

## Shifts at a Glance

# College- and Career-Ready Shifts in Mathematics

 **Focus** strongly where the standards focus.

**Focus:** The Common Core and other college- and career-ready (CCR) standards call for a greater focus in mathematics. Rather than racing to cover topics in a mile-wide, inch-deep curriculum, CCR standards require us to significantly narrow and deepen the way time and energy the way time and energy are spent in the math classroom. We focus deeply on the Major Work\* of each grade so that students can gain strong foundations: solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the math classroom.

 **Coherence:** Think across grades and link to major topics within grades.

**Thinking across grades:** College- and career-ready standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding onto foundations built in previous years. Each standard is not a new event, but an extension of previous learning.

**Linking to major topics:** Instead of allowing additional or supporting topics to detract from the focus of the grade, these concepts serve the grade-level focus. For example, instead of data displays as an end in themselves, they are an opportunity to do grade-level word problems.

 **Rigor:** In major topics\*, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

**Conceptual understanding:** CCR standards call for conceptual understanding of key concepts, such as place value and ratios. Students must be able to access concepts from a number of perspectives so that they are able to see math as more than a set of mnemonics or discrete procedures.

**Procedural skill and fluency:** CCR standards call for speed and accuracy in calculation. Students are given opportunities to practice core functions such as single-digit multiplication so that they have access to more complex concepts and procedures.

**Application:** CCR standards call for students to use math flexibly for applications in problem-solving contexts. In content areas outside of math, particularly science, students are given the opportunity to use math to make meaning of and access content.

## High-level Summary 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 equations and linear functions

\*For a list of major, additional, and supporting clusters by grade, please refer to 'Focus in Math' at [achievethecore.org/focus](http://achievethecore.org/focus)

## Shifts at a Glance

# College- and Career-Ready Shifts in English Language Arts/Literacy

 **Complexity:** Practice regularly with complex text and its academic language.

Rather than focusing solely on the skills of reading and writing, the Common Core and other college- and career-ready (CCR) standards highlight the growing complexity of the texts students must read to be ready for the demands of college and careers. CCR standards build a staircase of text complexity so that all students are ready for the demands of college- and career-level reading no later than the end of high school. Closely related to text complexity—and inextricably connected to reading comprehension—is a focus on academic vocabulary: words that appear in a variety of content areas (such as *ignite* and *commit*).

 **Evidence:** Ground reading, writing, and speaking in evidence from text, both literary and informational.

College- and career-ready standards place a premium on students writing to sources, i.e., using evidence from texts to present careful analyses, well-defended claims, and clear information. Rather than asking students questions they can answer solely from their prior knowledge or experience, CCR standards expect students to answer questions that depend on their having read the text or texts with care. CCR standards also require the cultivation of narrative writing throughout the grades; in later grades, a command of sequence and detail will be essential for effective argumentative and informational writing.

Likewise, the reading standards focus on students' ability to read carefully and grasp information, arguments, ideas, and details based on text evidence. Students should be able to answer a range of text-dependent questions, questions in which the answers require inferences based on careful attention to the text.

 **Knowledge:** Build knowledge through content-rich nonfiction.

Building knowledge through content rich nonfiction plays an essential role in literacy and in CCR standards. In K–5, fulfilling the standards requires a 50–50 balance between informational and literary reading. Informational reading primarily includes content rich nonfiction in history/social studies, science, and the arts; the K–5 standards strongly recommend that students build coherent general knowledge both within each year and across years. In grades 6–12, ELA classes pay much greater attention to a specific category of informational text—literary nonfiction—than has been traditional. In grades 6–12, the standards for literacy in history/social studies, science, and technical subjects ensure that students can independently build knowledge in these disciplines through reading and writing.

To be clear, CCR standards—including the Common Core—require substantial attention to literature throughout K–12, as half of the required work in K–5 and the core of the work of 6–12 ELA.