
2. Priority instructional content is selected, in part, because it is critical to college and career readiness.
3. Priority instructional content is a way to ensure all students have access to grade-level learning while addressing unfinished learning.

Attend to Students' Social, Emotional, and Academic Development (SEAD)

As we narrow the focus and recommit to what matters most academically, research also tells us that four learning mindsets are particularly important in supporting students' academic development. They focus on students' sense of 1) belonging and safety, 2) efficacy, 3) value for effort and growth, and 4) engagement in work that is relevant and culturally responsive (Aspen Institute, 2019). Within classrooms, within schools, attention must be given to restoring relationships and a sense of community, so students feel safe, fully engage and work hard. We need to help students know that we believe they can succeed and that their ability and competence will grow with their effort. And more than ever, students need to see value and relevance in what they are learning to their lives and their very beings. Investing in students'

social-emotional development is done by the entire system of adults in schools. This investment is key to promoting engagement in—not a substitute for—teaching academic content; it represents a change in how academic content is taught. There is a stunning opportunity to curate high-quality instructional materials aligned to healing and resilience for next year. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.

English Language Arts and Literacy

Vision and Identification of Priority Standards

Identification of priority content must begin with a vision for instruction. In Wisconsin, we believe that literate individuals are flexible; they respond to the varying demands of audience, task, purpose, and discipline. Literate individuals adapt their communication in relation to audience, task, and purpose, making intentional choices about reading, writing, speaking, listening, and language. In addition, literate individuals read, write, speak, listen, and use language for enjoyment and self-exploration. The knowledge and skills developed through grade-level standards lead toward lifelong literacy, including the ability to meet the changing literacy demands of a contemporary, democratic society.

Learners become proficient in literacy through deliberate and intentional practice. In the English language arts and literacy, practice means that students:

- Read and comprehend a variety of complex literary and informational texts for many purposes (including enjoyment), including texts that reflect one's experiences and experiences of others. This includes independently and proficiently understanding grade-level text.
- Listen to understand and adapt speech to a variety of purposes, audiences, and situations in order to meet communicative goals. Be able to justify intentional language choices and how those choices differ for culture and context.

- Write routinely for a range of culturally-sustaining and rhetorically authentic tasks, purposes, and audiences over extended time frames (time for inquiry, reflection, and revision) and shorter time frames.
- Demonstrate an understanding of how language functions in different cultures and contexts. Apply this knowledge to meet communicative goals when composing, creating, and speaking, and to comprehend more fully when reading and listening. Be able to justify intentional language and convention choices and explain how those choices differ for culture and context.

In Wisconsin, text is defined as any communication that carries meaning. It can be written, visual, or oral.

Student Achievement Partners has identified priority standards for a limited term focus that crosses the strands of the English language arts, retaining the integrated nature of the English language arts and literacy. These 2010 academic standards are: RF.4, L.4, L.5., L.6, RI.1, RI.9, RI.10, RL.1, RL.4, RL.10, SL.1, W.8, and W.9. Within Wisconsin's Standards for English Language Arts, 2020, these standards would be: RF.4, L.2, L.3, L.4,R.1, R.9, the Overarching Statement for Reading, R.4, SL.1, W.8, and W.9. Educators should continue to plan and implement instruction that includes the additional standards so as not to narrow the curriculum for students, which could result in a narrowing of learning opportunities for each learner.

Adapting ELA and Literacy Curriculum Materials in the 2020–21 School Year

The specific grade-band guidance that follows reflects a "map" of sorts to college- and career-ready standards by answering the question: How can we do more with less? Decision makers, whether they are guiding policy that affects students and their teachers or thinking about how to modify the instructional materials they've developed, need to strip away what isn't central. The most important priorities in each grade-band are clearly signaled. Within the English language arts, opportunities are highlighted for maximizing instructional time—and student impacts—by

designing learning around anchor texts, related topical reading to build knowledge, and in the primary grades, developing foundational reading skills.

Recommendations are also made for integrating fluency instruction within relevant grade-level work. The really good news is that the high-quality curricula in use in districts around the country already share these priorities.

With varying school conditions and compressed instructional time, publishers, and instructional designers and leaders will need to find new efficiencies. Some standards and instructional practices will need to be omitted entirely or almost entirely during the 2020–21 school year. Instruction that distracts from the focus on students reading and sharing new knowledge through discussions and in writing is unproductive. The number of lessons, the number of texts encountered, and the number of units—even in the best curricula in use—will need to be reduced. In fact, several publishers of high-quality materials have developed specific guidance about how to adjust pacing of each grade level's units in a way that aligns with these priorities. Teachers, students, and families need to be reassured that the omission of some units and lessons from the curriculum in the upcoming school year will not compromise the acquisition of key literacy knowledge and skills at grade level. Students can still thrive. Now is the time to deliver even more thoughtfully on the promise of deep learning in literacy, especially that which enables students to connect learning to their worlds in meaningful ways.

Adapting ELA and Literacy Assessments

Grasping where students are vis a vis accessing grade-level texts and content is of great importance both as students return to school and move through the school year. Understanding where students are will allow teachers to provide students with targeted, meaningful supports. This document is not intended to serve as a guide for development of assessment products.

However, the instructional guidance has implications for an assessment system designed in service of equitable grade-level instruction. Assessment will:

1. Be used to determine *how* to bring students into grade-level instruction, not whether to bring them into it.
2. Center *formative* practices (FAST SCASS, 2018). Leverage such sources of information as exit tickets, student work, and student discussions. Use these sources of information to inform instructional choices in connection with high-quality instructional materials.
3. Employ *targeted* checks for very specific subject and grade-level instructional purposes.

In literacy, assessment will be most useful, efficient, equitable, and supportive of social, emotional, and academic development when it takes place within the instructional triangle of teacher, student, and grade-level content. This means that assessment must occur as close to instruction as possible, and in the mode in which it will provide the most meaningful guidance. Listening to students read out loud, analyzing students' writing, and engaging with students in conversations about what they have read are the most efficient ways to understand what students know and can do, and where they need extra practice or other supports to access grade-level work. The point of assessment in this use case isn't to generate data about what students get right and wrong, it's to understand how to support students as they work. A single multiple choice item will not provide that, nor will a single generalized "reading comprehension" test or "reading skills" test. Targeted periodic checks used strategically throughout the year can. Three specific areas of literacy development, supported by the research, warrant strategic assessment in the upcoming year:

- **In grades K–2: ongoing measurement of foundational skills to support students' decoding and fluency development.** A settled body of research points to the fact that

systematic, explicit foundational skills instruction is critical to early childhood instruction because most students depend on it to learn to read and write in English. This translates into teaching students beginning with phonological awareness, following a clear sequence of phonics patterns, providing direct instruction with adequate student practice, and making use of weekly assessment and targeted supports (Adams, 2011; Castles et al., 2018; Lesnick et al., 2010; Liben & Paige, 2017; National Reading Panel, 2000; No Child Left Behind, 2002).

- **In grades 2–5: periodic measurement of fluency with grade-level text to monitor progress and provide additional supports.** Research shows that reading fluency has a direct correlation with reading comprehension. Research shows dysfluency causes as much as 40% of the variance in student performance (Pinnell et al., 1995). Administering fluency checks at the beginning of the year with grade level text, (and readministering checks as needed throughout the year), allows teachers to identify students who need specific, targeted support to fluently read grade-level text. Such checks should attend to students' use of appropriate accuracy, rate, and expression using nationally verified norms. Teachers can administer additional regular fluency checks in lots of low-stress ways (e.g., choral reading, buddy reading).
- **In grades K–12: pre-assessing knowledge of the topics of the complex texts under study to determine how to bring students into the unit of study, not whether to bring them into it**. Research is clear that students' knowledge of the topic has been shown to have a greater impact on reading comprehension than generalized reading ability (Recht & Leslie, 1988). The very purpose of such targeted checks is to identify students who may need additional opportunities to build their knowledge about topics under study. For example, at the beginning of each unit, teachers can ask students to share what they know about the topic of each unit. This should be informal and brief (e.g., "tell me what you know about sea

mammals"). Such pre-checks should not take more than 20 minutes of instructional time or be graded.

Though these three areas do not represent the entirety of students' literacy development, time is a precious resource and is especially so in the upcoming year. Periodically monitoring and tracking student progress in these three areas will give teachers concrete information that can inform vital instructional decisions.

This approach is being proposed as a deliberate alternative to assessment choices that have the potential to serve as a gatekeeper to grade-level content. It also deliberately recognizes the very real social-emotional needs of students—particularly students who have been disproportionately affected by the pandemic. After such major disruptions, it is essential that students engage immediately and consistently in the affirmative act of learning new content, not be deemed deficient because of events outside of their control. Regarding administering tests too soon, the Council of the Great City Schools notes in in *Addressing Unfinished Learning After COVID-19 School Closures* that "testing appears to put the onus of learning losses on the students themselves—the resulting label of 'deficient' or academically behind may very well further alienate and isolate the students who most need our support" (CGCS, 2020).

Grades K–1 ELA and Literacy Considerations for the 2020–21 School Year

Learning new language skills, particularly how to read, is a hallmark of kindergarten and grade 1. Students learn about the alphabet and its role in reading. They learn how to listen carefully to the sounds inside words: to play with those sounds, to rhyme. They learn to match words with beginning sounds, blend sounds into words, and use a whole range of word analysis skills. Lots of practice with all these foundational skills, both with and without connected text, are potent steps toward their becoming joyful and competent readers. Through regular opportunities

to think, talk, and write about rich stories and other read-aloud books, students' vocabulary and knowledge about how the world works grow exponentially. They learn to confer with their peers about topics and texts being studied by responding to the comments of others, asking questions to clear up confusions, and following rules for discussions. Students also begin to experiment with writing and are encouraged to use a combination of drawing, dictating, and writing letters to share information, ideas, and feelings.

Teaching Students to Read (K-1)

Systematic, Explicit Foundational Skills with Ample Time for Practice (2010 RF.1, RF.2, RF.3, and RF.4; 2020 RF.1, RF.2, RF.3, RF.4)
Considerations for instructional content and practices
Utilize a systematic scope and sequence of foundational skills lessons that follows a carefully designed progression. ● Focus time and attention on phonological and phonemic awareness starting in early kindergarten with an increasing emphasis on phonics in early/mid-K through grade 3. ● Data from the National Reading Panel report suggest that 14-18 hours of phonemic awareness instruction (approximately 15 minutes per day for a semester of kindergarten) be provided to most children. ● Data from the National Reading Panel report suggest that phonics instruction is most effective for most students in grades 5K through grade 2. Instructional time to include: ● Explicit teacher modeling of new content. ● Engage students in brief, repeated, explicit instruction that uses multiple modalities (e.g. oral, visual, and tactile) to support students in connecting letter names, the sound(s) associated with the letters, and the formation of the letters. ● Use a variety of methods for listening for sounds in words and estimating their spellings (e.g., blocks, letter magnets, Elkonin boxes, or phoneme-grapheme mapping). ● Explicit instruction in how to use letter sounds and spelling patterns to decode words. ● Opportunities for student practice of targeted skill(s) through speaking, reading, writing, and/or listening. ● Reading practice that includes the sound-symbol correspondences and spelling patterns being taught within the systematic scope and sequence.

Fluency Practice with Grade-Appropriate Texts (2010 RF.4; 2020 RF.4)
Considerations for instructional content and practices
● Model and support fluent reading by reading with students (e.g., repeated reading, echo reading, partner reading, or choral reading) and listening to students as appropriate throughout daily reading instruction. ● Attend to prosody (pitch, stress, and timing) as students read aloud. ● Focus on decoding grade-appropriate texts with accuracy and automaticity before moving to a focus on fluency. ● Incorporate regular, repeated reading practice that includes the sound-symbol correspondences and spelling patterns being taught within the systematic scope and sequence. ● Even when improving fluency is the focus, ensure students have time to discuss the meaning of the text and address text-based vocabulary as needed.

Formative Assessments to Modify Instruction Based on Student Progress
Considerations for instructional content and practice
● Administer brief diagnostic screener at the beginning of the year and at periodic checkpoints throughout the school year: ○ Wisconsin's required assessment of reading readiness can be used for this purpose. ○ Prioritize letter inventory, phonological awareness, and grade-level-appropriate sound and spelling patterns for each student. ● Collect formative data during daily lessons (e.g., observation of literacy work, sampling of dictation responses, monitoring of student work); respond to data and adjust instruction accordingly. Ensure frequent opportunities to formatively assess: ○ Students' phonological awareness, connecting to phonics as appropriate. ○ Students' ability to decode and encode new words based on grade-level-appropriate phonics instruction. ● Support students' decoding and fluency development through additional small group or individual support; opportunities to amplify or embed practice with needed skills within existing instruction or practice opportunities; modified student practice or scaffolds.

Facilitate Social, Emotional, and Academic Development (SEAD) Through Building of Foundational Reading Skills
Sample actions for how SEAD can be effectively integrated in ELA and literacy instruction
● Promote a sense of belonging by including language routines, such as partner reading, choral reading, and word games, so students see themselves as a part of a learning community. ● Engage students with texts that reflect their own lived experiences, as well as the lived experiences of others, and texts that reflect student interests. ● Allow time and space for students to interact with texts that they choose. ● Empower students to monitor their own decoding skills and fluency through cycles of action and reflection. ● Engage students in reading and rereading to build habits as increasingly independent readers.

Supporting Research
(Adams, 2011 a); (Adams, 2011b); (Castels et al., 2018); (Lesnick et al., 2010); (Liben & Paige, 2017); (National Reading Panel, 2000); (Pinnell et al., 1995); (Shanahan, 2005); (Wisconsin Department of Public Instruction, 2020b).

Keep Text at the Center of Reading, Writing, Speaking and Listening, and Language

Regular Close Reading of Complex Anchor Texts Through Read Aloud (2010 RL.1, RI.1; 2020 R.1)
Considerations for instructional content and practices
● Focus all students on the same rich, read-aloud anchor texts (as defined by the chart below) multiple times a week, as school disruptions allow. ● Organize units around conceptually-related topics (and content-rich themes for literary texts) that build knowledge through anchor texts and volume of reading. Set aside skills-paced calendars. ● Identify access points in grade-level text for each student. Provide and adjust instructional scaffolds so every student can access grade-level anchor texts, rather than restrict students to texts at their prescribed independent reading level. Scaffolds could include building knowledge about the topic of the text under study, or providing access to texts read aloud. ● Intentionally select relevant texts for read-alouds and whole class work to give students experience with a variety of formats and genres. For each, explicitly introduce and/or teach features and elements that can support students in reading that type of text independently. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field.

5K-Grade 1 Texts for Read Aloud	Should be in the grades 2-3 Lexile range 420-820
For all grade bands also consider qualitative features (such as levels of meaning, structure, language, and knowledge demands) as well as reader and task considerations.	

Sequences of Text-Specific Questions and Tasks to Support Close Reading (2010 RL.1 and RI.1; 2020 R.1)
Considerations for instructional content and practices
● Provide sequences of questions that engage students deeply with the anchor text read aloud to build understanding. ● Use talk, reading, movement, writing or drawing, and dramatic play to explore and express perspectives and other text-based tasks. ● Provide appropriate scaffolds for productive collaborative text-based conversation and/or work (such as sentence starters, discussion stems, or pre-teaching of vocabulary).

Systematic Work with Text-Based Vocabulary and Syntax (2010 RL.4, RI.4, L.4, L.5, L.6; 2020 R.4, L.2, L.3, L.4)
Considerations for instructional content and practices
● Use text-based questions/tasks to focus on academic and domain-specific words that merit more attention (e.g., critical for understanding the text, part of large word families). Do this rather than memorizing text-agnostic word lists. ● Use word parts (i.e., common inflections, affixes, and roots) to increase comprehension of word meanings while also improving decoding and encoding abilities. ● Provide supplemental practice on text-based vocabulary through games, exercises, and focus on word parts and their morphology. ● Encourage the use of the targeted words from the anchor text throughout discussions and writing assignments. ● Regularly—and daily if possible—choose one complex and compelling sentence from the anchor text to deconstruct and reconstruct with students. ● Develop a deep understanding of words through student-friendly and student-created explanations of words. ● Provide and model strategies in oral and written contexts to practice vocabulary, including repeated exposure to new words ● Provide explicit instruction in strategies for determining the meaning of unknown words.

Frequent Evidence-Based Discussions About Anchor Texts (2010 SL.1; 2020 SL.1)
Considerations for instructional content and practices
● Design collaborative, small-group, or partner discussions about anchor texts—daily if possible—for students to process and extend their learning: ○ Make strategic use of peer partnerships to promote as much productive talk as possible. ○ Ask students to reflect on each other's thinking using evidence, as well as considering and challenging others' perspectives. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes authentic text-based discussion using scaffolds (such as think-pair-share and sentence starters) to develop oral language skills and purposeful talk and the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. ● Step in (and out) of discussions to keep students focused and encourage them to construct longer and deeper responses.

Regular Evidence-Based Writing About Anchor Texts (2010 W.8; 2020 W.8)
Considerations for instructional content and practice
● Connect writing to what students are reading (or listening to) to deepen comprehension, check for understanding, and ensure all students have equal access to the topic on which they're writing. ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Include writing tasks connected to the literary texts students are reading that target perspective-taking and exploring the emotions and motivations of characters as an on-ramp to self-exploration and reflection. ● Support students to make use of knowledge gained from the anchor text in their writing without requiring direct text evidence. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Develop a sense of student agency through student goal setting and self-assessment (using tools such as writing portfolios, written or verbal reflections, conferencing, or exemplars), including opportunities for peer feedback. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Within these writing opportunities, address and support students' ability to demonstrate command of standardized writing and conventions, including use of capitalization, punctuation, and spelling. ● Use non-text-based writing prompts to advance specific goals rooted in social-emotional learning (reflect on feelings, foster artistic expression, write personal stories).

Facilitate SEAD Through Close Reading of Complex Texts
Sample actions for how SEAD can be integrated into ELA and literacy instruction
● Visibly and frequently celebrate diversity that exists in the classroom, community, and world. ● Facilitate reflection on reading and writing to interact with text in ways that promote the development of empathetic, thinking, feeling citizens of the world. ● Ensure that the richness and complexity of texts read aloud are regularly available to every student, and that community is built by reading and listening to texts as a learning community. ● Ensure anchor texts throughout the curriculum reflect and reveal accurately a multicultural world and resonance with learners. Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. Showcase texts that are examples of young people making a difference in their communities ● Include perspective-taking in the study of literary texts by attending to how characters might think and feel to support understanding emotions and thoughts. Perspective-taking can also be included with informational text to similarly highlight multiple perspectives, or investigate claims, purpose, and reasoning of an author or topic. ● Encourage students to draw on their emotional and empathetic skills as they orally express their thoughts, feelings, ideas, and arguments.

Supporting Research
(Adams, 2011a); (Adams, 2011b); (Brown et al., 2018); (Burke & Gilmore, 2015); (McKeown et al., 2009); (Morgan et al., 2000); (National Reading Panel, 2000); (Shanahan, 2005); (Sims, 1990); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Build Knowledge Through Reading, Writing, and Speaking About Topics Across Content Areas

Regular Reading of Multiple Texts On A Range of Conceptually Related Topics (2010 W.8; 2020 W.8)
Considerations for instructional content and practices
● Choose content-rich informational texts that are topically connected to the anchor texts to build students' knowledge about the topic and maximize their breadth of exposure to academic vocabulary. ● Offer students texts that span a range of complexity levels so they can read the texts independently, with peers, or with modest support. This should include a balance of literature and informational texts across ELA, science, history, and the arts. ● Eliminate skills-paced calendars and generalized theme-based units in favor of organizing units around topics that build knowledge through anchor texts and volume of reading.

Regular Research, Discussion, and Writing About Topics (2010 W.8, SL.1; 2020 W.8, SL.1)
Considerations for instructional content and practices
● Regularly ask students to participate in shared research tasks where they explore multiple texts and auxiliary resources (e.g., illustrations, video clips, maps) to build knowledge on a topic. (These can be driven by student interest, topic of anchor text, and course content.) ● Promote independent reading by providing options for students to choose topically connected texts. ● Ask students to integrate what they have just read or listened to with what they have read or listened to previously to build a more coherent understanding of a topic. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Design collaborative, small-group, or partner discussions on topics for students to process and extend their learning.

Facilitate SEAD Through Research, Writing, and Speaking About A Volume of Topically Connected Texts
Sample actions for how SEAD can be integrated into ELA and literacy instruction
● Ensure instruction and materials are responsive to students' existing funds of knowledge as well as connecting students to a shared knowledge of the world through the study of conceptually coherent topics. ● Anchor topical knowledge building in collaborative opportunities for students to conduct research while practicing cooperation, communication, innovation, reflection, self-regulation, and empathy. ● Create space and opportunity for students to identify and explore their own interests and fascinations. ● Engage students with texts that reflect their own lived experiences, as well as the lived experiences of others, and texts that reflect student interests. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. ● Develop and strengthen writing in response to feedback from others.

Rationale and Research
(Adams, 2011a); (Adams, 2011b); (Cervetti et al., 2016); (Landauer & Dumais, 1997); (National Reading Panel Report, 2000); (Recht & Leslie, 1988); (Shanahan, 2005); (Sims, 1990); (Willingham, 2006); (Wisconsin Department of Public Instruction, 2020b).

Grades 2-3 ELA and Literacy Considerations for the 2020–21 School Year

Students in grades 2 and 3 become more independent readers and writers. These are pivotal years for students; automating the patterns they learned in K and 1 so they read with fluency and confidence will serve as a foundation for the reading demands in later grades. Students continue to learn and practice rules for matching sounds to letters that make up words, and they learn new concepts—such as words that share the same root (e.g., add and additional)—that help them figure out the meanings of new words. They also come to appreciate that some words and phrases have meanings that are not literal (e.g., a piece of cake, hang in there). Recognizing and understanding words help students read increasingly challenging stories and books and continue to build knowledge about the world. It also provides them with the tools they need to engage with texts about others' experiences in the world and self-selected texts. Writing becomes an exciting way for students to use newly learned words and phrases to express ideas and advocate for their own interests. They are writing clear sentences and paragraphs on a range of topics, drawing on an expanding vocabulary. They also become more confident speakers and listeners as they learn to paraphrase, clarify, explain, and report on information they hear.

Teach Students to Read 2-3

Systematic Explicit Foundational Skills With Time to Practice (2010 RF.3, RF.4; 2020 RF.3, RF.4)
Considerations for instructional content and practices
Utilize a systematic scope and sequence of foundational skills lessons that follows a carefully designed progression. ● Focus time and attention on phonological and phonemic awareness starting in early kindergarten with an increasing emphasis on phonics in early/mid-K through grade 3. ● Data from the National Reading Panel report suggest that 14-18 hours of phonemic awareness instruction (approximately 15 minutes per day for a semester of kindergarten) be provided to most children. ● Data from the National Reading Panel report suggest that phonics instruction is most effective for most students in grades 5K through grade 2. Instructional time to include: ● Explicit teacher modeling of new content. ● Engage students in brief, repeated, explicit instruction that uses multiple modalities (e.g. oral, visual, and tactile) to support students in connecting letter names, the sound(s) associated with the letters, and the formation of the letters. ● Use a variety of methods for listening for sounds in words and estimating their spellings (e.g., blocks, letter magnets, Elkonin boxes, or phoneme-grapheme mapping). ● Explicit instruction in how to use letter sounds and spelling patterns to decode words. ● Opportunities for student practice of targeted skill(s) through speaking, reading, writing, and/or listening. ● Greater emphasis in grade 2 on reading practice that includes the sound-symbol correspondences and spelling patterns being taught within the systematic scope and sequence. ● Greater emphasis in grade 3 on reading grade-level, complex text.

Fluency Practice With Grade-Appropriate Texts (2010 RF.3, RF.4; 2020 RF.3, RF.4)
Considerations for instructional content and practices
● Model and support fluent reading by reading with students (e.g., repeated reading, echo reading, partner reading, or choral reading) and listening to students as appropriate throughout daily reading instruction. ● Attend to prosody (pitch, stress, and timing) as students read aloud. ● Focus on decoding grade-appropriate texts with accuracy and automaticity before moving to a focus on fluency. ● Incorporate regular, repeated reading practice that includes the sound-symbol correspondences and spelling patterns being taught within the systematic scope and sequence. ● Select an excerpt from grade-level anchor text at the center of instruction for fluency practice. Allow for regular repeated reading to build accuracy, appropriate rate, and expression. ● Even when improving fluency is the focus, ensure students have time to discuss the meaning of the text and address text-based vocabulary as needed.

Formative Assessments to Modify Instruction Based on Student Progress
Considerations for instructional content and practices
● Administer brief diagnostic screener at the beginning of the year and at periodic checkpoints throughout the school year: ○ Wisconsin's required assessment of reading readiness can be used for this purpose. ○ Prioritize assessing grade-level-appropriate sound and spelling patterns and reading fluency with grade-level text. ● Collect formative data during daily lessons (e.g., observations of students' literacy work, sampling dictation responses, monitoring of student work); respond to data and adjust instruction accordingly. Ensure frequent opportunities to formatively assess: ○ Students' ability to decode and encode new words based on grade-level-appropriate phonics instruction. ● Support students' decoding and fluency development through additional small group or individual support; opportunities to amplify or embed practice with needed skills within existing instruction or practice opportunities; modified student practice or scaffolds.

Facilitate Social Emotional and Academic Development (SEAD) Through Building of Foundational Literacy Skills
Sample actions for integrating SEAD into ELA and literacy instruction
● Promote a sense of belonging by including language routines, such as partner reading, choral reading, and word games, so students see themselves as a part of a learning community. ● Engage students with texts that reflect their own lived experiences, as well as the lived experiences of others, and texts that reflect student interests. ● Allow time and space for students to interact with texts that they choose. ● Empower students to monitor their own decoding skills and fluency through cycles of action and reflection. ● Engage students in reading and rereading to build habits as increasingly independent readers.

Supporting Research
(Adams, 2011a); (Adams, 2011b); (Castles et al., 2018); (Lesnick et al., 2010); (Liben & Paige, 2017); (National Reading Panel, 2000); (Shanahan, 2005); (Sims, 1990); (Stanley et al., 2017); (Wisconsin Department of Public Instruction, 2020b).

Keep Text at the Center of Reading, Writing, Speaking and Listening, and Language

Regular Close Reading of Complex Anchor Texts (2010 RL.10, RI.10; 2020 Reading Overarching Statement)
Considerations for instructional content and practices
● Focus all students on the same rich, read-aloud anchor texts (as defined by the chart below) multiple times a week, as school disruptions allow. ● Organize units around conceptually-related topics (and content-rich themes for literary texts) that build knowledge through anchor texts and volume of reading. Set aside skills-paced calendars. ● Identify access points in grade-level text for each student. Provide and adjust instructional scaffolds so every student can access grade-level anchor texts, rather than restrict students to texts at their prescribed independent reading level. Scaffolds could include building knowledge about the topic of the text under study, or providing access to texts read aloud. ● Intentionally select relevant texts for read-alouds and whole class work to give students experience with a variety of formats and genres. For each, explicitly introduce and/or teach features and elements that can support students in reading that type of text independently. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field.

Grade 2-3 Texts for Read Aloud	Should be in the grades 4-5 Lexile range 740-1010
For all grade bands also consider qualitative features (such as levels of meaning, structure, language, and knowledge demands) as well as reader and task considerations.	

Sequences of Text-Specific Questions and Tasks to Support Close Reading (2010 RL.1, RI.1; 2020 R.1)
Considerations for instructional content and practices
● Provide sequences of questions that engage students deeply with the anchor text read aloud to build understanding. ● Use talk, reading, movement, writing or drawing, and dramatic play to explore and express perspectives and other text-based tasks. ● Provide appropriate scaffolds for productive collaborative text-based conversation and/or work (such as sentence starters, discussion stems, or pre-teaching of vocabulary).

Systematic Work with Text-Based Vocabulary and Syntax (2010 RL.4, RI.4, L.4, L.5, L.6; 2020 R.4, L.2, L.3, L.4)
Considerations for instructional content and practices
● Use text-based questions/tasks to focus on academic and domain-specific words that merit more attention (e.g., critical for understanding the text, part of large word families). Do this rather than memorizing text-agnostic word lists. ● Use word parts (i.e., common inflections, affixes, and roots) to increase comprehension of word meanings while also improving decoding and encoding abilities. ● Provide supplemental practice on text-based vocabulary through games, exercises, and focus on word parts and their morphology. ● Encourage the use of the targeted words from the anchor text throughout discussions and writing assignments. ● Regularly—and daily if possible—choose one complex and compelling sentence from the anchor text to deconstruct and reconstruct with students. ● Develop a deep understanding of words through student-friendly and student-created explanations of words. ● Provide and model strategies in oral and written contexts to practice vocabulary, including repeated exposure to new words ● Provide explicit instruction in strategies for determining the meaning of unknown words.

Frequent Evidence-Based Discussions About Anchor Texts (2010 SL.1; 2020 SL.1)
Considerations for instructional content and practices
● Design collaborative, small-group, or partner discussions about anchor texts—daily if possible—for students to process and extend their learning: ○ Make strategic use of peer partnerships to promote as much productive talk as possible. ○ Ask students to reflect on each other's thinking using evidence, as well as considering and challenging others' perspectives. ● Explicitly teach and model behaviors expected for productive, collaborative conversation (including both listening and speaking). ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes authentic text-based discussion using scaffolds (such as think-pair-share and sentence starters) to develop oral language skills and purposeful talk and the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. ● Step in (and out) of discussions to keep students focused and encourage them to construct longer and deeper responses.

Regular Evidence-Based Writing About Texts (2010 W.8; 2020 W.8)
Considerations for instructional content and practices
● Connect writing to what students are reading (or listening to) to deepen comprehension, check for understanding, and ensure all students have equal access to the topic on which they're writing. ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Include writing tasks connected to the literary texts students are reading that target perspective-taking and exploring the emotions and motivations of characters as an on-ramp to self-exploration and reflection. ● Support students to ground their writing in knowledge gained and evidence from the anchor text. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Develop a sense of student agency through student goal setting and self-assessment (using tools such as writing portfolios, written or verbal reflections, conferencing, or exemplars), including opportunities for peer feedback. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Within these writing opportunities, address and support students' ability to demonstrate command of writing and conventions, including use of capitalization, punctuation, and spelling. ● Use non-text-based writing prompts to advance specific goals rooted in social-emotional learning (reflect on feelings, foster artistic expression, write personal stories).

Facilitate SEAD Through Close Reading of Complex Texts
Sample actions to integrate SEAD into ELA and literacy instruction
● Flexible groupings, including peer-assisted learning, are used to reteach and support students of all abilities and backgrounds (e.g., groupings may be based on student needs, strengths, interests, or languages). ● Visibly and frequently celebrate diversity that exists in the classroom, community, and world. ● Facilitate reflection on reading and writing to interact with text in ways that promote the development of empathetic, thinking, feeling citizens of the world. ● Ensure that the richness and complexity of texts read aloud are regularly available to every student, that no student is denied such access through the exclusive practice of assigning leveled or alternative texts, and that community is built by reading and listening to texts as a learning community. ● Ensure anchor texts throughout the curriculum reflect and reveal accurately a multicultural world and resonance with learners. Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. Showcase texts that are examples of young people making a difference in their communities ● Provide a variety of text-dependent writing, speaking, performance, or multimedia task options for students to express comprehension, knowledge, and skills. ● Include perspective-taking in the study of literary texts by attending to how characters might think and feel to support understanding emotions and thoughts. Perspective-taking can also be included with informational text to similarly highlight multiple perspectives, or investigate claims, purpose, and reasoning of an author or topic. ● Encourage students to draw on their emotional and empathetic skills as they orally express their thoughts, feelings, ideas, and arguments.

Supporting Research
(Adams, 2011a); (Adams, 2011b); (Brown et al., 2018); (Burke & Gilmore, 2015); (Hawkins et al., 2008);(McKeown et al., 2009); (Morgan et al., 2000), (National Reading Panel, 2000); (Shanahan, 2005); (Sims, 1990); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Build Knowledge Through Reading, Writing, and Speaking About Topics Across Content Areas

Regular Reading of Multiple Texts On A Range of Conceptually Related Topics (2010 W.8; 2020 W.8)
Considerations for instructional content and practices
● Choose content-rich informational texts that are topically connected to the anchor texts to build students' knowledge about the topic and maximize their breadth of exposure to academic vocabulary. ● Offer students texts that span a range of complexity levels so they can read the texts independently, with peers, or with modest support. This should include a balance of literature and informational texts across ELA, science, history, and the arts. ● Eliminate skills-paced calendars and generalized theme-based units in favor of organizing units around topics that build knowledge through anchor texts and volume of reading.

Regular Research, Discussion, and Writing About Texts (2010 W.8, SL.1, RI.9; 2020 W.8, SL.1, R.9)
Considerations for instructional content and practices
● Regularly ask students to participate in shared research tasks where they explore multiple texts and auxiliary resources (e.g., illustrations, video clips, maps) to build knowledge on a topic. (These can be driven by student interest, topic of anchor text, and course content.) ● Promote independent reading by providing options for students to choose topically connected texts. ● Ask students to integrate what they have just read or listened to with what they have read or listened to previously to build a more coherent understanding of a topic. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Design collaborative, small-group, or partner discussions on topics for students to process and extend their learning.

Facilitate SEAD Through Research, Writing, and Speaking About A Volume of Topically Connected Texts
Sample actions for integrating SEAD into ELA and literacy instruction
● Provide support as students engage in authentic inquiry that encourages students to identify problems in their communities or worlds and use literacy to engage in their communities or worlds. ● Ensure instruction and materials are responsive to students' existing funds of knowledge as well as connecting students to a shared knowledge of the world through the study of conceptually coherent topics. ● Anchor topical knowledge building in collaborative opportunities for students to conduct research while practicing cooperation, communication, innovation, reflection, self-regulation, and empathy. ● Create space and opportunity for students to identify and explore their own interests and fascinations. ● Engage students with texts that reflect their own lived experiences, as well as the lived experiences of others, and texts that reflect student interests. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. ● Develop and strengthen writing in response to feedback from others.

Supporting Research
(Burke & Gilmore, 2015); Cervetti et al., 2016); (Landauer & Dumais, 1997); (National Reading Panel, 2000); (Recht & Leslie, 1988); (Shanahan, 2005); (Sims, 1990); (Willingham, 2006); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Grades 4-5 ELA and Literacy Considerations for the 2020–21 School Year

Building the stamina and skills to read widely and deeply from a range of challenging fiction, informational texts, and other materials is fundamental to grades 4 and 5. Through wide reading on a topic and attention to vocabulary, students further develop knowledge about the world and specific topics, about the lived experiences of others, and learn variations in word meanings: synonyms, antonyms, idioms, and words with more than one meaning. Students solidify fundamental language skills as they use roots, prefixes, or suffixes to analyze the meanings of complex words. Students also make essential strides in their ability to explain plainly and in detail what books say—both explicitly and what is implied from its details. By devoting significant time and effort to producing numerous written pieces over short and extended time frames throughout the year, students are writing effective summaries, book reports, essays, descriptions of characters or events, and are advocating for what they believe and changes they want to see in their communities.

Keep Text at the Center of Reading, Writing, Speaking and Listening, and Language

Regular Close Reading of Complex Anchor Texts (2010 RL.10, RI.10; 2020 Overarching Statement of Reading)
Considerations for instructional content and practice
● Focus all students on the same rich, read-aloud anchor texts (as defined by the chart below) multiple times a week, as school disruptions allow. ● Organize units around conceptually-related topics (and content-rich themes for literary texts) that build knowledge through anchor texts and volume of reading. Set aside skills-paced calendars. ● Identify access points in grade-level text for each student. Provide and adjust instructional scaffolds so every student can access grade-level anchor texts, rather than restrict students to texts at their prescribed independent reading level. Scaffolds could include building knowledge about the topic of the text under study, or providing access to texts read aloud. ● Intentionally select relevant texts for read-alouds and whole class work to give students experience with a variety of formats and genres. For each, explicitly introduce and/or teach features and elements that can support students in reading that type of text independently. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field.

Grade 4-5 Anchor Texts	Should be in the grades 4-5 Lexile range 740-1010
For all grade bands also consider qualitative features (such as levels of meaning, structure, language, and knowledge demands) as well as reader and task considerations.	

Sequences of Text-Specific Questions and Tasks to Support Close Reading (2010 RL.1, RI.1; 2020 R.1)
Considerations to support instructional content and practices
● Provide sequences of questions that engage students deeply with the anchor text to build understanding. ● Use talk, reading, movement, writing or drawing, and dramatic play to explore and express perspectives and other text-based tasks. ● Provide appropriate scaffolds for productive collaborative text-based conversation and/or work (such as sentence starters, discussion stems, or pre-teaching of vocabulary). ● Design instruction to cultivate every student's ability to read carefully and grasp information—both what the text says explicitly and when drawing inferences from texts. ● Encourage students to cite specific text evidence (quotes and examples) when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener and constructively evaluating others' use of evidence. ● Provide time for students to engage meaningfully with the anchor text by reading or rereading portions.

Systematic Work with Text-Based Vocabulary and Syntax (2010 RL.4, RI.4, L.4, L.5, L.6; 2020 R.4, L.2, L.3. L.4)
Considerations for instructional content and practices
● Use text-based questions/tasks to focus on academic and domain-specific words that merit more attention (e.g., critical for understanding the text, part of large word families). Do this rather than memorizing text-agnostic word lists. ● Use word parts (i.e., Greek or Latin affixes, and roots) to increase comprehension of word meanings while also improving decoding and encoding abilities. ● Provide supplemental practice on text-based vocabulary through games, exercises, and focus on word parts and their morphology. ● Encourage the use of the targeted words from the anchor text throughout discussions and writing assignments. ● Regularly—and daily if possible—choose one complex and compelling sentence from the anchor text to deconstruct and reconstruct with students. ● Develop a deep understanding of words through student-friendly and student-created explanations of words. ● Provide and model strategies in oral and written contexts to practice vocabulary, including repeated exposure to new words ● Provide explicit instruction in strategies for determining the meaning of unknown words.

Frequent Evidence-Based Discussions About Anchor Texts (2010 SL.1; 2020 SL.1)
Considerations for instructional content and practices
● Design collaborative, small-group, or partner discussions about anchor texts—daily if possible—for students to process and extend their learning: ○ Make strategic use of peer partnerships to promote as much productive talk as possible. ○ Ask students to reflect on each other's thinking using evidence, as well as considering and challenging others' perspectives. ● Explicitly teach and model behaviors expected for productive, collaborative conversation (including both listening and speaking). ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes authentic text-based discussion using scaffolds (such as think-pair-share and sentence starters) to develop oral language skills and purposeful talk and the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. ● Step in (and out) of discussions to keep students focused and encourage them to construct longer and deeper responses.

Regular Evidence-Based Writing About Anchor Texts (2010 W.9; 2020 W.9)
Considerations for instructional content and practices
● Connect writing to what students are reading (or listening to) to deepen comprehension, check for understanding, and ensure all students have equal access to the topic on which they're writing. ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Vary writing assignments (short on-demand pieces or longer multi-day pieces) throughout the week, if possible. ● Include writing tasks connected to the literary texts students are reading that target perspective-taking and exploring the emotions and motivations of characters as an on-ramp to self-exploration and reflection. ● Support students to ground their writing in knowledge gained and evidence from the anchor text. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Develop a sense of student agency through student goal setting and self-assessment (using tools such as writing portfolios, written or verbal reflections, conferencing, or exemplars), including opportunities for peer feedback. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Within these writing opportunities, address and support students' ability to demonstrate command of writing and conventions, including use of capitalization, punctuation, and spelling. ● Use non-text-based writing prompts to advance specific goals rooted in social-emotional learning (reflect on feelings, foster artistic expression, write personal stories).

Fluency Practice With Complex Texts (2010 RF.4; 2020 RF.4)
Considerations for instructional content and practice
● Attend to prosody (pitch, stress, and timing) as students read aloud. ● Develop reading fluency through techniques such as repeated reading, echo reading, or partner reading. ● Develop fluency through brief, regular, joyful practice with culturally-relevant text (e.g., complex literary text, poetry or readers theatre).

Facilitate Social, Emotional, and Academic Development (SEAD) Through Close Reading of Complex Texts
Sample actions to integrate SEAD into ELA and literacy instruction
● Flexible groupings, including peer-assisted learning, are used to reteach and support students of all abilities and backgrounds (e.g., groupings may be based on student needs, strengths, interests, or languages). ● Visibly and frequently celebrate diversity that exists in the classroom, community, and world. ● Facilitate reflection on reading and writing to interact with text in ways that promote the development of empathetic, thinking, feeling citizens of the world. ● Ensure that the richness and complexity of texts read aloud are regularly available to every student, that no student is denied such access through the exclusive practice of assigning leveled or alternative texts, and that community is built by reading and listening to texts as a learning community. ● Ensure anchor texts throughout the curriculum reflect and reveal accurately a multicultural world and resonance with learners. Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. Showcase texts that are examples of young people making a difference in their communities ● Provide a variety of text-dependent writing, speaking, performance, or multimedia task options for students to express comprehension, knowledge, and skills. ● Establish student discussion protocols to facilitate evidence-based discourse about text that supports active listening, values diverse perspectives and insights, and ensures there is equity of voice and responsibility. ● Include collaborative conversations that require students to integrate the perspective of their peers into their own critical thinking. ● Include perspective-taking in the study of literary texts by attending to how characters might think and feel to support understanding emotions and thoughts. Perspective-taking can also be included with informational text to similarly highlight multiple perspectives, or investigate claims, purpose, and reasoning of an author or topic. ● Encourage students to draw on their emotional and empathetic skills as they orally express their thoughts, feelings, ideas, and arguments.

Supporting Research
(Adams, 2011a); (Adams, 2011b); (Brown et al., 2018); (Burke & Gilmore, 2015); (Hawkins et al., 2008); (McKeown et al., 2009); (Morgan et al., 2000); (National Reading Panel, 2000); (Shanahan, 2005); (Sims, 1990); (Willingham, 2006); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Build Knowledge Through Reading, Writing, and Speaking About Topics Across Content Areas

Regular Reading of Multiple Texts On A Range of Conceptually Related Topics (2010 W.8; 2020 W.8)
Considerations for instructional content and practices
● Choose content-rich informational texts that are topically connected to the anchor texts to build students' knowledge about the topic and maximize their breadth of exposure to academic vocabulary. ● Explicitly teach how to vary thinking, speaking, and writing to reflect the thinking of a discipline. ● Offer students texts that span a range of complexity levels so they can read the texts independently, with peers, or with modest support. This should include a balance of literature and informational texts across ELA, science, history, and the arts. ● Eliminate skills-paced calendars and generalized theme-based units in favor of organizing units around topics that build knowledge through anchor texts and volume of reading.

Regular Research, Discussion, and Writing About Topics (2010 W.8, SL.1; 2020 W.8, SL.1)
Considerations for instructional content and practices
● Regularly ask students to participate in independent and shared research tasks where they explore multiple texts and auxiliary resources (e.g., illustrations, video clips, maps) to build knowledge on a topic. (These can be driven by student interest, topic of anchor text, and course content.) ● Provide access to texts representing multiple points of view/perspectives on the same topic. ● Promote independent reading by providing options for students to choose topically connected texts. ● Ask students to integrate what they have just read or listened to with what they have read or listened to previously to build a more coherent understanding of a topic. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Design collaborative, small-group, or partner discussions on topics for students to process and extend their learning.

Facilitate SEAD Through Research, Writing, and Speaking About A Volume of Topically Connected Texts
Sample practices to integrate SEAD into ELA and literacy instruction
● Use read-alouds and/or mentor texts to advance historically underrepresented cultural perspectives and build background knowledge from which to draw for later content. ● Provide support as students engage in authentic inquiry that encourages students to identify problems in their communities or worlds and use literacy to engage in their communities or worlds. ● Ensure instruction and materials are responsive to students' existing funds of knowledge as well as connecting students to a shared knowledge of the world through the study of conceptually coherent topics. ● Anchor topical knowledge building in collaborative opportunities for students to conduct research while practicing cooperation, communication, innovation, reflection, self-regulation, and empathy. ● Create space and opportunity for students to identify and explore their own interests and fascinations. ● Engage students with texts that reflect their own lived experiences, as well as the lived experiences of others, and texts that reflect student interests. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. ● Develop and strengthen writing in response to feedback from others.

Supporting Research
(Burke & Gilmore, 2015); (Cervetti et al., 2016); (Landauer & Dumais, 1997); (National Reading Panel, 2000); (Recht & Leslie, 1988); (Shanahan, 2005); (Sims, 1990); (Willingham, 2006); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Grades 6-8 ELA and Literacy Considerations for the 2020–21 School Year

In the middle school grades, students analyze, define, compare, and evaluate ideas with more precision when reading, writing, speaking, and listening. They apply skills they learned in earlier grades to make sense of a range of more challenging books and articles as they address various topics, including the lived experiences of others. In particular, students' ability to cite specific evidence and make use of the academic language and knowledge they've encountered in their own reading when writing in response to texts matures. As they work diligently to understand precisely what an author or speaker is saying, students also learn to question an author's or speaker's assumptions and assess the accuracy of his or her claims. Students are guided to seek out multiple perspectives on the same topic and to identify when particular perspectives or voices are given greater emphasis or are missing. Students continue to expand their vocabularies and use new words in all types of their writing. They use relevant evidence when supporting their own points in writing and speaking, making their reasoning clear to readers or listeners or constructively evaluating others' use of evidence. This ability helps students in every facet of their studies.

Keep Text at the Center of Reading, Writing, Speaking and Listening, and Language

Regular Close Reading of Complex Anchor Texts (2010 RL.10, RI.10; 2020 Overarching Statement of Reading)
Considerations for instructional content and practices
● Focus all students on the same rich, anchor texts (as defined by the chart below) multiple times a week, as school disruptions allow. ● Organize units around conceptually-related topics (and content-rich themes for literary texts) that build knowledge through anchor texts and volume of reading. Set aside skills-paced calendars. ● Identify access points in grade-level text for each student. Provide and adjust instructional scaffolds so every student can access grade-level anchor texts, rather than restrict students to texts at their prescribed independent reading level. Scaffolds could include building knowledge about the topic of the text under study, or providing access to texts read aloud. ● Intentionally select relevant texts for read-alouds and whole class work to give students experience with a variety of formats and genres. For each, explicitly introduce and/or teach features and elements that can support students in reading that type of text independently. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field.

Grade 6-8 Anchor Texts	Should be in the grades 6-8 Lexile range 925-1185
For all grade bands also consider qualitative features (such as levels of meaning, structure, language, and knowledge demands) as well as reader and task considerations.	

Sequences of Text-Specific Questions and Tasks to Support Close Reading (2010 RL.1, RI.1; 2020 R.1)
Considerations for instructional content and practices
● Provide sequences of questions that engage students deeply with the anchor text to build understanding. ● Use talk, reading, movement, writing or drawing, and dramatic play to explore and express perspectives and other text-based tasks. ● Provide appropriate scaffolds for productive collaborative text-based conversation and/or work (such as sentence starters, discussion stems, or pre-teaching of vocabulary). ● Design instruction to cultivate every student's ability to read carefully and grasp information—both what the text says explicitly and when drawing inferences from texts. ● Encourage students to cite specific text evidence (quotes and examples) when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener and constructively evaluating others' use of evidence. ● Provide time for students to engage meaningfully with the anchor text by reading or rereading portions.

Systematic Work with Text-Based Vocabulary and Syntax (2010 RL.4, RI.4, L.4, L.5, L.6; 2020 R.4, L.2, L.3, L.4)
Considerations for instructional content and practices
● Use text-based questions/tasks to focus on academic and domain-specific words that merit more attention (e.g., critical for understanding the text, part of large word families). Do this rather than memorizing text-agnostic word lists. ● Use word parts (i.e., Greek or Latin affixes, and roots) to increase comprehension of word meanings while also improving decoding and encoding abilities. ● Provide supplemental practice on text-based vocabulary through games, exercises, and focus on word parts and their morphology. ● Encourage the use of the targeted words from the anchor text throughout discussions and writing assignments. ● Regularly—and daily if possible—choose one complex and compelling sentence from the anchor text to deconstruct and reconstruct with students. ● Develop a deep understanding of words through student-friendly and student-created explanations of words. ● Provide and model strategies in oral and written contexts to practice vocabulary, including repeated exposure to new words ● Provide explicit instruction in strategies for determining the meaning of unknown words.

Frequent Evidence-Based Discussions About Grade-Level Anchor Texts (2010 SL.1; 2020 SL.1)
Considerations for instructional content and practices
● Design collaborative, small-group, or partner discussions about anchor texts—daily if possible—for students to process and extend their learning: ○ Make strategic use of peer partnerships to promote as much productive talk as possible. ○ Ask students to reflect on each other's thinking using evidence, as well as considering and challenging others' perspectives. ○ Teach the language of argumentation to facilitate students taking positions on what they're reading and hearing from others. ● Explicitly teach and model behaviors expected for productive, collaborative conversation (including both listening and speaking). ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes authentic text-based discussion using scaffolds (such as think-pair-share and sentence starters) to develop oral language skills and purposeful talk and the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. ● Step in (and out) of discussions to keep students focused and encourage them to construct longer and deeper responses.

Regular Evidence-Based Writing About Anchor Texts (2010 W.9; 2020 W.9)
Considerations for instructional content and practices
● Connect writing to what students are reading (or listening to) to deepen comprehension, check for understanding, and ensure all students have equal access to the topic on which they're writing. ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Vary writing assignments (short on-demand pieces or longer multi-day pieces) throughout the week, if possible. ● Include reflective writing tasks connected to the literary texts students are reading that target perspective-taking and exploring the emotions and motivations of characters as an on-ramp to self-exploration and reflection. ● Support students to ground their writing in knowledge gained and evidence from the anchor text. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Develop a sense of student agency through student goal setting and self-assessment (using tools such as writing portfolios, written or verbal reflections, conferencing, or exemplars), including opportunities for peer feedback. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Within these writing opportunities, address and support students' ability to demonstrate the ability to use sentences that express complete thoughts and produce well-organized paragraphs with smooth transitions. ● Use non-text-based writing prompts to advance specific goals rooted in social-emotional learning (reflect on feelings, foster artistic expression, write personal stories).

Facilitate Social, Emotional, and Academic Development (SEAD) Through Close Reading of Complex Texts
Sample practices to integrate SEAD into ELA and literacy instruction
● Flexible groupings, including peer-assisted learning, are used to reteach and support students of all abilities and backgrounds (e.g., groupings may be based on student needs, strengths, interests, or languages). ● Visibly and frequently celebrate diversity that exists in the classroom, community, and world. ● Facilitate reflection on reading and writing to interact with text in ways that promote the development of empathetic, thinking, feeling citizens of the world. ● Ensure that the richness and complexity of texts read aloud are regularly available to every student, that no student is denied such access through the exclusive practice of assigning leveled or alternative texts, and that community is built by reading and listening to texts as a learning community. ● Facilitate reflection on how the anchor text supports or is in contradiction to their personal thoughts or experiences. ● Ensure anchor texts throughout the curriculum reflect and reveal accurately a multicultural world and resonance with learners. Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. Showcase texts that are examples of young people making a difference in their communities ● Provide a variety of text-dependent writing, speaking, performance, or multimedia task options for students to express comprehension, knowledge, and skills. ● Establish student discussion protocols to facilitate evidence-based discourse about text that supports active listening, values diverse perspectives and insights, and ensures there is equity of voice and responsibility. ● Include collaborative conversations that require students to integrate the perspective of their peers into their own critical thinking. ● Include perspective-taking in the study of literary texts by attending to how characters might think and feel to support understanding emotions and thoughts. Perspective-taking can also be included with informational text to similarly highlight multiple perspectives, or investigate claims, purpose, and reasoning of an author or topic. ● Encourage students to draw on their emotional and empathetic skills as they express their thoughts, feelings, ideas, and arguments orally or in writing.

Supporting Research
(Adams, 2011a); (Adams, 2011b); (Brown et al., 2018); (Burke & Gilmore, 2015); (Hawkins et al., 2008); (McKeown et al., 2009); (Morgan et al., 2000); (National Reading Panel, 2000); (Shanahan, 2005); (Sims, 1990); (Willingham, 2006); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Build Knowledge Through Reading, Writing, and Speaking About Topics Across Content Areas

Regular Reading of Multiple Texts on A Range of Conceptually Related Topics (2010 W.8; 2020 W.8)
Considerations for instructional content and practices
● Choose content-rich informational texts that are topically connected to the anchor texts to build students' knowledge about the topic and maximize their breadth of exposure to academic vocabulary. ● Explicitly teach how to vary thinking, speaking, and writing to reflect the thinking of a discipline. ● Offer students texts that span a range of complexity levels so they can read the texts independently, with peers, or with modest support. This should include a balance of literature and informational texts across ELA, science, history, and the arts. ● Eliminate skills-paced calendars and generalized theme-based units in favor of organizing units around topics that build knowledge through anchor texts and volume of reading.

Regular Research, Discussion, and Writing About Topics (2010 W.8, SL.1; 2020 W.8, SL.1)
Considerations for instructional content and practices
● Regularly ask students to participate in independent and shared research tasks where they explore multiple texts and auxiliary resources (e.g., illustrations, video clips, maps) to build knowledge on a topic. (These can be driven by student interest, topic of anchor text, and course content.) ● Promote independent reading by providing options for students to choose topically connected texts. ● Provide access to texts representing multiple points of view/perspectives on the same topic. ● Ask students to integrate what they have just read or listened to with what they have read or listened to previously to build a more coherent understanding of a topic. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing, and a variety of writing modes, including creative, reflective, and formal writing. Inquiry-based writing tasks are modeled and practiced. ● Design collaborative, small-group, or partner discussions on topics for students to process and extend their learning.

Facilitate SEAD Through Research, Writing, and Speaking About A Volume of Topically Connected Texts
Sample practices to integrate SEAD into ELA and literacy instruction
● Use read-alouds and/or mentor texts to advance historically underrepresented cultural perspectives and build background knowledge from which to draw for later content. ● Provide support as students engage in authentic inquiry that encourages students to identify problems in their communities or worlds and use literacy to engage in their communities or worlds. ● Ensure instruction and materials are responsive to students' existing funds of knowledge as well as connecting students to a shared knowledge of the world through the study of conceptually coherent topics. ● Anchor topical knowledge building in collaborative opportunities for students to conduct research while practicing cooperation, communication, innovation, reflection, self-regulation, and empathy. ● Create space and opportunity for students to identify and explore their own interests and fascinations. ● Engage students with texts that reflect their own lived experiences, as well as the lived experiences of others, and texts that reflect student interests. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. ● Develop and strengthen writing in response to feedback from others and self-reflection.

Supporting Research
(Burke & Gilmore, 2015); (Cervetti et al., 2016); Landauer & Dumais, 1997); (Recht & Leslie, 1988); (Sims, 1990); (Willingham, 2006); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Grades 9-12 ELA and Literacy Considerations for the 2020–21 School Year

At this level, students are expected to understand more from and make fuller use of texts, including using a wider range of textual evidence to support their inferences. As they address different aspects of the same topic, students make more connections about how complex ideas interact and develop within (and across) books, essays, articles, or other resources. Students learn to evaluate intricate arguments and surmount the challenges posed by complex written materials and other resources independently and confidently. Through wide and deep reading of literature and literary nonfiction of steadily increasing sophistication, they expand their literary and cultural knowledge and better understand references and images, as well as better understanding the lived experiences of others. Students seek out multiple perspectives on the same topic and identify when particular perspectives or voices are given greater emphasis or are missing. They also work to develop the flexibility, concentration, and fluency to produce logical, well-reasoned writings and presentations that are supported by evidence. By writing and participating in a variety of conversations, they will practice asserting and defending claims and showing what they know about a subject using appropriate examples and evidence.

These literacy practices that allow students to gain knowledge and skills through the careful study of texts and topics are not only left to ELA, but should also find their rightful place as practices required by the disciplines in science, technical subjects, history, and social studies.

Keep Text at the Center of Reading, Writing, Speaking and Listening, and Language

Regular Close Reading of Complex Anchor Texts (2010 RL.10, RI.10; 2020 Overarching Statement of Reading)
Considerations for instructional content and practices
● Focus all students on the same rich, anchor texts (as defined by the chart below) multiple times a week, as school disruptions allow. ● Organize units around conceptually-related topics (and content-rich themes for literary texts) that build knowledge through anchor texts and volume of reading. Set aside skills-paced calendars. ● Identify access points in grade-level text for each student. Provide and adjust instructional scaffolds so every student can access grade-level anchor texts, rather than restrict students to texts at their prescribed independent reading level. Scaffolds could include building knowledge about the topic of the text under study, or providing access to texts read aloud. ● Intentionally select relevant texts for read-alouds and whole class work to give students experience with a variety of formats and genres. For each, explicitly introduce and/or teach features and elements that can support students in reading that type of text independently. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field.

Grade 9-12 Anchor Texts	Should be in the grades 9- College, Career Readiness Lexile range 1050-1385
For all grade bands also consider qualitative features (such as levels of meaning, structure, language, and knowledge demands) as well as reader and task considerations.	

Sequences of Text-Specific Questions and Tasks to Support Close Reading (2010 RL.1, RI.1; 2020 R.1)
Considerations for instructional content and practices
● Provide sequences of questions that engage students deeply with the anchor text to build understanding. ● Use talk, reading, movement, writing or drawing, and dramatic play to explore and express perspectives and other text-based tasks. ● Provide appropriate scaffolds for productive collaborative text-based conversation and/or work (such as sentence starters, discussion stems, or pre-teaching of vocabulary). ● Design instruction to cultivate every student's ability to read carefully and grasp information—both what the text says explicitly and when drawing inferences from texts. ● Encourage students to cite specific text evidence (quotes and examples) when supporting their own points in writing and speaking, making their reasoning clear to the reader or listener and constructively evaluating others' use of evidence. ● Provide time for students to engage meaningfully with the anchor text by reading or rereading portions.

Systematic Work with Text-Based Vocabulary and Syntax (2010 RL.4, RI.4, L.4, L.5, L.6; 2020 R.4, L.2, L.3,L.4)
Considerations for instructional content and practices
● Use text-based questions/tasks to focus on academic and domain-specific words that merit more attention (e.g., critical for understanding the text, part of large word families). Do this rather than memorizing text-agnostic word lists. ● Use word parts (i.e., Greek or Latin affixes, and roots) to increase comprehension of word meanings while also improving decoding and encoding abilities. ● Provide supplemental practice on text-based vocabulary through games, exercises, and focus on word parts and their morphology. ● Encourage the use of the targeted words from the anchor text throughout discussions and writing assignments. ● Regularly—and daily if possible—choose one complex and compelling sentence from the anchor text to deconstruct and reconstruct with students. ● Develop a deep understanding of words through student-friendly and student-created explanations of words. ● Provide and model strategies in oral and written contexts to practice vocabulary, including repeated exposure to new words ● Provide explicit instruction in strategies for determining the meaning of unknown words.

Frequent Evidence-Based Discussions About Anchor Texts (2010 SL.1; 2020 SL.1)
Considerations for instructional content and practices
● Design collaborative, small-group, or partner discussions about anchor texts—daily if possible—for students to process and extend their learning: ○ Make strategic use of peer partnerships to promote as much productive talk as possible. ○ Ask students to reflect on each other's thinking using evidence, as well as considering and challenging others' perspectives. ○ Teach the language of argumentation to facilitate students taking positions on what they're reading and hearing from others. ● Explicitly teach and model behaviors expected for productive, collaborative conversation (including both listening and speaking). ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes authentic text-based discussion using scaffolds (such as think-pair-share and sentence starters) to develop oral language skills and purposeful talk and the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. ● Step in (and out) of discussions to keep students focused and encourage them to construct longer and deeper responses.

Regular Evidence-Based Writing About Anchor Texts (2010 W.9; 2020 W.9)
Considerations for instructional content and practices
● Connect writing to what students are reading, seeing, or listening to, to deepen comprehension, check for understanding, and ensure all students have equal access to the topic on which they're writing. ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Vary writing assignments (short on-demand pieces or longer multi-day pieces) throughout the week, if possible. ● Include writing tasks connected to the literary texts students are reading that target perspective-taking and exploring the emotions and motivations of characters as an on-ramp to self-exploration and reflection. ● Support students to ground their writing in knowledge gained and evidence from the anchor text. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Develop a sense of student agency through student goal setting and self-assessment (using tools such as writing portfolios, written or verbal reflections, conferencing, or exemplars), including opportunities for peer feedback. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. Inquiry-based writing tasks are modeled and practiced. ● Within these writing opportunities, address and support students' ability to demonstrate the ability to use sentences that express complete thoughts and produce well-organized paragraphs with smooth transitions. ● Use non-text-based writing prompts to advance specific goals rooted in social-emotional learning (reflect on feelings, foster artistic expression, write personal stories).

Facilitate Social, Emotional, and Academic Development (SEAD) Through Close Reading of Complex Texts
Sample practices to integrate SEAD into ELA and literacy instruction
● Flexible groupings, including peer-assisted learning, are used to reteach and support students of all abilities and backgrounds (e.g., groupings may be based on student needs, strengths, interests, or languages). ● Visibly and frequently celebrate diversity that exists in the classroom, community, and world. ● Facilitate reflection on reading and writing to interact with text in ways that promote the development of empathetic, thinking, feeling citizens of the world. ● Ensure that the richness and complexity of texts read aloud are regularly available to every student, that no student is denied such access through the exclusive practice of assigning leveled or alternative texts, and that community is built by reading and listening to texts as a learning community. ● Ensure anchor texts throughout the curriculum reflect and reveal accurately a multicultural world and resonance with learners. Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. Showcase texts that are examples of young people making a difference in their communities ● Provide a variety of text-dependent writing, speaking, performance, or multimedia task options for students to express comprehension, knowledge, and skills. ● Establish student discussion protocols to facilitate evidence-based discourse about text that supports active listening, values diverse perspectives and insights, and ensures there is equity of voice and responsibility. ● Include collaborative conversations that require students to integrate the perspective of their peers into their own critical thinking. ● Include perspective-taking in the study of literary texts by attending to how characters might think and feel to support understanding emotions and thoughts. Perspective-taking can also be included with informational text to similarly highlight multiple perspectives, or investigate claims, purpose, and reasoning of an author or topic. ● Encourage students to draw on their emotional and empathetic skills as they express their thoughts, feelings, ideas, and arguments orally or in writing.

Supporting Research
(Adams, 2011a); (Adams, 2011b); (Brown et al., 2018); (Burke & Gilmore, 2015); (Hawkins et al., 2008); McKeown et al., 2009); (Morgan et al., 2000); (National Reading Panel, 2000); (Shanahan, 2005); (Sims, 1990); Willingham, 2006); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Build Knowledge Through Reading, Writing, and Speaking About Topics Across Content Areas

Regular Reading of Multiple Texts on A Range of Conceptually Related Topics (2010 W.8; 2020 W.8)
Considerations for instructional content and practices
● Choose content-rich informational texts that are topically connected to the anchor texts to build students' knowledge about the topic and maximize their breadth of exposure to academic vocabulary. ● Explicitly teach how to vary thinking, speaking, and writing to reflect the thinking of a discipline. ● Offer students texts that span a range of complexity levels so they can read the texts independently, with peers, or with modest support. This should include a balance of literature and informational texts across ELA, science, history, and the arts. ● Eliminate skills-paced calendars and generalized theme-based units in favor of organizing units around topics that build knowledge through anchor texts and volume of reading.

Regular Research, Discussion, and Writing About Topics (2010 W.8, SL.1; 2020 W.8, SL.1)
Considerations for instructional content and practices
● Regularly ask students to participate in independent and shared research tasks where they explore multiple texts and auxiliary resources (e.g., illustrations, video clips, maps) to build knowledge on a topic. (These can be driven by student interest, topic of anchor text, and course content.) ● Promote independent reading by providing options for students to choose topically connected texts. ● Provide access to texts representing multiple points of view/perspectives on the same topic. ● Ask students to integrate what they have just read or listened to with what they have read or listened to previously to build a more coherent understanding of a topic. ● Provide appropriate scaffolds for productive work (such as sentence starters or pre-teaching of vocabulary). ● Provide opportunities for students to orally share thoughts and ideas before and during writing, including in the language that students are most comfortable using. ● Educators teach students to work in pairs or small groups to meet instructional goals. This includes the use of a variety of writing methods, including a range of explicit, guided, and collaborative writing. As well as a variety of writing modes, including creative, reflective, and formal. Inquiry-based writing tasks are modeled and practiced. ● Design collaborative, small-group, or partner discussions on topics for students to process and extend their learning.

Facilitate SEAD Through Research, Writing, and Speaking About A Volume of Topically Connected Texts
Sample practices to integrate SEAD into ELA and literacy instruction
● Use read-alouds and/or mentor texts to advance historically underrepresented cultural perspectives and build background knowledge from which to draw for later content. ● Provide support as students engage in authentic inquiry that encourages students to identify problems in their communities or worlds and use literacy to engage in their communities or worlds. ● Ensure instruction and materials are responsive to students' existing funds of knowledge as well as connecting students to a shared knowledge of the world through the study of conceptually coherent topics. ● Anchor topical knowledge building in collaborative opportunities for students to conduct research while practicing cooperation, communication, innovation, reflection, self-regulation, and empathy. ● Create space and opportunity for students to identify and explore their own interests and fascinations. ● Engage students with texts that reflect their own lived experiences, as well as the lived experiences of others, and texts that reflect student interests. ● Select texts and materials that provide rich and multiple models of culture, including informational texts about heroes, inventors, or pioneers in a field. ● Develop and strengthen writing in response to feedback from others and self-reflection.

Supporting Research
(Burke & Gilmore, 2015); (Cervetti et al., 2016); (Landauer & Dumais, 1997); (Recht & Leslie, 1988); (Sims, 1990); (Willingham, 2006); (Willingham, 2010); (Wisconsin Department of Public Instruction, 2020b).

Mathematics

The mathematics priority content support that follows includes both the K-8 guidance from *2020-21 Priority Instructional Content in English Language Arts/Literacy and Mathematics* as well as the high school guidance from *2020-21 Support For Instructional Content Prioritization in High School Mathematics.* Both are exactly as they can be found in the original source, but have been provided here for the convenience of having all of the mathematics guidance in one place.

Introduction to Priority Content for K-8 Mathematics

As the 2020–2021 school year approaches, mathematics educators are more interested than ever in knowing which topics or standards are most important. This document provides guidance for the field about content priorities by leveraging the structure and emphases of college- and career-ready mathematics standards. As in previous years, students will need to engage deeply with grade-level mathematics by justifying claims, sharing their thinking and responding to the thinking of others, and solving well-chosen problems that connect to their world and advance them mathematically. As noted in *Catalyzing Change in Middle School Mathematics: Initiating Critical Conversations* (NCTM, 2020b), "[T]here still remains a considerable need for a more consistent, systematic, and widespread implementation of college and career readiness standards in the ways in which they were intended."

That observation isn't specific to the current moment. What is new, given the recent and ongoing interruptions to schooling, and given widespread moves to remote or hybrid learning, is a set of conditions that threaten to make good math instruction seem a luxury we can't afford. Because of these factors, and because of greater than usual variability in the recent mathematics experiences of returning students, educators will be looking for ways to accelerate learning and "catch up." But students are unlikely to benefit from simply increasing the pace. Indeed, in guidance from the Council of the Great City Schools, *Addressing Unfinished Learning After COVID-19 School Closures* (CGCS, 2020), a key recommendation is to

> Focus on the depth of instruction, not on the pace… [A]void the temptation to rush to cover all of the 'gaps' in learning from the last school year. The pace required to cover all of this content will mean rushing ahead of many students, leaving them abandoned and discouraged. It will also feed students a steady diet of curricular junk food: shallow engagement with the content, low standards for understanding, and low cognitive demand—all bad learning habits to acquire. Moreover, at a time when social emotional wellbeing, agency, and engagement are more important than ever, instructional haste may eclipse the patient work of building academic character and motivation.

But where will the time for in-depth teaching come from? The specific grade-level guidance in this document is intended to help publishers, other designers of instructional materials, and

mathematics instructional leaders find new efficiencies in the curriculum that are critical for the unique challenges that have resulted from school closures and anticipated disruptions in the year ahead. In the grade-level sections that follow, the most important priorities in each grade are clearly signaled. Opportunities are highlighted for combining lessons about topics. If some material from the grade must be omitted entirely or almost entirely, then the possibilities indicated here can help to minimize negative effects on student progress. Recommendations are also made for integrating previous-grade topics within relevant grade-level work. These and other considerations in the grade-level documents can help students engage deeply with grade-level mathematics this year and in subsequent years.

The guidance at each grade level is tied to individual content clusters, or in some cases to individual standards, and this degree of specificity is necessary to support those who work directly with the design of curricula. However, the specifics of clusters or standards mustn't become trees that obscure the mathematical forest. Two forest-level views are essential. One opens out to a vista of mathematical practices: mathematical content is only learned according to college- and career-ready standards when it is connected to mathematical practices. A second forest-level view opens out to reveal the shape of the mathematical content itself: a focused, coherent arc that traces a student's journey from arithmetic to algebra. This design is supported by evidence from diverse sources including education research, international comparisons, and national reports.[8] By preserving both of these forest-level views, educators can maintain the continuity of their mathematical vision during a time of great interruption.

***

As noted in the above quotation from *Addressing Unfinished Learning After COVID-19 School Closures* (CGCS, 2020), "social emotional well being, agency, identity, and belonging are more important than ever." Indeed as focus narrows and there is recommitment to what matters most academically, research tells us that four learning mindsets are particularly important in supporting students' academic development, specifically students' sense of 1) belonging and safety, 2) efficacy, 3) value for effort and growth, and 4) engagement in work that is relevant and culturally responsive (Aspen Institute, 2019; The University of Chicago Urban Education Institute, 2018). Within classrooms, within schools, attention must be given to restoring relationships and a sense of community, so students feel safe, engage fully, and work hard. Students need help knowing that caring adults believe in them and that their ability and competence will grow with their effort. And more than ever, students need to see value and relevance in what they are learning to their lives and their very beings. Investing in students' social-emotional development is done by the entire system of adults in schools.

This investment is key to promoting engagement in—not a substitute for—teaching academic content. Therefore at each grade level, this document provides recommendations for facilitating students' social, emotional, and academic development (SEAD) in mathematics.

These recommendations stress themes of discourse, belonging, agency, and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades and different learning environments. Note that in mathematics, there is a close connection between social, emotional, and academic development and the Standards of Mathematical Practice; the recommendations reflect this connection. When these practices are done well, they not only improve the teaching and learning of mathematics, they can address social-emotional learning as well.

***

Confidence about the coming school year will come not only from recognizing the power and dedication of educators across the country, but also from trusting in the resources of our nation's students. Our beliefs about our students will matter greatly to our success. In *Catalyzing Change in Early Childhood and Elementary School Mathematics: Initiating Critical Conversations* (NCTM, 2020a), there is a valuable list of productive and unproductive beliefs about children's mathematical ability. Three of the productive beliefs are especially relevant today, not only during early childhood and elementary school but also in middle grades (Table M-1).

Table M-1. Selected productive beliefs about children's mathematical ability from *Catalyzing Change in Early Childhood and Elementary School Mathematics: Initiating Critical Conversations* (NCTM, 2020a).

Selected Productive Beliefs About Children's Mathematical Ability from *Catalyzing Change in Early Childhood and Elementary School Mathematics: Initiating Critical Conversations* (NCTM, 2020a)
Mathematics curriculum and instruction should account for and leverage human difference to promote rich and connected mathematics learning experiences. A common shared mathematics learning experience benefits all children.
All children should have access to grade-level mathematics content centered on learning mathematics with understanding, actively building new knowledge from their informal experiences and prior knowledge.
Interventions must focus on content that is connected with and promotes the grade-level curriculum through problem solving and reasoning and not be a review of low-level basic facts or procedural skills.

Remember that "Children prefer mathematical learning experiences that challenge their thinking and allow them to be creative in solving problems, responding positively to statements, such as, 'I like complex problems more than easy problems' and 'I like activities that challenge my thinking abilities.'…[C]hildren who have regular opportunities to collaborate on challenging tasks, use varied solution approaches, and focus on sense making have higher mathematics achievement" (NCTM, 2020a). Interventions must provide students with more opportunities, not fewer, to engage deeply with grade-level mathematics in all its dimensions. A virtue of concentrating on grade-level work is that each topic in the grade-level curriculum will reveal the prior understandings and assets of the students in its own way, so that teachers can build on those understandings and assets efficiently to access the topic at hand. This is remediating "just in time," not "just in case."

How should mathematics assessment be considered in light of this instructional guidance?

Uncovering and addressing unfinished learning in the context of grade-level work will require teachers to know what students know and can do at the beginning and throughout the school year. This document is not intended to serve as a guide for assessment products. However, the instructional guidance has implications for assessment in service of equitable grade-level instruction. Assessment should:

1. Be used to determine ***how*** to bring students into a unit of grade-level instruction, not whether to bring them into it.

2. Center ***formative*** practices (FAST SCASS, 2018). Leverage such sources of information as exit tickets, student work, and student discussions. Use these sources of information to inform instructional choices in connection with high-quality instructional materials.

3. Employ ***targeted*** checks for very specific subject and grade-level instructional purposes (specifically, math fluency inventories).

In mathematics in particular, assessment will be more useful, efficient, and supportive of social, emotional, and academic development when it takes place at the instructional triangle of teacher, student, and (grade-level) subject. For example, unit-level assessments that publishers provide to accompany high-quality instructional materials are preferable to district-administered interim assessments. In mathematics, we can better understand students' thinking even on assessments by engaging them in discussions of the problems they worked on.

Assessment should be used to determine how to bring students into a unit of grade-level instruction, not whether to bring them into it. The point isn't to generate data about what students get right and wrong; it's to understand how to support students as they work. A single multiple choice item will not provide that, nor will a single numerical score. In mathematics, sometimes a couple of well-selected problems do the job of providing the right information to understand how to support students. In a distance learning scenario, one-on-one check-ins with students are likely the best way to understand how they are thinking about some of the important particulars and to

help them understand how those particulars connect to the current grade-level content they are about to engage with.

Pre-assessment is not needed for every unit in a curriculum. In some cases the prerequisites to a unit are few. Indeed some topics are well thought of as making their first appearance in a given grade, and diagnosing about such topics is inappropriate. In many cases, the prerequisites for a unit are naturally and efficiently prompted by the content of the unit itself (remediating just-in-time, not just-in-case). And in some cases, students' entry is based on a longer trajectory over multiple years.

This approach is being proposed as a deliberate alternative to assessment choices that have the potential to serve as a gatekeeper to grade-level content. It also deliberately recognizes the very real social-emotional needs of students—particularly students who have been disproportionately affected by the pandemic. After such major disruptions, it is essential that students engage immediately and consistently in the affirmative act of learning new ideas, not be deemed deficient because of events outside of their control. Regarding administering tests too soon, the Council of the Great City Schools notes in *Addressing Unfinished Learning After COVID-19 School Closures* that "testing appears to put the onus of learning losses on the students themselves—the resulting label of 'deficient' or academically behind may very well further alienate and isolate the students who most need our support" (CGCS, 2020).

***

Mathematics has seldom been as prominent in the public square as it is now. Fewer citizens are saying, "I'm not a math person." Instead they are reading the news about COVID-19 and contemplating rates, percentages, denominators, and time lags in order to know better how they can safely conduct their lives. Today, mathematics offers students both the empowerment that comes from using mathematical tools to understand and confront an epidemic, as well as the emotional escape that can come from permitting oneself to entertain abstract but beautiful questions at such a time. "Each and every child must be afforded opportunities to not only feel confident as doers of mathematics but also to experience *joy* and see the *beauty* in their mathematical discoveries" (NCTM, 2020b). Our students' resilience is being tested but they have minds eager to learn. Supporting students' social and emotional needs during these uncertain times cannot be done by rushing through all of the current grade-level mathematics while simultaneously re-teaching prior grade-level content that students might have missed. Rather, now is the time to deliver even more thoughtfully on the promise of deep learning of mathematics, especially that which allows our students to connect the content to their world in meaningful ways.

Kindergarten Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and

intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency, and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

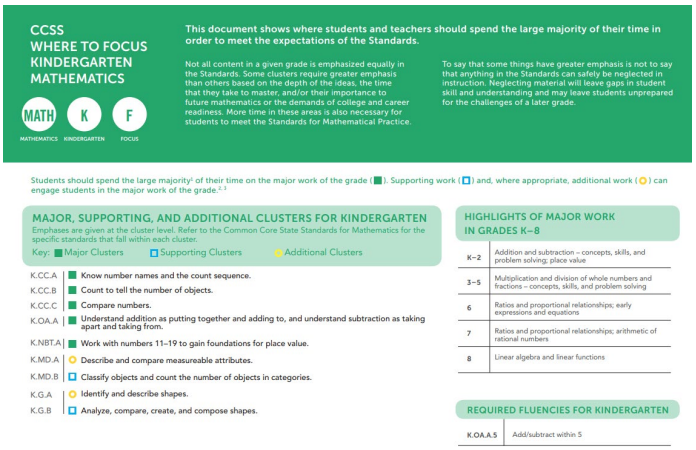
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as K.CC.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade

concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Kindergarten Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for kindergarten are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS KINDERGARTEN MATHEMATICS

MATH (MATHEMATICS) K (KINDERGARTEN) F (FOCUS)

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[2] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR KINDERGARTEN

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

K.CC.A	■ Know number names and the count sequence.
K.CC.B	■ Count to tell the number of objects.
K.CC.C	■ Compare numbers.
K.OA.A	■ Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
K.NBT.A	■ Work with numbers 11–19 to gain foundations for place value.
K.MD.A	○ Describe and compare measureable attributes.
K.MD.B	□ Classify objects and count the number of objects in categories.
K.G.A	○ Identify and describe shapes.
K.G.B	□ Analyze, compare, create, and compose shapes.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR KINDERGARTEN

K.OA.A.5	Add/subtract within 5

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and
- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for kindergarten. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
K.CC.A K.CC.B K.CC.C	No special considerations for curricula well aligned to knowing number names, counting, and comparing numbers, as detailed in these clusters. Time spent on instruction and practice should NOT be reduced.
K.OA.A	No special considerations for curricula well aligned to understanding addition and subtraction, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of kindergarten grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
K.NBT.A*	*Combine* lessons on numbers 11–19 to address key concepts in order to reduce the amount of time spent on this cluster. *Limit* the amount of required student practice.
K.MD.A	*Combine* lessons on describing and comparing measurable attributes to address key concepts across this cluster in order to reduce the amount of time spent on this cluster. *Limit* the amount of required student practice. (Note that standards in K.MD.A do not require use of measuring devices or measurement units.)
K.MD.B	*Integrate* classifying and counting objects (K.MD.B) with other counting and comparison work in the grade (K.CC.A, B, and C) in order to reduce the amount of time spent on this cluster.
K.G.A K.G.B	*Integrate* classifying and counting objects (K.MD.B) with other counting and comparison work in the grade (K.CC.A, B, and C) in order to reduce the amount of time spent on this cluster.

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[9] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Design structured and unstructured time for students to actively collaborate with their classmates to grow their skills in problem solving, cooperation, communication, innovation, reflection, self-regulation, and empathy (for example, when students are in math centers or when they share tasks such as counting out supplies).	MP1: Make sense of problems and persevere in solving them.
Promote a sense of belonging by including math routines, such as number talks, choral counting, counting collections, and other counting routines, so that students see themselves as a part of a community.	MP7: Look for and make use of structure.
Promote skills in cooperation and communication by providing opportunities in daily lessons for students to work in pairs counting objects and practicing fluency within 5.	MP6: Attend to precision.

9 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 1 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency, and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

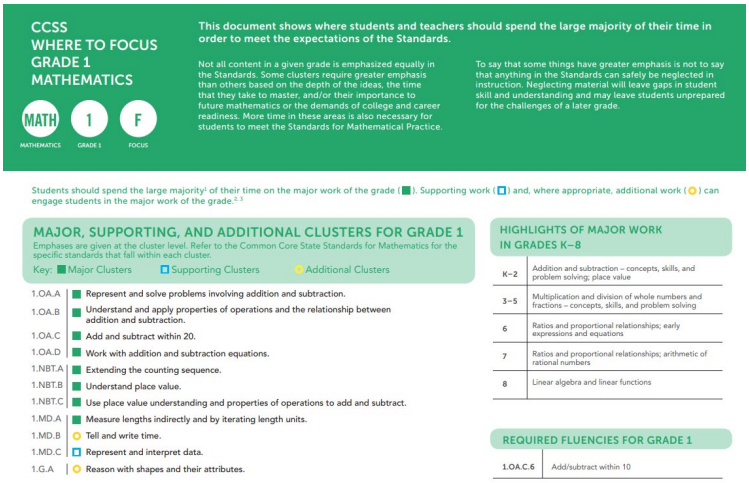
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 1.OA.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such

as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 1 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 1 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS GRADE 1 MATHEMATICS

MATH (MATHEMATICS) 1 (GRADE 1) F (FOCUS)

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[1] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 1

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

1.OA.A	■	Represent and solve problems involving addition and subtraction.
1.OA.B	■	Understand and apply properties of operations and the relationship between addition and subtraction.
1.OA.C	■	Add and subtract within 20.
1.OA.D	■	Work with addition and subtraction equations.
1.NBT.A	■	Extending the counting sequence.
1.NBT.B	■	Understand place value.
1.NBT.C	■	Use place value understanding and properties of operations to add and subtract.
1.MD.A	■	Measure lengths indirectly and by iterating length units.
1.MD.B	○	Tell and write time.
1.MD.C	□	Represent and interpret data.
1.G.A	○	Reason with shapes and their attributes.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR GRADE 1

1.OA.C.6	Add/subtract within 10

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and
- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 1. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
1.OA.A.1	*Emphasize* problems that involve sums less than or equal to 10 and/or the related differences to keep the focus on making sense of different problem types; do not limit the range of addition and subtraction situations, but assign fewer problems with sums greater than 10 or related differences.
1.OA.B	No special considerations for curricula well aligned to understanding and applying properties of operations to addition and subtraction, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.
1.OA.C.6	No special considerations for curricula well aligned to adding and subtracting within 20, as detailed in this standard. Time spent on instruction and practice should NOT be reduced.
1.OA.D	No special considerations for curricula well aligned to work with addition and subtraction equations, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.
1.NBT.B	*Incorporate* foundational work on understanding that numbers 11–19 are built from ten ones and some further ones (K.NBT.A) to support grade 1 understanding of place value.
1.NBT.C	*Emphasize* the understanding that in adding two two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten, in order to strengthen the progression toward fluency with multi-digit addition and subtraction.
1.MD.A	No special considerations for curricula well aligned to measuring lengths indirectly by iterating length units, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 1 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
1.OA.A.2*	*Reduce* the amount of time spent on lessons and problems that call for addition of three whole numbers. *Limit* the amount of required student practice.
1.OA.C.5*	*Integrate* counting into the work of the domain (OA), instead of separate lessons, in order to reduce the amount of time spent on this standard.
1.NBT.A*	*Eliminate* lessons that are solely about extending the count sequence in order to reduce the amount of time spent on this cluster. Incorporate extending the count sequence into other lessons in the grade.
1.MD.B	*Eliminate* lessons devoted to telling and writing time to the hour and half-hour (1.MD.B.3).
1.MD.C	*Eliminate* lessons devoted to representing and interpreting data. (Do not eliminate problems about using addition and subtraction to solve problems about the data.)
1.G.A	*Combine* lessons to address key concepts of defining attributes of shapes and composing shapes in order to reduce the amount of time spent on this cluster.

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[10] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Position students as competent young mathematicians by highlighting their successes with grade-level content (for example, creating their own word problems and becoming fluent with adding and subtracting within 10), as well as by strategically creating just-in-time supports and enrichment that provide every student opportunity to actively engage with grade-level work.	MP1: Make sense of problems and persevere in solving them.
Communicate collective learning goals for the class as a whole to reinforce that students belong to a learning community where they can succeed and where they will be supported to grow.	Creating a learning community is essential for mathematical practices such as MP3 that are interpersonal by nature.
Establish norms for participation within routines, such as number talks for addition and subtraction within 20 and choral counting within 120, to position every student as a competent mathematical thinker.	MP7: Look for and make use of structure.

10 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 2 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency, and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

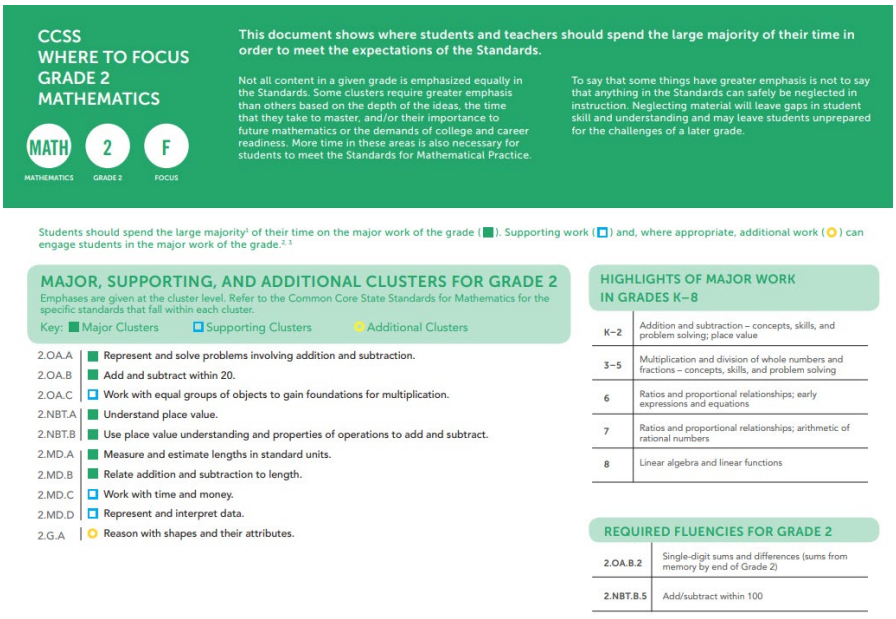
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 2.OA.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such

as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 2 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 2 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS GRADE 2 MATHEMATICS

MATH 2 F

MATHEMATICS GRADE 2 FOCUS

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[1] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2, 3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 2

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

2.OA.A	■ Represent and solve problems involving addition and subtraction.
2.OA.B	■ Add and subtract within 20.
2.OA.C	□ Work with equal groups of objects to gain foundations for multiplication.
2.NBT.A	■ Understand place value.
2.NBT.B	■ Use place value understanding and properties of operations to add and subtract.
2.MD.A	■ Measure and estimate lengths in standard units.
2.MD.B	■ Relate addition and subtraction to length.
2.MD.C	□ Work with time and money.
2.MD.D	□ Represent and interpret data.
2.G.A	○ Reason with shapes and their attributes.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR GRADE 2

2.OA.B.2	Single-digit sums and differences (sums from memory by end of Grade 2)
2.NBT.B.5	Add/subtract within 100

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations.

As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and

- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 2. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
2.OA.A	*Emphasize* problems that involve sums less than or equal to 20 and/or the related differences to keep the focus on making sense of different problem types; assign fewer problems with sums greater than 20 or related differences.
2.OA.B	*Incorporate* additional practice on the grade 1 fluency of adding and subtracting within 10 (1.OA.C.6) early in the school year to support the addition and subtraction work of grade 2 (2.OA).
2.NBT.B	*Prioritize* strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction. (Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required.) *Incorporate* foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.
2.MD.B.5	Ensure word problems represent all grade 2 problem types, and refer to guidance for 2.OA.A.
2.MD.B.6	No special considerations for curricula well aligned to representing lengths on number line diagrams, as detailed in this standard. Time spent on instruction and practice should NOT be reduced.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 2 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
2.OA.C	*Eliminate* lessons on foundations for multiplication.
2.NBT.A*	*Emphasize* the conceptual understanding of three-digit numbers (as detailed in 2.NBT.A.1). *Integrate* lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 3, and 4) into the work of place value. *Limit* the amount of required student practice on counting by ones, reading/writing, and comparing numbers.
2.MD.A*	*Integrate* lessons and practice on comparing and estimating lengths (2.MD.A.2, 3, and 4) into the work of measuring length with tools (2.MD.A.1) in order to reduce the amount of time spent on this cluster. *Limit* the amount of required student practice.
2.MD.C	*Combine* lessons in order to reduce the amount of time spent on time and money. *Emphasize* denominations that support place value understanding such as penny-dime-dollar. *Limit* the amount of required student practice.
2.MD.D	*Eliminate* lessons on generating measurement data (2.MD.D.9) and creating picture/bar graphs (2.MD.D.10). *Integrate* data displays only as settings for addition/subtraction word problems (2.OA.A).
2.G.A	*Combine* lessons to address key concepts on reasoning with shapes and their attributes in order to reduce the amount of time spent on this cluster. *Limit* the amount of required student practice.

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[11] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Use discussion protocols to provide a safe environment for students to share their developing thinking and to allow for interactions where peers value multiple contributions.	MP3: Construct viable arguments and critique the reasoning of others.
Design question threads that prompt students to recognize frustration with a problem, manage the frustration without turning their back on the task, re-evaluate, and look for an alternate pathway to a solution.	MP1: Make sense of problems and persevere in solving them.
Empower students to self-monitor their individual progress as they use properties and patterns along the way toward knowing sums of two one-digit numbers from memory. This monitoring includes reflection and individual recording, supporting their ability to try and try again to show off their improvement.	MP8: Look for and express regularity in repeated reasoning.

11 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 3 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency, and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

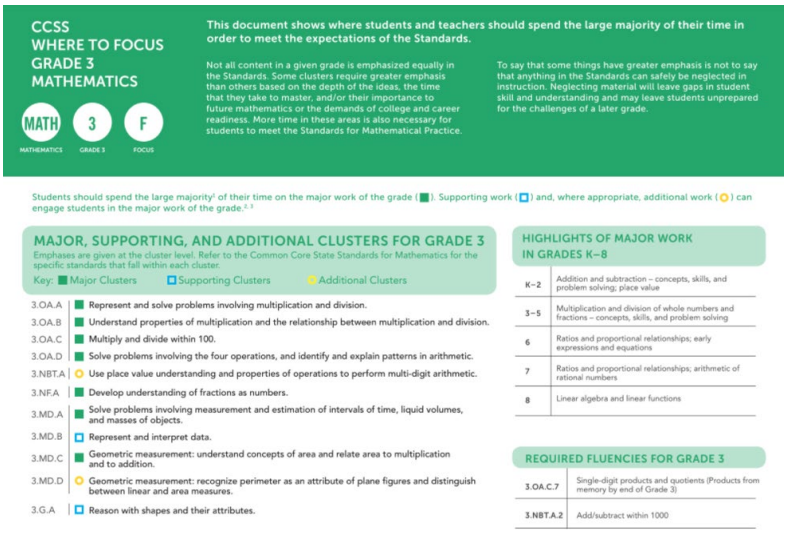
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 3.OA.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even

when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 3 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 3 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS GRADE 3 MATHEMATICS

MATH 3 F

MATHEMATICS GRADE 3 FOCUS

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[1] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 3

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

3.OA.A	■	Represent and solve problems involving multiplication and division.
3.OA.B	■	Understand properties of multiplication and the relationship between multiplication and division.
3.OA.C	■	Multiply and divide within 100.
3.OA.D	■	Solve problems involving the four operations, and identify and explain patterns in arithmetic.
3.NBT.A	○	Use place value understanding and properties of operations to perform multi-digit arithmetic.
3.NF.A	■	Develop understanding of fractions as numbers.
3.MD.A	■	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
3.MD.B	□	Represent and interpret data.
3.MD.C	■	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
3.MD.D	○	Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
3.G.A	□	Reason with shapes and their attributes.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR GRADE 3

3.OA.C.7	Single-digit products and quotients (Products from memory by end of Grade 3)
3.NBT.A.2	Add/subtract within 1000

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and

- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 3. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
3.OA.A	No special considerations for curricula well aligned to multiplication and division concepts and problem solving, as detailed in this cluster. Students may need extra support to see row and column structure in arrays of objects. Time spent on instruction and practice should NOT be reduced.
3.OA.B 3.OA.C	*Incorporate* additional practice with double-digit sums (2.NBT.B.5) to support the grade 3 multiplication work with the properties of operations, especially the distributive property.
3.OA.D.8	No special considerations for curricula well aligned to two-step word problems using the four operations, as detailed in this standard. Time spent on instruction and practice should NOT be reduced.
3.NF.A	*Emphasize* the concept of unit fraction as the basis for building fractions. *Prioritize* the number line as a representation to develop students' understanding of fractions as numbers by foregrounding the magnitude, location, and order of fractions among whole numbers (3.NF.A.2)

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 3 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
3.OA.D.9*	*Eliminate* lessons or problems on arithmetic patterns.
3.NBT.A.1	*Combine* lessons on rounding in order to reduce the amount of time spent on rounding numbers. *Limit* the amount of required student practice.
3.NBT.A.2	No special considerations for curricula well aligned to addition and subtraction within 1000, as detailed in this standard. Time spent on instruction and practice should not exceed what would be spent in a typical year.
3.NBT.A.3	*Combine* lessons in order to reduce time spent multiplying by multiples of 10. *Emphasize* the connection to single-digit products and tens units.
3.MD.A*	*Combine* lessons in order to reduce the amount of time spent on time, volume, and mass. *Reduce* the amount of required student practice.
3.MD.B.3	*Eliminate* lessons on creating scaled graphs. *Integrate* a few problems with scaled graphs only as settings for multiplication word problems (3.OA.A.3) and two-step word problems (3.OA.8).
3.MD.B.4	*Eliminate any lessons or problems that do not strongly reinforce the fraction work of this grade (3.NF.A). Incorporate foundational work measuring with rulers (2.MD.A) to support entry into generating fractional measurement data in grade 3.*

3.MD.C*	*Emphasize enduring concepts of geometric measurement (iterating a unit with no gaps or overlaps) (3.MD.C.5) and students using area models to support their mathematical explanations involving the distributive property for products (3.MD.C.7c). Combine lessons in order to reduce the amount of time spent on measuring area and limit the amount of required student practice.*
3.MD.D	*Integrate a few problems on perimeter into work on area (3.MD.C).*
3.G.A.1	*Combine lessons on shapes and their attributes in order to reduce the amount of time spent on this standard.*
3.G.A.2	*Eliminate separate geometry lessons on partitioning shapes.*

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[12] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Establish discussion protocols to facilitate students' engagement in peer-to-peer mathematical discourse (for example, about the meaning of multiplication and division, reasoning about fractions) that supports active listening, values diverse perspectives and insights, sets team roles, and ensures there is equity of voice and responsibility.	MP6: Attend to precision.
Attend to the ways in which students position one another as capable or not capable of doing mathematics and provide opportunities to elevate the voices of marginalized students, such as strategically sharing student work, student thinking, and solutions.	MP3: Construct viable arguments and critique the reasoning of others.
Draw on knowledge and experiences that students bring to mathematics (culture, contexts, language, and experiences) by using multiple representations and contexts (for example, when working with multiplication and division situations).	MP2: Reason abstractly and quantitatively.

12 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 4 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

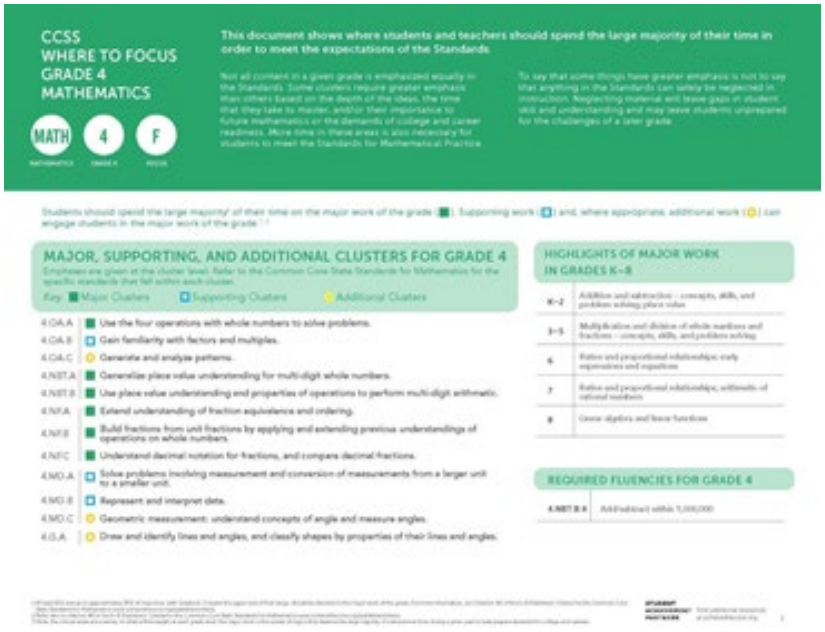
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 4.NBT.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content

relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 4 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 4 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and
- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the

cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 4. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
4.OA.A	No special considerations for curricula well aligned to analyzing and solving multi-step word problems with the four operations (4.OA.3), and extending multiplicative thinking beyond grade 3 to solve problems involving comparison and the idea of times-as-many/times-as-much (4.OA.2).
4.NBT.A	No special considerations for curricula well aligned to generalizing place value understanding, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.
4.NF.A	No special considerations for curricula well aligned to fraction equivalence and ordering, as detailed in this cluster. *Incorporate* some foundational work on simple equivalent fractions (3.NF.A.3). Time spent on instruction and practice should NOT be reduced.
4.NF.C	No special considerations for curricula well aligned to concepts of decimal fractions, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 4 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
4.OA.B	*Incorporate* opportunities to solidify the fluency expectations of 3.OA.C.7 by giving additional practice sets related to products of single-digit factors and related quotients (with unknowns in all positions) into the grade 4 work of gaining familiarity with factors and multiples.
4.OA.C	*Eliminate* lessons on generating and analyzing patterns.
4.NBT.B*	In relation to fluency expectations for subtracting multi-digit numbers, *emphasize* problems with only one regrouping step (4.NBT.B.4), in order to reduce algorithmic complexity. *Incorporate* fluency expectations of 3.OA.C.7 by giving additional practice sets related to products of single-digit factors and related quotients (with unknowns in all positions) into the grade 4 work on multi-digit multiplication and division (4.NBT.5 & 6). (Note that there are no fluency expectations for multi-digit multiplication or division in grade 4; repetitive fluency exercises are not required.)
4.NF.B*	*Emphasize* reasoning with unit fractions to determine sums and products, not committing calculation rules to memory or engaging in repetitive fluency exercises. *Incorporate* some foundational work on the meaning of the unit fraction (3.NF.A.1 & 2), especially through partitioning the whole on a number line diagram.
4.MD.A.1	No special considerations for curricula well aligned to measurement conversion, as detailed in this standard. Time spent on instruction and practice should not exceed what would be spent in a typical year.

4.MD.A.2 4.MD.A.3	*Combine* lessons on problems involving measurement, except for those on measurement conversion (see 4.MD.A.1). *Limit* the amount of required student practice.
4.MD.B	*Eliminate* lessons and problems that do not strongly reinforce the fraction work of this grade (4.NF).
4.MD.C.5 4.MD.C.6	*Emphasize* the foundational understanding of a one-degree angle as a unit of measure (4.MD.C.5a) and use that as the basis for measuring and drawing angles with protractors (4.MD.C.6).
4.MD.C.7	*Eliminate* lessons on recognizing angle measure as additive.
4.G.A	*Combine* lessons on drawing and identifying lines and angles and classifying shapes by properties. *Limit* the amount of required student practice.

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[13] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Bring in students' funds of knowledge and past mathematical experiences by providing access to a wide variety of math tools when working on grade-level math (for example, providing number lines when studying equivalent fractions).	MP5: Use appropriate tools strategically.
Position students as mathematically competent by creating a safe space for students to share their developing reasoning (for example, when they make conjectures and arguments about whole numbers to determine whether they apply to fractions and decimals).	MP3: Construct viable arguments and critique the reasoning of others.
Establish clear learning goals that promote mathematical learning as just, equitable, and inclusive. For example, in work with subtraction of multi-digit numbers, begin with one regrouping step using evidence of student learning to determine next steps (exit tickets, assigned problem).	MP7: Look for and make use of structure.

13 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 5 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from Kindergarten through Grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

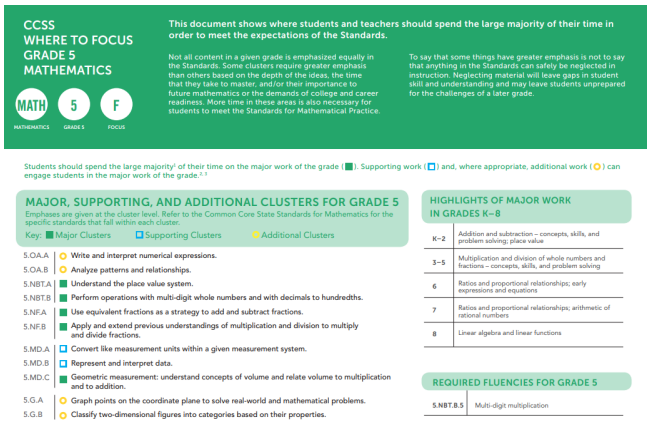
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 5.NBT.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even

when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 5 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 5 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS GRADE 5 MATHEMATICS

MATH 5 F (MATHEMATICS, GRADE 5, FOCUS)

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[1] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 5

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

5.OA.A	○ Write and interpret numerical expressions.
5.OA.B	○ Analyze patterns and relationships.
5.NBT.A	■ Understand the place value system.
5.NBT.B	■ Perform operations with multi-digit whole numbers and with decimals to hundredths.
5.NF.A	■ Use equivalent fractions as a strategy to add and subtract fractions.
5.NF.B	■ Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
5.MD.A	□ Convert like measurement units within a given measurement system.
5.MD.B	□ Represent and interpret data.
5.MD.C	■ Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
5.G.A	○ Graph points on the coordinate plane to solve real-world and mathematical problems.
5.G.B	○ Classify two-dimensional figures into categories based on their properties.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR GRADE 5

5.NBT.B.5	Multi-digit multiplication

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and
- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine, integrate*, etc. The verbs most

commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 5. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
5.NBT.A	Allow for time to develop students' understanding of the foundational work of decimal fractions (4.NF.C) to support entry into understanding the place value system with decimals (5.NBT.A.1, 3, and 4).
5.NBT.B	*Incorporate* foundational work on multiplying and dividing multi-digit whole numbers (4.NBT.B.5 & 6) to support students' work operating with multi-digit whole numbers and decimals (5.NBT.B). In relation to fluency expectations for multiplying multi-digit numbers, *eliminate* problems in which either factor has more than three digits.
5.NBT.B.7	*Incorporate* students' understanding of decimal fractions (4.NF.C) to support entry into the grade 5 work of operations with decimals.
5.NF.A	*Incorporate* foundational work on equivalent fractions (4.NF.A.1) and on the conceptual understanding underlying fraction additio (4.NF.B.3) to support students' work on adding and subtracting fractions with unlike denominators (5.NF.A).
5.NF.B	*Incorporate* foundations for multiplying fractions by whole numbers (4.NF.B.4) to support students' work in multiplying fractions and whole numbers by fractions (5.NF.4).
5.MD.C	No special considerations for curricula well aligned to the work of volume in grade 5, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.

5.G.A	*Incorporate* foundational understandings of number lines (such as found in the work of 4.NF) into the work of extending number lines to the coordinate plane, as detailed in this cluster. *Emphasize* interpreting coordinate values of points in the context of a situation.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 1 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
5.OA.A	*Combine* lessons on writing and interpreting numerical expressions in order to reduce the amount of time spent on this topic.
5.OA.B	*Eliminate* lessons and problems on analyzing relationships between numerical patterns.
5.MD.A	*Combine* lessons on converting measurement units in order to reduce the amount of time spent on this topic.
5.MD.B	*Eliminate* lessons and problems on representing and interpreting data using line plots that do not strongly reinforce the fraction work of this grade (5.NF).
5.G.B	*Combine* lessons on classifying two-dimensional figures into categories based on properties in order to reduce the amount of time spent on this topic.

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[14] Through Grade-Level Content

The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.

Sample Actions	Connection to Standards for Mathematical Practice (SMP)
Build community by providing group tasks to develop sense making and problem solving while deepening students' active engagement.	MP1: Make sense of problems and persevere in solving them.
Gather student perspectives through written or verbal reflection (for example, anticipation guides, exit slips, error analysis, interviews) so that students consider their learning, performance, and growth as learners.	MP3: Construct viable arguments and critique the reasoning of others.
Position students as mathematically competent by encouraging various entry points and elevating different ways students see and use structure in problems. For example, students might see a $3 \times 4 \times 5$ rectangular prism as three layers of a 4×5 array of cubes, as four layers of a 3×5 array of cubes, or as five layers of a 3×4 array of cubes.	MP7: Look for and make use of structure.

14 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 6 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.
The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

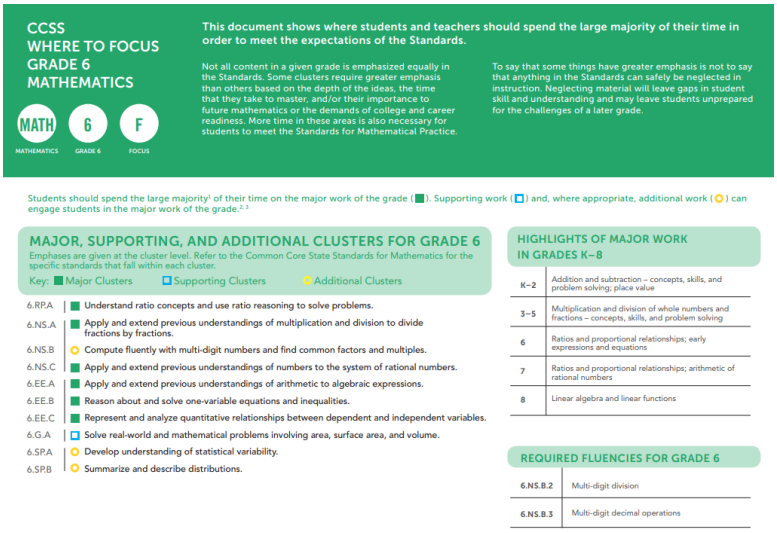
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 6.RP.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade

collaboration among educators who know the standards well and can use existing resources such as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 6 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 6 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS GRADE 6 MATHEMATICS

MATH 6 F
MATHEMATICS GRADE 6 FOCUS

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[1] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 6

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

6.RP.A	■ Understand ratio concepts and use ratio reasoning to solve problems.
6.NS.A	■ Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
6.NS.B	○ Compute fluently with multi-digit numbers and find common factors and multiples.
6.NS.C	■ Apply and extend previous understandings of numbers to the system of rational numbers.
6.EE.A	■ Apply and extend previous understandings of arithmetic to algebraic expressions.
6.EE.B	■ Reason about and solve one-variable equations and inequalities.
6.EE.C	■ Represent and analyze quantitative relationships between dependent and independent variables.
6.G.A	□ Solve real-world and mathematical problems involving area, surface area, and volume.
6.SP.A	○ Develop understanding of statistical variability.
6.SP.B	○ Summarize and describe distributions.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR GRADE 6

6.NS.B.2	Multi-digit division
6.NS.B.3	Multi-digit decimal operations

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and
- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most

commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 6. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
6.RP.A	No special considerations for curricula well aligned to understanding ratio concepts and using ratio reasoning to solve problems, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.
6.NS.A	*Incorporate* foundational work on division with unit fractions and whole numbers (5.NF.B.7) in the early part of students' work on fraction division (6.NS.A).
6.NS.C	*Incorporate* foundational work on the coordinate plane (5.G.A.1) to support students' entry into this cluster.
6.EE.A	*Emphasize* equivalent expressions (6.EE.A.3 and 4), particularly the idea that applying properties of operations to an expression always results in an expression that is equivalent to the original one.
6.EE.B	No special considerations for curricula well aligned to reasoning about and solving one-variable equations and inequalities, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.
6.EE.C	No special considerations for curricula well aligned to this representing and analyzing quantitative relationships between dependent and independent variables, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 6 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
6.NS.B.2 6.NS.B.3	*Eliminate* lessons on computing fluently (6.NS.B.2 and 3) by *integrating* these problems into spiraled practice throughout the year. To keep students on track to algebra and avoid inequitable remediation structures, time in grade 6 should not be spent remediating multi-digit calculation algorithms.
6.NS.B.4	No special considerations for curricula well aligned to common factors and multiples, including using distributive property for expressions, as detailed in this standard. Time spent on instruction and practice should not exceed what would be spent in a typical year.
6.G.A.1	*Emphasize* understanding of the reasoning leading to the triangle area formula; instead of teaching additional area formulas as separate topics, *emphasize* problems that focus on finding areas in real-world problems by decomposing figures into triangles and rectangles.
6.G.A.2	*Incorporate* foundational work on volume (5.MD.C) while working on volumes of right rectangular prisms with fractional edge lengths (6.G.A.2). *Emphasize* contextual problems, as detailed in the second sentence of the standard; *eliminate* lessons focused on the first sentence of the standard (finding the volume of a rectangular prism with fractional edge lengths by packing it with unit cubes).
6.G.A.3	*Eliminate* lessons and problems involving polygons on the coordinate plane.
6.G.A.4	*Eliminate* lessons and problems on constructing three-dimensional figures from nets and determining if nets can be constructed into three-dimensional figures during the study of nets and surface area.

6.SP.A	*Combine* lessons about introductory statistical concepts so as to proceed more quickly to applying and reinforcing these concepts in context. (Note that there are no procedural expectations in the cluster; no procedural practice is required to meet the expectations of the cluster.)
6.SP.B	*Reduce* the amount of required student practice in calculating measures of center and measures of variation by hand, to make room to emphasize the concept of a distribution and the usefulness of summary measures. *Reduce* the amount of time spent creating data displays by hand.

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[15] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Build a safe community where mathematical discourse supports active listening, promotes diverse perspectives and insights, and allows students to consider others' reasoning to advance their own mathematical understanding. For example, utilize a "which one doesn't belong?" activity for groups of students to discuss and analyze correspondences between graphs, tables, and equations that represent a relationship between dependent and independent variables.	MP2: Reason abstractly and quantitatively.
Bring in students' existing funds of knowledge (culture, contexts, language, and experiences), such as during the study of ratios and rates, when students need to make sense of quantities and relationships in problem situations; they may bring in their understanding of measurement units to do measurement conversions and their real-life interactions with percents to solve percent problems.	MP2: Reason abstractly and quantitatively.
Position students as mathematically competent by encouraging students to construct mathematical arguments and engage in the reasoning of others, such as when they are using the properties of operations to generate equivalent expressions or working collaboratively to develop the formula for the area of a triangle through analyzing a variety of parallelograms and making an argument to generalize the relationship.	MP3: Construct viable arguments and critique the reasoning of others.

15 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 7 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

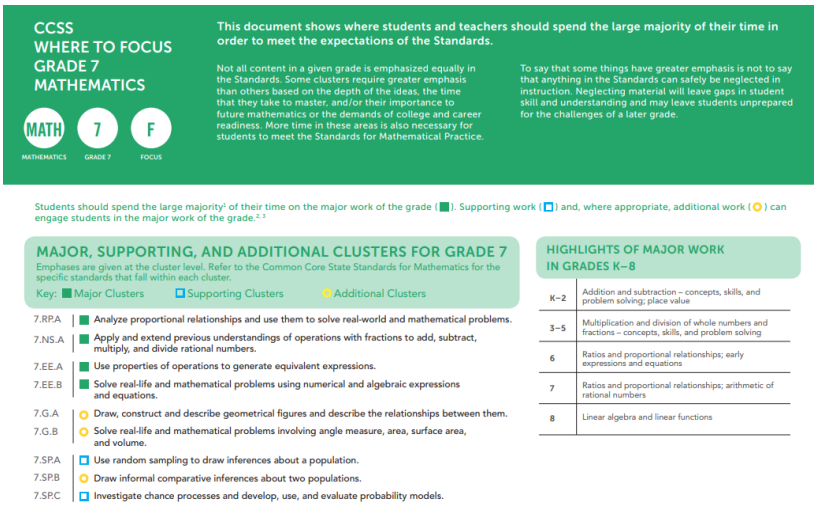
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 7.RP.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such

as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 7 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 7 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS GRADE 7 MATHEMATICS

MATH 7 F

MATHEMATICS GRADE 7 FOCUS

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[2] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 7

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

7.RP.A	■ Analyze proportional relationships and use them to solve real-world and mathematical problems.
7.NS.A	■ Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
7.EE.A	■ Use properties of operations to generate equivalent expressions.
7.EE.B	■ Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
7.G.A	○ Draw, construct and describe geometrical figures and describe the relationships between them.
7.G.B	○ Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
7.SP.A	□ Use random sampling to draw inferences about a population.
7.SP.B	○ Draw informal comparative inferences about two populations.
7.SP.C	□ Investigate chance processes and develop, use, and evaluate probability models.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and
- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most

commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 7. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
7.RP.A	No special considerations for curricula well aligned to analyzing proportional relationships, as detailed by the cluster. Time spent on instruction and practice should NOT be reduced.
7.NS.A	*Incorporate* foundational work on understandings of rational numbers (6.NS.C.5, 6, and 7) to build towards operations with rational numbers (7.NS.A), as detailed by the cluster.
7.EE.A	*Incorporate* foundational work on writing and transforming linear expressions from grade 6 (6.EE.A) into the work of using properties of operations to generate equivalent expressions, as detailed by the cluster (7.EE.A).
7.EE.B.3	No special considerations for curricula well aligned to solving multi-step real-life and mathematical problems, as detailed by the standard. Time spent on instruction and practice should NOT be reduced.
7.EE.B.4	*Emphasize* equations relative to inequalities. *Incorporate* foundational work of reasoning about and solving one-variable equations (6.EE.B) to support students' work on constructing equations to solve problems, as detailed by the standard (7.EE.B.4). Time spent on instruction and practice relating to equations should NOT be reduced.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 7 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
7.G.A.1	*Reduce* time spent creating scale drawings by hand. Time spent on instruction and practice should not exceed what would be spent in a typical year.
7.G.A.2 7.G.A.3	*Eliminate* lessons on drawing and constructing triangles, as detailed in the standard (7.G.A.2). *Eliminate* lessons on analyzing figures that result from slicing three-dimensional figures, as detailed in the standard (7.G.A.3).
7.G.B.4	*Combine* lessons on knowing and using the formulas for the area and circumference of a circle in order to reduce the amount of time spent on this topic. *Limit* the amount of required student practice.
7.G.B.5 7.G.B.6	*Combine* lessons to address key concepts and skills of unknown angles, area, volume, and surface area (7.G.B.5, 7.G.B.6). *Reduce* the amount of required student practice. *Incorporate* conceptual understanding of finding the area of polygons and the volume of right rectangular prisms (6.G.A.1, 6.G.A.2) in teaching real-life and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects (7.G.B.6). Do not require students to use or draw nets to determine surface area.
7.SP.A 7.SP.B	*Combine* lessons on using random sampling to draw inferences about a population and using measures of center and variability to draw comparative inferences

	about two populations in order to reduce the amount of time spent on this topic. *Incorporate* students' grade 6 understanding of statistical variability (6.SP.A). *Limit* the amount of required student practice. *Eliminate* lessons and problems on assessing the degree of overlap on data distributions, as detailed in the standard (7.SP.B.3).
7.SP.C	*Combine* lessons on developing, using, and evaluating probability models in order to emphasize foundational concepts and reduce the amount of time spent on this topic (7.SP.C). *Limit* the amount of required student practice. *Eliminate* lessons and problems on finding probabilities of compound events, as detailed in the standard (7.SP.C.8).

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[16] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Bring in students' funds of knowledge by ensuring materials and problems have a connection with learners while also providing opportunities to learn about the broader world, such as when solving rich tasks involving geometric measurement that have a significant modeling component.	MP4: Model with mathematics
Communicate that students' thinking is valued to build trust and rapport by asking questions that elicit students' thinking, such as when students are analyzing proportional relationships.	MP1: Make sense of problems and persevere in solving them.
Position students as competent and elevate the status of students by valuing different contributions students make when they share representations and make connections between these representations (for example, tables, graphs, equations, and verbal descriptions of proportional relationships).	MP3: Construct viable arguments and critique the reasoning of others.

16 Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

Grade 8 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

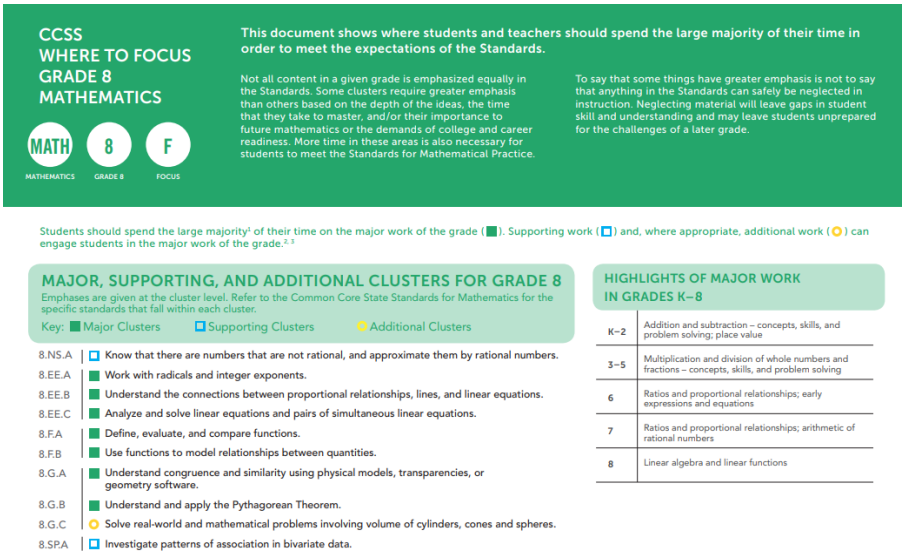
The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 8.EE.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most

powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019–20 school year based on the scope and sequence analysis.

Where to focus Grade 8 Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 8 are highlighted in this Focus Document. The considerations for the 2020–21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.



CCSS WHERE TO FOCUS GRADE 8 MATHEMATICS

MATH 8 F
MATHEMATICS GRADE 8 FOCUS

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[1] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 8

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

8.NS.A	□ Know that there are numbers that are not rational, and approximate them by rational numbers.
8.EE.A	■ Work with radicals and integer exponents.
8.EE.B	■ Understand the connections between proportional relationships, lines, and linear equations.
8.EE.C	■ Analyze and solve linear equations and pairs of simultaneous linear equations.
8.F.A	■ Define, evaluate, and compare functions.
8.F.B	■ Use functions to model relationships between quantities.
8.G.A	■ Understand congruence and similarity using physical models, transparencies, or geometry software.
8.G.B	■ Understand and apply the Pythagorean Theorem.
8.G.C	○ Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.
8.SP.A	□ Investigate patterns of association in bivariate data.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

For the 2020–21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most

important topics; and

- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 8. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
8.EE.A.1	No special considerations for curricula well aligned to the work of integer exponents, as detailed by the standard. Time spent on instruction and practice should NOT be reduced.
8.EE.A.2	*Eliminate* lessons and problems about cube roots.
8.EE.B	No special considerations for curricula well aligned to the work of understanding the connections between proportional relationships, lines, and linear equations, as detailed by the cluster. Time spent on instruction and practice should NOT be reduced.
8.EE.C.7	*Incorporate* students' work on rewriting expressions (7.EE.A) and solving algebraic equations (7.EE.B.4) to support students in analyzing and solving one-variable linear equations.
8.EE.C.8	*Emphasize* the correspondences among: (1) a solution to a pair of simultaneous two-variable equations, (2) a point of intersection of the corresponding lines, and (3) the real-world context for which the equations were created. *Limit* the amount of required student practice in solving systems algebraically.

8.F.A 8.F.B	No special considerations for curricula well aligned to the domain of Functions, as detailed in the clusters and standards within the domain. Time spent on instruction and practice should NOT be reduced.
8.G.B	No special considerations for curricula well aligned to applying the Pythagorean Theorem to solve real-world and mathematical problems (as detailed by standard 8.G.B.7). Time spent on instruction and practice should NOT be reduced. *Eliminate* lessons and problems dedicated to applying the Pythagorean Theorem to find the distance between two points in a coordinate system. *Eliminate* lessons and problems that require students to develop and/or explain a proof of the Pythagorean Theorem (8.G.B.6). Lessons should present a proof of the theorem to students. *Eliminate* lessons about the converse of the Pythagorean Theorem.

Considerations for Addressing <u>REMAINING</u> Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 8 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
8.NS.A	*Integrate* irrational numbers with students' work on square roots (8.EE.A.2) and the Pythagorean Theorem (8.G.B.7).
8.EE.A.3* 8.EE.A.4*	*Eliminate* lessons and practice dedicated to calculating with scientific notation, but include examples of numbers expressed in scientific notation in lessons about integer exponents, as examples of how integer exponents are applicable outside of mathematics classes (8.EE.A.1).
8.G.A*	*Combine* lessons to address key concepts in congruence and *combine* lessons to address key concepts in similarity of two-dimensional figures in order to reduce the amount of time on this topic.

8.G.C	*Combine* lessons to address key concepts with volume, with an emphasis on cylinders, in order to reduce the amount of time on this topic.
8.SP.A	*Emphasize* using linear functions to model association in bivariate measurement data that suggest a linear association, using the functions to answer questions about the data (8.SP.A.3). *Combine* lessons for 8.SP.A.1, 2, and 4 to address key statistical concepts in order to reduce the amount of time on this topic. *Limit* the amount of required student practice.

**While this cluster is Major Work of the Grade, during the 2020–21 school year, it is recommended that it receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[17] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Promote student engagement and identity by embedding systems and routines such as "stronger and clearer each time" or other routines that allow students to engage in productive struggle and take ownership in their progress and growth toward intended learning outcomes.	MP3: Construct viable arguments and critique the reasoning of others.
Enhance students' mathematical agency by including regular collaborative opportunities for students to work together with others as a team on modeling tasks that provide multiple pathways for success and that require reasoning and problem solving.	MP4: Model with mathematics.
Provide opportunities for students to consider tools they may use to solve a problem and justify their appropriateness. For example, they may choose to graph a function defined by expressions to picture the way one quantity depends on the other or use graphing technology to approximate solutions to system of equations	MP5: Use appropriate tools strategically.

[17] Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.

K-8 Appendix
Glossary of the Most Commonly Used Verbs in the Grade-Level Mathematics Recommendations for the 2020–21 School Year

Combine. Give less time and attention to individual lessons by merging a group of lessons in the same domain.

Limit. Cut back on the number of brief, repetitious practice problems that would normally be assigned to students for these topic(s).

Eliminate. Save time by removing the content for this year; the threat to coherence is minimal.

Incorporate. Draw in prior grade-level skills and understandings to support students in engaging successfully with grade-level content. Base decisions related to this additional support on analyses of prior-grade-level scope and sequence and/or factors related to the district-, school-, or classroom-level context.

Integrate. Merge content from the same grade level with other content that has been explicitly specified.

Emphasize/Prioritize. Elevate the importance of one or more standards, concepts, strategies, or problem types above others. Emphasizing is a matter of giving stronger weight to specified things in the cluster or standard, not a matter of limiting entirely to the specified things.

Reduce. Lessen the normal emphasis on specific standards, concepts, strategies, or problem types.

Introduction to Priority Content for High School Mathematics

As the 2020–21 school year approaches, mathematics educators are more interested than ever in knowing which topics or standards are most important. This document provides guidance for the field about content priorities by leveraging the structure and emphases of college- and career-ready mathematics standards. As in previous years, students will need to engage deeply with grade-level mathematics by justifying claims, sharing their thinking and responding to the thinking of others, and solving well-chosen problems that connect to their world and advance them mathematically. This need is especially pronounced in high school mathematics where changes have been slower to take shape. As noted in Catalyzing Change in High School Mathematics: Initiating Critical Conversations:

> Despite the progress that the mathematics education community has made to improve mathematics instruction and learning in kindergarten through grade 8 (NCES, 2015), an implementation gap persists between

> the calls for change and the comprehensive actions needed to support all high school students to learn and appreciate mathematics, to prepare them sufficiently for postsecondary education opportunities or a career (particularly in STEM), and to equip them with the quantitative skills and critical mathematical reasoning skills necessary to make sound decisions in their lives and as members of a democratic society. (NCTM, 2018, p. 2)

Instead of viewing this observation as an additional layer, or one more thing to "get done" while also navigating the recent and ongoing interruptions to schooling, it is possible to elevate the word "catalyzing" in the title of NCTM's book and use this moment to deliver on some of the changes in high school mathematics that have been slow to unfold despite the known implications for just and equitable instruction that such changes could yield. In other words, we can prioritize content in a way that pushes our systems toward more equitable pathways that do a better job than today's pathways do at connecting students to their desired postsecondary opportunities. Because of greater than usual variability in the recent mathematics experiences of returning students, educators will be looking for ways to accelerate learning and "catch up," but students are unlikely to benefit from simply increasing the pace. Indeed, in guidance from the Council of the Great City Schools, Addressing Unfinished Learning After COVID-19 School Closures, a key recommendation is to:

> Focus on the depth of instruction, not on the pace… [A]void the temptation to rush to cover all of the 'gaps' in learning from the last school year. The pace required to cover all of this content will mean rushing ahead of many students, leaving them abandoned and discouraged. It will also feed students a steady diet of curricular junk food: shallow engagement with the content, low standards for understanding, and low cognitive demand—all bad learning habits to acquire. Moreover, at a time when social emotional wellbeing, agency, and engagement are more important than ever, instructional haste may eclipse the patient work of building academic character and motivation. (CGCS, 2020)

But where will the time for in-depth teaching come from? The guidance in this document is intended to help publishers, other designers of instructional materials, and mathematics instructional leaders find new efficiencies in the curriculum that are critical for the unique challenges that have resulted from school closures and anticipated disruptions in the year ahead. In the sections that follow, the most important priorities in high school mathematics are clearly signaled. Opportunities are highlighted for reducing the normal emphasis of particular topics and, in some cases, there are suggestions to omit certain mathematical topics entirely or almost entirely for the 2020–21 school year. In this high school document, all of these suggestions are grounded in the larger national conversation about re-focusing high school mathematics programming and dismantling the longstanding tradition of tracking students by ability, moving

instead towards instructional sequences more strongly associated with postsecondary success across a broad spectrum of college and career options. So while the primary purpose of this document is to inform decisions about which content to prioritize for the 2020–21 school year, it may also serve as a catalyst for the larger structural and content changes described in Catalyzing Change in High School Mathematics: Initiating Critical Conversations (NCTM, 2018). For additional information on high school to postsecondary mathematics pathways, see the "Additional Resources" section of the Appendix.

How do we remain focused on equitable teaching that responds to students' social, emotional, and academic development?

As noted in Addressing Unfinished Learning After COVID-19 School Closures, "social emotional well being, agency, identity, and belonging are more important than ever" (CGCS, 2020). Indeed as focus narrows and there is recommitment to what matters most academically, research tells us that four learning mindsets are particularly important in supporting students' academic development, specifically students' sense of 1) belonging and safety, 2) efficacy, 3) value for effort and growth, and 4) engagement in work that is relevant and culturally responsive (Aspen Institute, 2019; The University of Chicago Urban Education Institute, 2018). Regardless of the mode of learning for the upcoming school year, attention must be given to restoring relationships and a sense of community, so students feel safe, engage fully, and work hard. Students need help knowing that caring adults believe in them and that their ability and competence will grow with their effort. And more than ever, students need to see value and relevance in what they are learning to their lives and their very beings. Investing in students' social-emotional development is done by the entire system of adults.

Confidence about the coming school year will come not only from recognizing the power and dedication of educators across the country, but also from investing in our nation's students. Our beliefs about our students will matter greatly to our success. In Catalyzing Change in High School Mathematics: Initiating Critical Conversations, there is a valuable list of equitable mathematics teaching practices. Some of these practices are especially relevant today -- even as we make adjustments to the modes of instructional delivery (Table 1).

Table 1. Selected equitable mathematics teaching practices from *Catalyzing Change in High School Mathematics: Initiating Critical Conversations* (NCTM, 2018).

Selected Equitable Mathematics Teaching Practices from *Catalyzing Change in High School Mathematics: Initiating Critical Conversations* (NCTM, 2018)
Create structures to position each and every student as a full participant in mathematics and recognize that participation builds agency (Turner, 2013 as cited in NCTM, 2018).
Use tasks that require reasoning, problem solving and modeling (i.e., tasks with high cognitive demand) to build positive student orientation toward mathematics allowing them to see themselves as doers of mathematics (Boaler & Staples, 2008 as cited in NCTM, 2018).
Elicit and use students' ideas and pose purposeful questions to ensure that students see value in their own mathematical thinking and resist pedagogies that reinforce mathematics as a discipline focused solely on right and wrong responses.

Remember that "...equitable mathematics teaching practices are inclusive when they acknowledge that students bring knowledge and resources from their community and make community-based knowledge and resources an integral part of mathematics teaching" (NCTM, 2018). As educators navigate the 2020–21 school year, these teaching practices can provide the necessary grounding to ensure that even as adaptations are made to the mode of instructional delivery that all students are positioned as knowers and doers of mathematics.

Mathematics has seldom been as prominent in the public square as it is now. Fewer citizens are saying, "I'm not a math person." Instead they are reading the news about COVID-19 and contemplating rates, percentages, denominators, and time lags in order to know better how they can safely conduct their lives. Today, mathematics offers students both the empowerment that comes from using mathematical tools to understand and confront an epidemic, as well as the emotional escape that can come from permitting oneself to entertain abstract but beautiful questions at such a time. But caution should be taken here, as the topic of the pandemic is not one that should be tossed around casually or as a way to simply meet a particular mathematics standard without the deep intellectual preparation necessary to engage in conversations about our own humanity and that of our students. Venet (2020) provides some specific, thoughtful guidance for educators to reflect on before they consider how to approach the topic of the pandemic with students in her blog post, "Is the Pandemic a Teachable Moment?"

How should mathematics assessment be considered in light of this instructional guidance?

Uncovering and addressing unfinished learning in the context of course-level work will require teachers to know what students know and can do at the beginning of and throughout the school year. This document is not intended to serve as a guide for assessment products. However, the instructional guidance has implications for assessment in service of equitable course-level instruction. Assessment should:

1. Be used to determine ***how*** to bring students into a unit of course-level instruction, not whether to bring them into it.

2. Center ***formative*** practices (FAST SCASS, 2018). Leverage such sources of information as exit tickets, student work, and student discussions. Use these sources of information to inform instructional choices in connection with high-quality instructional materials.

3. Employ ***targeted*** checks for very specific subject and course-level instructional purposes.

In mathematics in particular, assessment will be more useful, efficient, and supportive of social, emotional, and academic development when it takes place at the instructional triangle of teacher, student, and (course-level) subject. For example, unit-level assessments that publishers provide to accompany high-quality instructional materials are preferable to district-administered interim assessments. In mathematics, we can better understand students' thinking even on assessments by engaging them in discussions of the problems they worked on.

Assessment should be used to determine how to bring students into a unit of course-level instruction, not whether to bring them into it. The point isn't to generate data about what students get right and wrong; it's to understand how to support students as they work. A single multiple choice item will not provide that, nor will a single numerical score. In mathematics, sometimes a couple of well-selected problems do the job of providing the right information to understand how to support students. In a distance learning scenario, one-on-one check-ins with students are likely the best way to understand how they are thinking about some of the important particulars and to help them understand how those particulars connect to the current course-level content they are about to engage with.

Pre-assessment is not needed for every unit in a curriculum. In some cases the prerequisites to a unit are few. Indeed some topics are well thought of as making their first appearance in a given course, and diagnosing about such topics is inappropriate. In many cases, the prerequisites for a unit are naturally and efficiently prompted by the content of the unit itself (remediating just-in-time, not just-in-case). And in some cases, students' entry is based on a longer trajectory over multiple years.

This approach is being proposed as a deliberate alternative to assessment choices that have the potential to serve as a gatekeeper to course-level content. It also deliberately recognizes the very real social-emotional needs of students—particularly students who have been disproportionately affected by the pandemic. After such major disruptions, it is essential that students engage immediately and consistently in the affirmative act of learning new ideas, not be deemed deficient

because of events outside of their control. Regarding administering tests too soon, the Council of the Great City Schools notes in *Addressing Unfinished Learning After COVID-19 School Closures* that "testing appears to put the onus of learning losses on the students themselves—the resulting label of 'deficient' or academically behind may very well further alienate and isolate the students who most need our support" (CGCS, 2020).

Where to focus high school mathematics?

This 2020–21 Support for Instructional Content Prioritization in High School Mathematics (High School Mathematics Instructional Priorities) is designed to provide guidance for decisions about how to elevate some of the most important mathematics in typical high school mathematics courses in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

The High School Mathematics Instructional Priorities document differs in structure from the K–8 document due primarily to the structural difference in the standards themselves: namely, that high school mathematics standards are not organized by grade level, and the ways in which states and/or districts organize standards into courses vary widely. However, similar to the K–8 document, this guidance suggests ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence and thereby creates some additional time in the school year for supporting students in accessing and engaging with the most important high school mathematics content. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the course-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with course-level content is always a priority.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–21 school year. The High School Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with course-level mathematics in the 2020–21 school year.

The High School Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as F-IF.A must be traced back to the standards in order to see the language to which they refer. The High School Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Therefore, the High School Mathematics Instructional Priorities will be used most powerfully by educators who know the standards well and can use existing resources such as those listed in the Appendix.

In constructing the recommendations for the High School Mathematics Instructional Priorities, several resources were consulted to gain an understanding of how the standards are typically organized into courses as well as to make determinations about which standards to prioritize, which standards to de-emphasize, and which standards could reasonably be eliminated under the current circumstances. In addition to the information obtained from the resources listed below, some decisions required professional judgment of the document's lead writers, who also serve in district roles where such guidance for the upcoming school year will be greatly needed.

Resources consulted to inform the assignment of standards to courses:

(1) Utah Core Standards: Major Works (Utah State Board of Education, n.d.)

(2) Achieve the Core's High School Coherence Map (Student Achievement Partners, n.d.)

(3) *Common Core State Standards for Mathematics Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards* (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010b)

Resources consulted to inform the prioritization of standards for 2020–21 school year:

(1) *Common Core State Standards for Mathematics* [for standards-designated modeling] (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010a)

(2) Achieve the Core's Widely Applicable Prerequisites (Student Achievement Partners, n.d.)

(3) *Catalyzing Change in High School Mathematics: Initiating Critical Conversations* (NCTM, 2018)

(4) High School Core Math Cont[1]ent (Oregon Department of Education, in press)

For the 2020–21 school year, prioritization of mathematical concepts and skills will be essential to support all students in meeting course-level expectations. Since the vast majority of high schools across the United States still use either an Algebra 1, Geometry, Algebra 2 sequence or some form of Integrated Mathematics I, II, and III sequence, the standards listed on the pages that follow have been coded in a way that corresponds to these courses. The tables use the following codes associated with each course: Algebra 1 (A1); Geometry (G); Algebra 2 (A2); Integrated Mathematics 1 (M1); Integrated Mathematics 2 (M2); and Integrated Mathematics 3 (M3).

How to Read the Content Prioritization Tables

The tables are first organized by conceptual category and cluster; then below each cluster

1

heading, the associated standards each receive a designation to indicate the recommended level of emphasis within a particular course for the 2020–21 school year. The designations below represent the codes used to communicate this emphasis:

P - Prioritize the importance

R - Reduce the normal emphasis

E - Eliminate content to save time

-- Standard typically not taught

For standards coded with “P” for a particular course, users should interpret that to mean that no special considerations should be made for curricula well aligned to the particulars of that standard, or that the emphasis should be comparable to what it typically is for that course. Standards coded with “R” have suggestions for either reducing the emphasis on certain parts of the standard or for reducing the overall time and attention to the entire standard, or some combination of these adaptations. For these cases, there will be a note accompanying the standard to provide additional guidance related to the particular reduction in emphasis that is being suggested by the coding. Standards coded with “E” are eligible to be eliminated for the upcoming school year to make room for additional support that may be needed to ensure that students can engage successfully with the most important content of each course and to recognize that some of the modes of learning being discussed for the upcoming year simply require more time on fewer topics. The designation “--” indicates that the standard is typically taught in a different course.

One additional set of codes in the tables is designed to help users understand in part how levels of prioritization were determined. These codes are assigned to individual standards and carry the following meanings:

^ Widely Applicable Prerequisite

[2]* Modeling Standard

~ Essential Concepts from Catalyzing Change

Standards that are considered “widely applicable prerequisites” are those with relatively wide applicability across a wide range of postsecondary work and often not taught for course credit in postsecondary settings. Modeling standards are those that lend themselves to developing and analyzing mathematical models for real world phenomena and generally have greater overall importance in the high school sequence of courses. Finally, standards identified as essential in *Catalyzing Change in High School Mathematics: Initiating Critical Conversations* (NCTM, 2018), are also marked as indicated above.

As a final thought, it is important to understand that these tables will not provide a one-to-one

---

2

correspondence between standards and any particular scope and sequence or set of instructional materials. Well-designed mathematics curricula are structured to communicate mathematical ideas in a coherent, logical manner and often integrate standards in ways that cannot be seen when standards are shown as a list. Professional judgment, local context considerations, and flexible decision-making throughout the 2020–21 school year will be essential to effectively using the information presented on the pages that follow.

Prioritization Tables for High School Mathematics

Conceptual Category: Number and Quantity Domain: The Real Number System							
Standard	Language of Standard	Courses					
		A1	G	A2	M1	M2	M3
Cluster: Extend the properties of exponents to rational exponents.							
HS.N.RN.A.1^~	Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{(1/3)3}$ to hold, so $(5^{1/3})^3$ must equal 5.	E	--	P	--	P	--
HS.N.RN.A.2^~ See Note	Rewrite expressions involving radicals and rational exponents using the properties of exponents. Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.	E	--	R	--	R	--
Cluster: Use properties of rational and irrational numbers.							
HS.N.RN.B.3^~	Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.	E	--	--	--	E	--

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Number and Quantity Domain: Quantities							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Reason quantitatively and use units to solve problems. *Note: All standards in this cluster require students to work with quantities and the relationships between them provides grounding for work with expressions, equations, and functions.*							
HS.N.Q.A.1^~	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	P	--	--	P	--	--
HS.N.Q.A.2^~	Define appropriate quantities for the purpose of descriptive modeling.	P	--	E	P	--	--
HS.N.Q.A.3^~	Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	P	--	--	P	--	--

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time | ***-- Standard typically not taught***
^ Widely Applicable Prerequisite **** Modeling Standard*** ***~ Essential Concepts from Catalyzing Change***

Conceptual Category: Number and Quantity Domain: The Complex Number System							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Perform arithmetic operations with complex numbers.							
HS.N.CN.A.1 See Note	Know there is a complex number i such that $i^2 = -1$, and every complex number has the form a + bi with a and b real. *Note: Combine lessons with N.CN.C.7 and A.REI.B.4b to address key concepts and reduce the amount of time spent on this standard.*	--	--	R	--	R	--
HS.N.CN.A.2 See Note	Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	--	R	--	R	--
HS.N.CN.A.3	(+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers.	--	--	--	--	--	--
Cluster: Represent complex numbers and their operations on the complex plane.							
HS.N.CN.B.4	(+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain	--	--	--	--	--	--

	why the rectangular and polar forms of a given complex number represent the same number.						
Cluster: Represent complex numbers and their operations on the complex plane.							
HS.N.CN.B.5	(+) Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation. For example, $(-1 + \sqrt{3}\, i)^3 = 8$ because $(-1 + \sqrt{3}\, i)$ has modulus 2 and argument 120°.	--	--	--	--	--	--
HS.N.CN.B.6	(+) Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints.	--	--	--	--	--	--
Cluster: Use complex numbers in polynomial identities and equations.							
HS.N.CN.C.7 See Note	Solve quadratic equations with real coefficients that have complex solutions. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	--	R	--	R	--
HS.N.CN.C.8	(+) Extend polynomial identities to the complex numbers. For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$.	--	--	***E***	--	***E***	***E***
HS.N.CN.C.9	(+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials.	--	--	***E***	--	***E***	***E***

Note: Vector Quantities and Matrices are not included in AGA or M1M2M3

P - Prioritize the importance *R - Reduce the normal emphasis*

E - Eliminate content to save time | *-- Standard typically not taught*

^ Widely Applicable Prerequisite ** Modeling Standard* *~ Essential Concepts from Catalyzing Change*

Conceptual Category: Algebra Domain: Seeing Structure in Expressions							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Interpret the structure of expressions.							
HS.A-SSE.A.1	Interpret expressions that represent a quantity in terms of its context.						
HS.A-SSE.A.1a^*	Interpret parts of an expression, such as terms, factors, and coefficients.	P	--	P	P	P	P
HS.A-SSE.A.1b^* See Note	Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $P(1+r)^2$ as the product of P and a factor not depending on P. *Note: Reduce overall emphasis, but retain focus on interpreting expressions to shed light on a quantity in context (as described in parent standard A-SSE.A.1).*	R	--	R	R	R	R
HS.A-SSE.A.2^~ See Note	Use the structure of an expression to identify ways to rewrite it. For example, see $x^2 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. *Note: Reduce overall emphasis in earlier algebra-focused courses.*	R	--	P	--	R	P
Cluster: Write expressions in equivalent forms to solve problems.							
HS.A-SSE.B.3	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.						

Cluster: Write expressions in equivalent forms to solve problems.							
HS.A-SSE.B.3a^*	Factor a quadratic expression to reveal the zeros of the function it defines.	P	--	--	--	P	--
HS.A-SSE.B.3b^* See Note	Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic and emphasize the value of the form of the expression over fluency with the specific process of completing the square. Connect to students' work on A-REI.B.4a.*	R	--	--	--	R	--
HS.A-SSE.B.3c^*	Use the properties of exponents to transform expressions for exponential functions. For example, the expression 1.15^t can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.	P	--	E	--	P	--
HS.A-SSE.B.4*^ *See Note*	Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems. *For example, calculate mortgage payments.* *Note: Combine with F-BF.A.2.*	--	--	R	--	--	R

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Algebra Domain: Arithmetic with Polynomials & Rational Expressions							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Perform arithmetic operations on polynomials.							
HS.A-APR.A.1^ See Note	Understand 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. *Note: A-APR.1 - Less emphasis on adding/subtracting and more prioritize multiplying. Combine lessons with A-SSE 2 to address key concepts and reduce the amount of time spent on this standard.*	R	--	P	--	R	P
Cluster: Understand the relationship between zeros and factors of polynomials.							
HS.A-.APR.B.2^ See Note	Know and apply the Remainder Theorem: For a polynomial p(x) and a number a, the remainder on division by x - a is p(a), so p(a) = 0 if and only if (x - a) is a factor of p(x). *Note: Reduce overall emphasis and the number of repetitious practice problems.*	--	--	R	--	--	R
HS.A-APR.B.3^	Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.	E	--	P	--	--	P
Cluster: Use polynomial identities to solve problems.							
HS.A-APR.C.4^	Prove polynomial identities and use them to describe numerical	--	--	E	--	--	E

	relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples.						
Cluster: Use polynomial identities to solve problems.							
HS.A-APR.C.5^	(+) 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.	--	--	E	--	--	E
Cluster: Rewrite rational expressions.							
HS.A-APR.D.6^ See Note	Rewrite simple rational expressions in different forms; write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x), using inspection, long division, or, for the more complicated examples, a computer algebra system. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic. Connect to A-APR.B.2.*	--	--	R	--	--	R
HS.A-APR.D.7^	(+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.	--	--	E	--	--	E

Conceptual Category: Algebra Domain: Creating Equations							
Standard	Language of Standard	Courses					
		A1	G	A2	M1	M2	M3
Cluster: Create equations that describe numbers or relationships.							
HS.A-CED.A.1^*	Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.	P	--	P	P	P	P
HS.A-CED.A.2^*	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	P	--	P	P	P	P
HS.A-CED.A.3^*	Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.	P	--	P	P	--	P
HS.A-CED.A.4^* See Note	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. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	P	--	P	P	P	R

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time | ***-- Standard typically not taught***

^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Algebra Domain: Reasoning with Equations and Inequalities							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Understand solving equations as a process of reasoning and explain the reasoning.							
HS.A-REI.A.1^~ See Note	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. *Note: Lessen the normal emphasis on problem types related to explaining each step and elevate the importance of constructing viable arguments.*	R	--	E	R	--	--
HS.A-REI.A.2^	Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.	--	--	P	--	--	P
Cluster: Solve equations and inequalities in one variable.							
HS.A-REI.B.3^ See Note	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	R	--	--	R	--	--
HS.A-REI.B.4	Solve quadratic equations in one variable.						

Cluster: Solve equations and inequalities in one variable.							
HS.A-REI.B.4a^ See Note	Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form. *Note: Lessen the normal emphasis on deriving the quadratic formula and reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	R	--	--	--	R	--
HS.A-REI.B.4b^~ See Note	Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as a ± bi for real numbers a and b. *Note: Lessen the emphasis on completing the square and emphasize solving by inspection, taking square roots, quadratic formula, and factoring; recognize when quadratic formula gives non-real solutions but reduce emphasis on this case.*	R	--	R	--	R	--
Cluster: Solve systems of equations.							
HS.A-REI.C.5^	Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a	E	--	--	E	--	--

	multiple of the other produces a system with the same solutions.						
Cluster: Solve systems of equations.							
HS.A-REI.C.6^	Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	P	--	E	P	--	--
HS.A-REI.C.7^ See Note	Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	R	--	E	--	R	--
HS.A-REI.C.8	(+) Represent a system of linear equations as a single matrix equation in a vector variable.	--	--	--	--	--	--
HS.A-REI.C.9	(+) Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3×3 or greater).	--	--	--	--	--	--
Cluster: Represent and solve equations and inequalities graphically.							
HS.A-REI.D.10^	Understand 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).	P	--	--	P	--	--
Cluster: Represent and solve equations and inequalities graphically.							
HS.A-	Explain why the x-coordinates of	P	--	P	P	--	P

REI.D.11^*~	the points where the graphs of the equations y = f(x) and y = g(x) intersect are the solutions of the equation f(x) = g(x); find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where f(x) and/or g(x) are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.						
HS.A-REI.D.12^~ See Note	Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. *Note: Emphasize problems that ground the mathematics in real world contexts.*	P	--	--	P	--	--

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Functions Domain: Interpreting Functions							
Standard	Language of Standard	Courses					
		A1	G	A2	M1	M2	M3
Cluster: Understand the concept of a function and use function notation.							
HS.F-IF.A.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).	P	--	--	P	--	--
HS.F-IF.A.2^	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	P	--	--	P	--	--
HS.F-IF.A.3^ See Note	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. Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.	R	--	R	R	--	--
HS.F-.IF.B.4^*~	For a function that models a relationship between two	P	--	P	P	P	P

	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.						
Cluster: Interpret functions that arise in applications in terms of the context. M1 - Linear, exponential, and quadratic M2 - Emphasize selection of appropriate models							
HS.F-IFB.5^*	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.*	P	--	P	P	P	P
HS.F-IF.B.6^*	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.	P	--	P	P	P	P
Cluster: Analyze functions using different representations.							
HS.F-IF.C.7	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.						
HS.F-IF.C.7a^*	Graph linear and quadratic functions and show intercepts, maxima, and minima.	P	--	--	P	P	--
HS.F-IF.C.7b^* See Note	Graph square root, cube root, and piecewise-defined functions,	R	--	P	--	P	R

	including step functions and absolute value functions. *Note: Eliminate step functions; emphasize square root and cube root.*						
HS.F-IF.C.7c^*	Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.	--	--	P	--	--	P
Cluster: Analyze functions using different representations.							
HS.F-IF.C.7d	(+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.	--	--	--	--	--	--
HS.F-IF.C.7e^*	Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.	P	--	P	P	--	P
HS.F-IF.C.8	Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function.						
HS.F-IF.C.8a^ See Note	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. *Note: Reduce the number of repetitious practice problems related to factoring trinomials over the integers, and emphasize using the factored form to draw conclusions. Connect to HS.A-SSE.B.3b.*	R	--	R	--	R	--
HS.F-IF.C.8b^	Use the properties of exponents to interpret	E	--	E	--	E	--

	expressions for exponential functions. For example, identify percent rate of change in functions such as $y = (1.02)^t$, $y = (0.97)^t$, $y = (1.01)12^t$, $y = (1.2)^{t/10}$, and classify them as representing exponential growth or decay.						
Cluster: Analyze functions using different representations.)							
HS.F-IF.C.9^ See Note	**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.** ***Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.***	**P**	**--**	**R**	**P**	**P**	**P**

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Functions Domain: Building Functions							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Build a function that models a relationship between two quantities.							
HS.F-BF.A.1	Write a function that describes a relationship between two quantities.						
HS.F-BF.A.1a^* See Note	Determine an explicit expression, a recursive process, or steps for calculation from a context. *Note: Combine with F-BF.A.2, F-LE.A.2 and F-IF.A.3 to address key concepts and reduce the amount of time spent on this standard.*	R	--	E	R	R	E
HS.F-BF.A.1b^*	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.	E	--	E	E	E	E
HS.F-BF.A.1c	(+) Compose functions. For example, 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.	--	--	--	--	--	--
HS.F-BF.A.2* See Note	Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate	R	--	R	R	--	--

	between the two forms. *Note: Combine with F-BF.A.1b and F-LE.A.2 to address key concepts and reduce the amount of time spent on this standard.*						
Cluster: Build new functions from existing functions.							
HS.F-BF.B.3	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.	P	--	P	P	P	P
HS.F-BF.B.4	Find inverse functions. For example, f(x) = or f(x) = $(x+1)/(x-1)$ for $x \neq 1$.						
HS.F-BF.B.4a See Note	Solve an equation of the form f(x) = c for a simple function f that has an inverse and write an expression for the inverse. Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.	E	--	R	--	E	R
HS.F-BF.B.4b See Note	(+) Verify by composition that one function is the inverse of another. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	--	--	--	--	R
HS.F-BF.B.4c	(+) Read values of an inverse function from a graph or a table, given that the function has an inverse.	--	--	--	--	E	E

HS.F-BF.B.4d	(+) Produce an invertible function from a non-invertible function by restricting the domain.	--	--	--	--	E	E
HS.F-BF.B.5	(+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.	--	--	--	--	--	--

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time | ***-- Standard typically not taught***
^ Widely Applicable Prerequisite **** Modeling Standard*** ***~ Essential Concepts from Catalyzing Change***

Conceptual Category: Functions Domain: Linear, Quadratic, and Exponential							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Construct and compare linear, quadratic, and exponential models and solve problems.							
HS.F-LE.A.1	Distinguish between situations that can be modeled with linear functions and with exponential functions.						
HS.F-LE.A.1a^*~	Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.	P	--	--	P	--	--
HS.F-LE.A.1b^*~	Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.	P	--	--	P	--	--
HS.F-LE.A.1c^*~	Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.	P	--	--	P	--	--
HS.F-LE.A.2*~	Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).	P	--	E	P	--	--
HS.F-LE.A.3* *See Note*	Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.	R	--	--	R	R	R

	Note: Combine with F-LE.A.1b and F-LE.A.1c to address key concepts and reduce the amount of time spent on this standard.						
Cluster: Construct and compare linear, quadratic, and exponential models and solve problems.							
HS.F-LE.A.4* See Note	For exponential models, express as a logarithm the solution to abct = d where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	--	R	--	--	R
Cluster: Interpret expressions for functions in terms of the situation they model.							
HS.F-LE.B.5*~	Interpret the parameters in a linear or exponential function in terms of a context.	P	--	E	P	--	--

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time | ***-- Standard typically not taught***
^ Widely Applicable Prerequisite **** Modeling Standard*** ***~ Essential Concepts from Catalyzing Change***

Conceptual Category: Functions Domain: Trigonometric Functions							
Standard	Language of Standard	Courses					
		A1	G	A2	M1	M2	M3
Cluster: Extend the domain of trigonometric functions using the unit circle.							
HS.F-TF.A.1	Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	--	--	P	--	--	P
HS.F-TF.A.2	Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.	--	--	P	--	--	P
HS.F-TF.A.3	(+) Use special triangles to determine geometrically the values of sine, cosine, tangent for π/3, π/4 and π/6, and use the unit circle to express the values of sine, cosine, and tangent for x, π + x, and 2π - x in terms of their values for x, where x is any real number.	--	--	--	--	--	--
HS.F-TF.A.4	(+) Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.	--	--	--	--	--	--
Cluster: Model periodic phenomena with trigonometric functions.							
HS.F-TF.B.5*	Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	--	--	P	--	--	P
HS.F-TF.B.6	(+) Understand that restricting a trigonometric function to a domain	--	--	--	--	--	--

	on which it is always increasing or always decreasing allows its inverse to be constructed.						
Cluster: Model periodic phenomena with trigonometric functions.							
HS.F-TF.B.7	(+) Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context.	--	--	--	--	--	--
Cluster: Prove and apply trigonometric identities.							
HS.F-TF.C.8	Prove the Pythagorean identity(θ) + (θ) = 1 and use it to find sin(θ), cos(θ), or tan(θ) given sin(θ), cos(θ), or tan(θ) and the quadrant of the angle.	--	--	E	--	E	E
HS.F-TF.C.9	(+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems.	--	--	--	--	--	--

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite **** Modeling Standard*** ***~ Essential Concepts from Catalyzing Change***

Conceptual Category: Geometry Domain: Congruence							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Experiment with transformations in the plane.							
HS.G-CO.A.1^ See Note	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. *Note: Combine with G-CO.A.4 to address key concepts and reduce the amount of time spent on this standard.*	--	R	--	R	--	--
HS.G-CO.A.2^~	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).	--	P	--	P	--	--
HS.G-CO.A.3^~ See Note	Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself. *Note: Combine with G-CO.A.2 to address key concepts and reduce the amount of time spent on the standard.*	--	R	--	R	--	--
HS.G-CO.A.4^	Develop definitions of rotations,	--	P	--	P	--	--

	reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.						
HS.G-CO.A.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.	--	P	--	P	--	--
Cluster: Understand congruence in terms of rigid motions.							
HS.G-CO.B.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.	--	P	--	P	--	--
HS.G-.CO.B.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.	--	P	--	P	--	--
HS.G-CO.B.8^	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.	--	P	--	P	--	--
Cluster: Prove geometric theorems.							
HS.G-CO.C.9^~	Prove theorems about lines and	--	P	--	--	P	--

	angles. Theorems include: vertical angles are congruent; when a 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.						
HS.G-CO.C.10^~ See Note	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. *Note: Reduce overall time spent on proving theorems.*	--	R	--	--	R	--
Cluster: Prove geometric theorems.							
HS.G-CO.C.11 See Note	Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals. *Note: Reduce overall time spent on proving theorems.*	--	R	--	--	R	--
Cluster: Make geometric constructions.							
HS.G-CO.D.12	Make formal geometric constructions with a variety of tools and methods (compass and	--	P	--	P	--	--

	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.						
HS.G-CO.D.13	Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.	--	E	--	E	--	--

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Geometry Domain: Similarity, Right Triangles, and Trigonometry							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Understand similarity in terms of similarity transformations.							
HS.G-SRT.A.1	Verify experimentally the properties of dilations given by a center and a scale factor:						
HS.G-SRT.A.1a^	A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.	--	P	--	--	P	--
HS.G-SRT.A.1b^ See Note	The dilation of a line segment is longer or shorter in the ratio given by the scale factor. *Note: Combine with students' work on G-SRT.A.1a.*	--	R	--	--	R	--
HS.G-SRT.A.2^~	Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.	--	P	--	--	P	--
HS.G-SRT.A.3^	Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.	--	P	--	--	P	--
Cluster: Prove theorems involving similarity.							
HS.G-SRT.B.4^	Prove theorems about triangles.	--	P	--	--	P	--

	Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.						
HS.G-SRT.B.5^	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	--	P	--	--	P	--
Cluster: Define trigonometric ratios and solve problems involving right triangles.							
HS.G-SRT.C.6^*	Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.	--	P	--	--	P	--
HS.G-.SRT.C.7 See Note	Explain and use the relationship between the sine and cosine of complementary angles. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	R	--	--	R	--
HS.G-SRT.C.8*~ See Note	Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	R	--	--	R	--
Cluster: Apply trigonometry to general triangles.							
HS.G-SRT.D.9	(+) Derive the formula A = 1/2 ab sin(C) for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the	--	E	--	--	--	E

	opposite side.						
HS.G-SRT.D.10 ^ See Note	(+) Prove the Laws of Sines and Cosines and use them to solve problems. *Note: Lessen the normal emphasis on proofs and elevate the importance of solving problem types.*	--	E	--	--	--	R
HS.G-SRT.D.11^ See Note	(+) Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces). *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	E	--	--	--	R

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Geometry Domain: Circles							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Understand and apply theorems about circles.							
HS.G-C.A.1	Prove that all circles are similar.	--	E	--	--	E	--
HS.G-C.A.2 See Note	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle. *Note: Emphasize primarily the concept of perpendicularity between the radius and any tangent to the circle.*	--	R	--	--	R	R
HS.G-C.A.3	Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.	--	E	--	--	E	--
HS.G-C.A.4	(+) Construct a tangent line from a point outside a given circle to the circle.	--	E	--	--	E	--
Cluster: Find arc lengths and areas of sectors of circles.							
HS.G-C.B.5 *See Note*	Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.	--	R	--	--	R	R

	Note: Reduce overall emphasis on the standard but retain the core definition of radian measure as described in the standard.						

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time ***|*** ***-- Standard typically not taught***
^ Widely Applicable Prerequisite **** Modeling Standard*** ***~ Essential Concepts from Catalyzing Change***

Conceptual Category: Geometry Domain: Expressing Geometric Properties with Equations							
Standard	Language of Standard	Courses					
		A1	G	A2	M1	M2	M3
Cluster: Translate between the geometric description and the equation for a conic section.							
HS.G-GPE.A.1	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.	--	P	--	--	P	--
HS.G-GPE.A.2	Derive the equation of a parabola given a focus and directrix.	--	E	E	--	E	--
HS.G-GPE.A.3	(+) Derive the equations of ellipses and hyperbolas given the foci, using the fact that the sum or difference of distances from the foci is constant.	--	--	--	--	--	E
Cluster: Use coordinates to prove simple geometric theorems algebraically.							
HS.G-GPE.B.4~	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 $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.	--	P	--	P	P	--
HS.G-GPE.B.5~ See Note	Prove the slope criteria for parallel and perpendicular lines and use	--	R	--	R	--	--

	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). *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*						
Cluster: Use coordinates to prove simple geometric theorems algebraically.							
HS.G-GPE.B.6	Find the point on a directed line segment between two given points that partitions the segment in a given ratio.	--	E	--	--	E	--
HS.G-GPE.B.7* See Note	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula. *Note: Emphasize understanding the formula conceptually, use it to solve real world problems, and reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	R	--	R	--	--

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Geometry Domain: Geometric Measurement and Dimension							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Explain volume formulas and use them to solve problems.							
HS.G-GMD.A.1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.	--	E	--	--	E	--
HS.G-GMD.A.2	(+) Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures.	--	E	--	--	--	--
HS.G-GMD.A.3*~	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	--	P	--	--	P	--
Cluster: Visualize relationships between two-dimensional and three-dimensional objects.							
HS.G-GMD.B.4 *See Note*	Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	R	--	--	--	R

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time | ***-- Standard typically not taught***
^ Widely Applicable Prerequisite **** Modeling Standard*** ***~ Essential Concepts from Catalyzing Change***

Conceptual Category: Geometry Domain: Modeling with Geometry							
Standard	Language of Standard	Courses					
		A1	G	A2	M1	M2	M3
Cluster: Apply geometric concepts in modeling situations.							
HS.G-MG.A.1*~	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).*	--	P	--	--	--	P
HS.G-MG.A.2*~	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).*	--	P	--	--	--	P
HS.G-MG.A.3*~	Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).*	--	P	--	--	--	P

P - Prioritize the importance ***R - Reduce the normal emphasis***
E - Eliminate content to save time | ***-- Standard typically not taught***
^ Widely Applicable Prerequisite **** Modeling Standard*** ***~ Essential Concepts from Catalyzing Change***

Conceptual Category: Statistics & Probability Domain: Interpreting Categorical and Quantitative Data							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Summarize, represent, and interpret data on a single count or measurement variable.							
HS.S-ID.A.1*~	Represent data with plots on the real number line (dot plots, histograms, and box plots).	E	--	--	E	--	--
HS.S-ID.A.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.	P	--	--	P	--	--
HS.S-ID.A.3*~	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	P	--	--	P	--	--
HS.S-ID.A.4*~	Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.	--	--	P	--	--	P
Cluster: Summarize, represent, and interpret data on two categorical and quantitative variables.							
HS.S-ID.B.5*~	Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations	P	--	--	P	--	--

	and trends in the data.						
Cluster: Summarize, represent, and interpret data on two categorical and quantitative variables.							
HS.S-ID.B.6	Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.						
HS.S-ID.B.6a*~	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, quadratic, and exponential models.	P	--	E	P	--	--
HS.S-ID.B.6b*~	Informally assess the fit of a function by plotting and analyzing residuals.	P	--	--	P	--	--
HS.S-ID.B.6c*~	Fit a linear function for a scatter plot that suggests a linear association.	P	--	--	P	--	--
Cluster: Interpret linear models.							
HS.S-ID.C.7^*~	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.	P	--	--	P	--	--
HS.S-ID.C.8*~ See Note	Compute (using technology) and interpret the correlation coefficient of a linear fit. *Note: Emphasize interpreting the correlation coefficient.*	R	--	--	R	--	--
HS.S-ID.C.9*~	Distinguish between correlation and causation.	P	--	--	P	--	--

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Statistics & Probability Domain: Making Inferences and Justifying Conclusions							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Understand and evaluate random processes underlying statistical experiments.							
HS.S-IC.A.1^*~	Understand statistics as a process for making inferences about population parameters based on a random sample from that population.	--	--	P	--	--	P
HS.S-IC.A.2^*~	Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?	--	--	P	--	--	P
Cluster: Make inferences and justify conclusions from sample surveys, experiments, and observational studies.							
HS.S-IC.B.3*~ See Note	Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. *Note: Combine lessons with S-IC.B.4 and S-IC.B.5 to address key concepts and reduce the amount of time spent on this standard. Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	--	R	--	--	R
HS.S-IC.B.4*~ See Note	Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random	--	--	R	--	--	R

	sampling. *Note: Combine lessons with S-IC.B.3 and S-IC.B.5 to address key concepts and reduce the amount of time spent on this standard. Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*						
Cluster: Make inferences and justify conclusions from sample surveys, experiments, and observational studies.							
HS.S-IC.B.5*~ See Note	Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. *Note: Combine lessons with S-IC.B.3 and S-IC.B.4 to address key concepts and reduce the amount of time spent on this standard. Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	--	R	--	--	R
HS.S-IC.B.6*~ *See Note*	Evaluate reports based on data. *Note: Reduce the normal emphasis.*	--	--	R	--	--	R

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Statistics & Probability Domain: Conditional Probability and the Rules of Probability							
Standard	**Language of Standard**	**Courses**					
		A1	**G**	**A2**	**M1**	**M2**	**M3**
Cluster: Understand independence and conditional probability and use them to interpret data.							
HS.S-.CP.A.1*~	Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").	--	P	E	--	P	--
HS.S-.CP.A.2*~ See Note	Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. *Note: Combine with lessons on other S-CP.A standards to address key concepts and reduce the amount of time spent on this standard. Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	R	E	--	R	--
HS.S-CP.A.3*~ See Note	Understand 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. *Note: Combine with lessons on other S-CP.A standards to address key concepts and reduce the amount of*	--	R	E	--	R	--

	time spent on this standard. Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.						
Cluster: Understand independence and conditional probability and use them to interpret data.							
HS.S-CP.A.4*~	Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.	--	P	E	--	P	--
HS.S-CP.A.5*~	Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.	--	P	E	--	P	--
Cluster: Use the rules of probability to compute probabilities of compound events.							
HS.S-CP.B.6* See Note	Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*	--	R	E	--	R	--
HS.S-CP.B.7*	Apply the Addition Rule, P(A or B) =	--	R	E	--	R	--

See Note	P(A) + P(B) - P(A and B), and interpret the answer in terms of the model. *Note: Reduce the number of repetitious practice problems that would normally be assigned to students for this topic.*						
Cluster: Use the rules of probability to compute probabilities of compound events.							
HS.S-CP.B.8*	(+) Apply the general Multiplication Rule in a uniform probability model, P(A and B) = P(A)P(B|A) = P(B)P(A|B), and interpret the answer in terms of the model.	--	E	E	--	E	--
HS.S-CP.B.9*	(+) Use permutations and combinations to compute probabilities of compound events and solve problems.	--	E	E	--	E	--

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

Conceptual Category: Statistics & Probability Domain: Using Probability to Make Decisions								
Standard	Language of Standard	Courses						
		A1	G	A2	M1	M2	M3	A1
Cluster: Calculate expected values and use them to solve problems.								
HS.S-MD.A.1	(+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.	--	--	--	--	--	--	
HS.S-MD.A.2	(+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.	--	--	--	--	--	--	
HS.S-MD.A.3	(+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value. For example, 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.	--	--	--	--	--	--	
HS.S-MD.A.4	(+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value. For example, find a current data distribution on the number of TV sets per household in the United States, and calculate the expected number of sets per household. How	--	--	--	--	--	--	

	many TV sets would you expect to find in 100 randomly selected households?						
Cluster: Use probability to evaluate outcomes of decisions.							
HS.S-MD.B.5	(+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.						
HS.S-MD.B.5a	Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant.	--	--	--	--	--	--
HS.S-MD.B.5b	Evaluate and compare strategies on the basis of expected values. For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident.	--	--	--	--	--	--
HS.S-MD.B.6	(+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).	--	E	E	--	E	E
HS.S-MD.B.7	(+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).	--	E	E	--	E	E

P - Prioritize the importance R - Reduce the normal emphasis
E - Eliminate content to save time | -- Standard typically not taught
^ Widely Applicable Prerequisite * Modeling Standard ~ Essential Concepts from Catalyzing Change

References

Adams, M. J. (2011a). Advancing our students' language and literacy: The challenge of complex texts. American Educator, 34(4), 3

Adams, M. J. (2011b). The relation between alphabetic basics, word recognition, and reading. In S. J. Samuels & A. E. Farstrup (Eds.), What research has to say about reading instruction (pp. 4–24). International Reading Association.

Allensworth, E. M., Farrington, C. A., Gordon, M. F., Johnson, D. W., Klein, K., McDaniel, B., & Nagaoka, J. (2018). Supporting social, emotional, & academic development: Research implications for educators. Chicago, IL: University of Chicago Consortium on School Research.

Aspen Institute. (2019). Integrating social, emotional, and academic development (SEAD): An action guide for school leadership teams. The Aspen Institute Education & Society Program.

Brown, L. T., Mohr, K. A., Wilcox, B. R., & Barrett, T. S. (2018). The effects of dyad reading and text difficulty on third-graders' reading achievement. The Journal of Educational Research, 111(5), 541–553.

Burke, J., & Gilmore, B. (2015). Academic moves for college and career readiness, grades 6-12: 15 must-have skills every student needs to achieve. Corwin Press.

Cervetti, G. N., Wright, T. S., & Hwang, H. (2016). Conceptual coherence, comprehension, and vocabulary acquisition: A knowledge effect?
Reading and Writing, 29(4), 761–779.

Collaborative for Academic, Social, and Emotional Learning. (2013). CASEL guide: Effective social and emotional learning programs—preschool and elementary school edition.

Council of the Great City Schools. (2020). Addressing unfinished learning after COVID-19 school closures. Washington, DC: Author. www.cgcs.org

Hawkins, J., Ginty, E., Kurzman, K. L., Leddy, D., & Miller, J. (2008). Writing for understanding: Using backward design to help all students write effectively. South Strafford, VT: Vermont Writing Collaborative.

"How to Leverage PLCs for School Improvement." (2015). Solution Tree Press. Accessed July 30, 2020. https://www.solutiontree.com/free-resources/plcatwork/hlplcsi#

Kintsch, W. (1998). Comprehension: A paradigm for cognition. New York, NY: Cambridge University Press.

Liben, D., & Paige, D. D. (2017). Why a structured phonics program is effective. Student Achievement Partners. Retrieved from https://achievethecore.org/aligned/wp-content/uploads/2017/03/Why-a-Structured-Phonics-Program-is-Effective.pdf

Marzano, Robert J. (2011). “Leaders of Learning: How District, School, and Classroom Leaders Improve Student Achievement.” *Marzano Resources.* Accessed July 23, 2020. https://www.marzanoresources.com/resources/tips/lol_tips_archive#tip5

McKeown, M. G., Beck, I. L., & Blake, R. G. (2009). Rethinking reading comprehension instruction: A comparison of instruction for strategies and content approaches. Reading Research Quarterly, 44(3), 218–253.

National Reading Panel. (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. National Institute of Child Health and Human Development, National Institutes of Health.

Paige, D. D., & Magpuri-Lavell, T. (2014). Reading fluency in the middle and secondary grades. International Electronic Journal of Elementary Education, 7(1), 83–96.

Pinnell, G. S., Pikulski, J. J., Wixson, K. K., Campbell, J. R., Gough, P. B., & Beatty, A. S. (1995). Listening to children read aloud: Oral fluency.
Washington, DC: US Department of Education, National Center for Education Statistics.

Recht, D. R., & Leslie, L. (1988). Effect of prior knowledge on good and poor readers' memory of text. Journal of Educational Psychology, 80(1), 16.

Shanahan, T., Fisher, D., & Frey, N. (2012). The challenge of challenging text. Educational Leadership, 69(6), 58–62. Retrieved from http://www.ascd.org/publications/educational-leadership/mar12/vol69/num06/The-Challenge-of-Challenging-Text.aspx

Shanahan, T. (2005). The National Reading Panel Report: Practical Advice for Teachers (Rep.). Naperville, IL: Learning Point Associates. Retrieved September 18, 2020, from https://files.eric.ed.gov/fulltext/ED489535.pdf (ERIC Document Reproduction Service No. ED489535)

Sims, Bishop, R. (1990). “Windows, mirrors, and sliding glass doors” Perspectives: Choosing and Using Books for the Classroom, 6, 3 (1990).

Student Achievement Partners. (2020a). Research supporting foundational skills instruction. Retrieved from https://achievethecore.org/content/upload/Research%20Supporting%20Foundational%20Skills%20Instruction.pdf

Student Achievement Partners. (2020b). 2020-21 Priority Instructional Content in English Language Arts/Literacy and Mathematics. Retrieved from https://achievethecore.org/page/3267/2020-21-priority-instructional-content-in-english-language-arts-literacy-and-mathematics.

Student Achievement Partners. (2020c). 2020-21 Support For Instructional Content Prioritization in High School Mathematics. Retrieved from https://achievethecore.org/page/3267/2020-21-priority-instructional-content-in-english-language-arts-literacy-and-mathematics

The University of Chicago Urban Education Institute. (2018). Cultivating social, emotional, and academic development. In New knowledge and developments in public education (pp. 11–16).

Wiener, R. (2020). Recovery and renewal: Principles for advancing public education post-crisis. The Aspen Institute Education & Society Program.

Willingham, D. T. (2006). How knowledge helps. American Educator, 30(1), 30–37.

Willingham, D. T. (2010). Why do students remember everything that's on television and forget everything I say? In Why don't students like school: A cognitive scientist answers questions about how the mind works and what it means for the classroom (pp. 53–86). Jossey-Bass

Wisconsin Department of Public Instruction (2020a). Wisconsin Standards for English Language Arts. Retrieved from https://dpi.wi.gov/sites/default/files/imce/standards/New%20pdfs/ELAStandards2020.pdf.

Wisconsin Department of Public Instruction (2020b). Instructional Practice Guide for Equitable Teaching and Learning in English Language Arts. Retrieved from https://dpi.wi.gov/ela/instruction/instructional-practice-guides.