

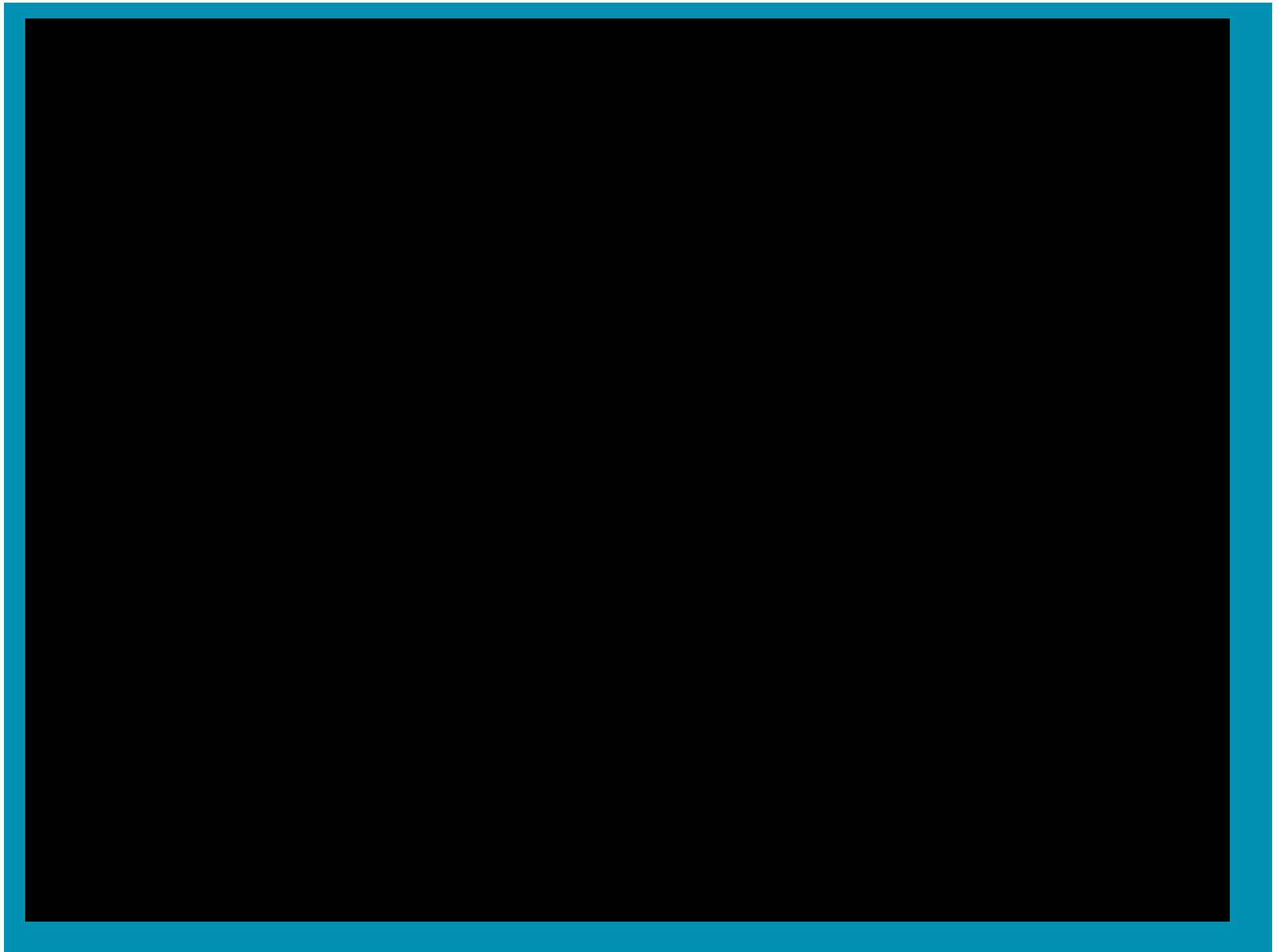


Understanding the Common Core State Standards



Achieve

American Diploma Project Network



Why Common Core State Standards?



We need them because

- ◆ Disparate standards across the states
- ◆ Global, not neighborhood competition
- ◆ For many young people, high school wasn't preparing them for college or careers

Why the CCSS Are Important

- ◆ Prepare students with knowledge and skills to succeed in college and career
- ◆ Ensure consistent expectations regardless of a student's zip code
- ◆ Provide educators, parents and students with clear, focused guideposts
- ◆ Offer economies of scale and sharing of best practices



The Common Core State Standards Initiative

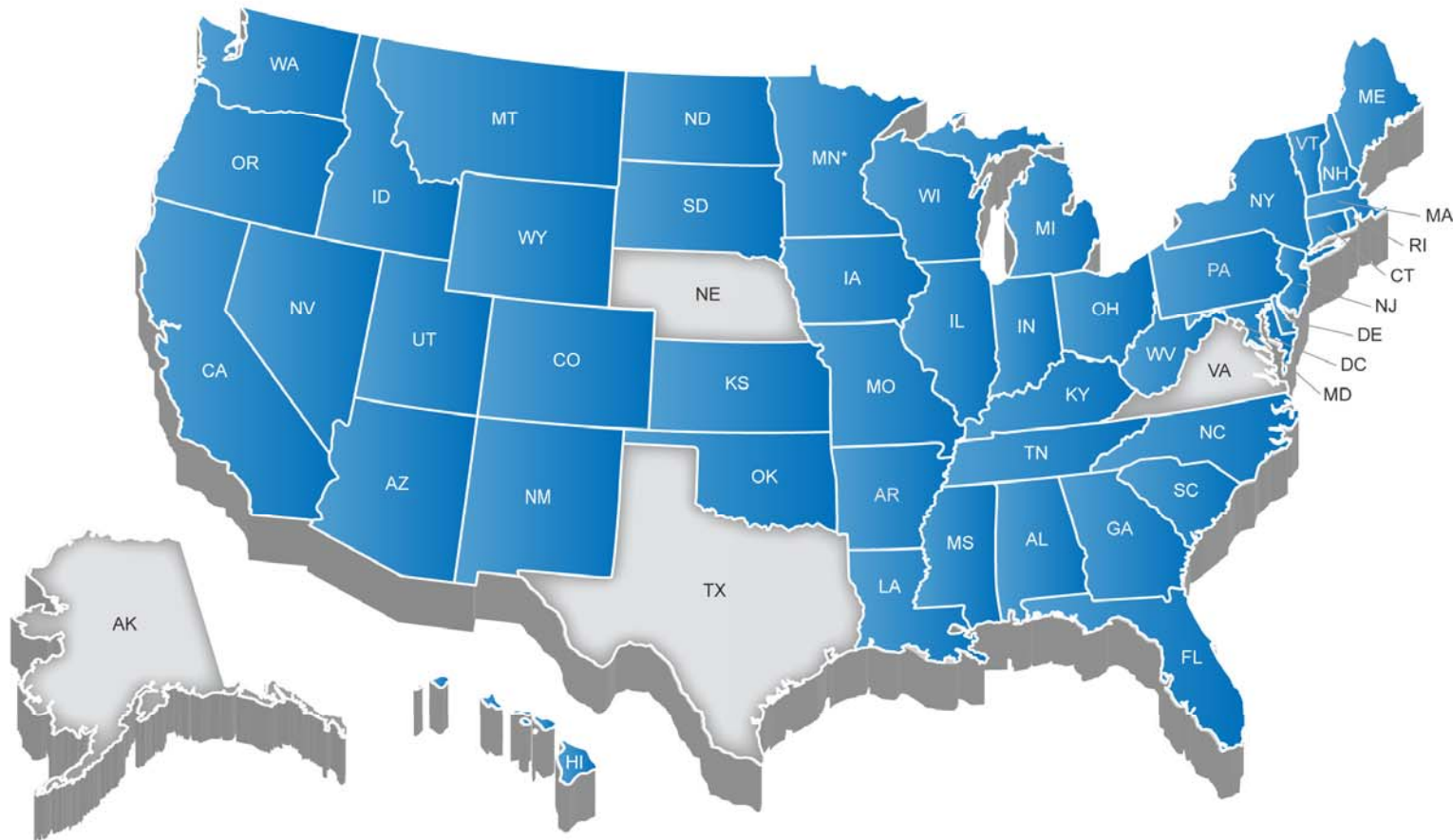


Beginning in the spring of 2009, Governors and state commissioners of education from 48 states, 2 territories and the District of Columbia committed to developing a common core of state K-12 English-language arts (ELA) and mathematics standards.

The Common Core State Standards Initiative (CCSSI) was a state-led effort coordinated by the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO).
www.corestandards.org

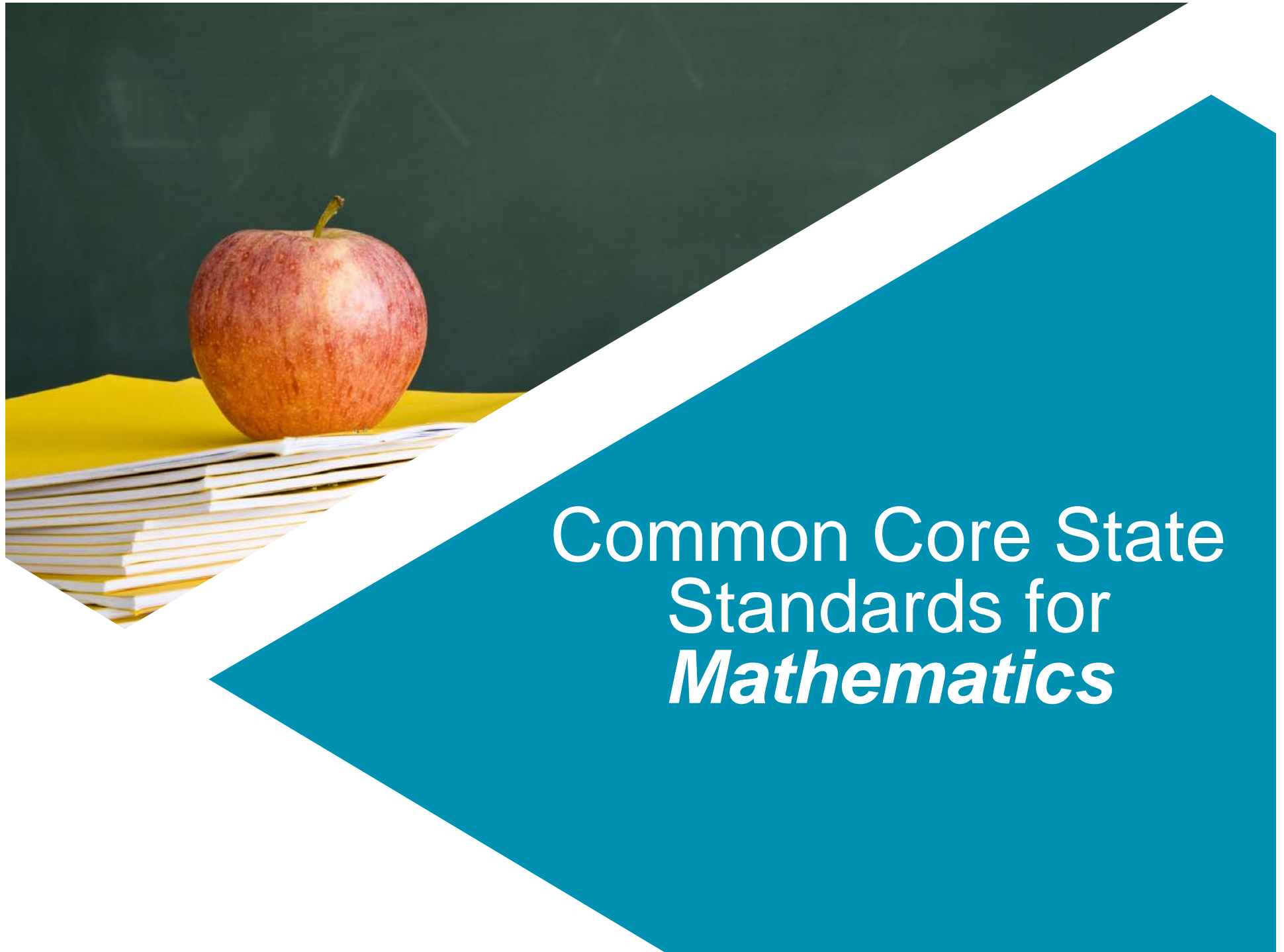


46 States + DC Have Adopted the Common Core State Standards



* Minnesota adopted the CCSS in ELA only





Common Core State
Standards for
Mathematics

Key Instructional Shifts in Mathematics



- ◆ The Common Core State Standards emphasize **coherence** at each grade level – making connections across content and between content and mathematical practices in order to promote deeper learning.
- ◆ The standards **focus** on key topics at each grade level to allow educators and students to go deeper into the content.
- ◆ The standards also emphasize **progressions** across grades, with the end of progression calling for **fluency** – or the ability to perform calculations or solving problems quickly and accurately.
- ◆ The **Standards for Mathematical Practice** describe mathematical “habits of mind” or mathematical **applications** and aim to foster reasoning, problem solving, modeling, decision making, and engagement among students.
- ◆ Finally, the standards require students to demonstrate **deep conceptual understanding** by applying them to new situations.



Organization of Common Core State Standards for Mathematics



Grade-Level Standards

- ◆ K-8 grade-by-grade standards organized by domain
- ◆ 9-12 high school standards organized by conceptual categories

Standards for Mathematical Practice

- ◆ Describe mathematical “habits of mind”
- ◆ Connect with content standards in each grade



Standards for Mathematical Practice



Eight Standards for Mathematical Practice

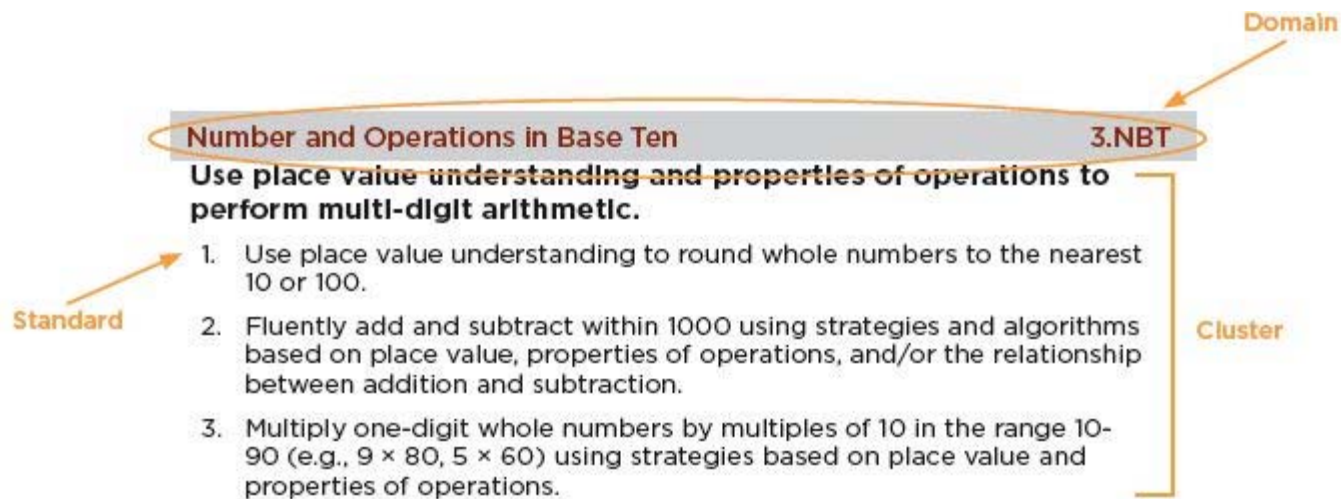
- ◆ Make sense of problems and persevere in solving them
- ◆ Reason abstractly and quantitatively
- ◆ Construct viable arguments and critique the understanding of others
- ◆ Model with mathematics
- ◆ Use appropriate tools strategically
- ◆ Attend to precision
- ◆ Look for and make use of structure
- ◆ Look for and express regularity in repeated reasoning



Format of K-8 Mathematics Standards



- ◆ **Domains:** overarching ideas that connect topics across the grades
- ◆ **Clusters:** illustrate progression of increasing complexity from grade to grade
- ◆ **Standards:** define what students should know and be able to do at each grade level



Overview of K-8 Mathematics Standards



The K- 8 standards:

- ◆ The K-5 standards provide students with a solid foundation in *whole numbers, addition, subtraction, multiplication, division, fractions and decimals*
- ◆ The 6-8 standards describe robust learning in *geometry, algebra, and probability and statistics*
- ◆ Modeled after the focus of standards from high-performing nations, the standards for grades 7 and 8 include *significant algebra and geometry content*
- ◆ Students who have completed 7th grade and mastered the content and skills will be *prepared for algebra, in 8th grade or after*



Priorities in Mathematics



Grade	Priorities in Support of Rich Instruction and Expectations of Fluency and Conceptual Understanding
K-2	Addition and subtraction, measurement using whole number quantities
3-5	Multiplication and division of whole numbers and fractions
6	Ratios and proportional reasoning; early expressions and equations
7	Ratios and proportional reasoning; arithmetic of rational numbers
8	Linear algebra



K-8 Mathematics Domains



K – Counting and Cardinality

K – 5

- ◆ Operations and Algebraic Thinking
- ◆ Number and Operations in Base Ten
- ◆ Measurement and Data
- ◆ Geometry

3 – 5 Number and Operations – Fractions

6 – 8

- ◆ Ratio & Proportional Relationships
- ◆ The Number System
- ◆ Expressions & Equations
- ◆ Geometry
- ◆ Statistics & Probability



Key Fluencies



Grade	Required Fluency
K	Add/subtract within 5
1	Add/subtract within 10
2	Add/subtract within 20 Add/subtract within 100 (pencil and paper)
3	Multiply/divide within 100 Add/subtract within 1000
4	Add/subtract within 1,000,000
5	Multi-digit multiplication
6	Multi-digit division Multi-digit decimal operations
7	Solve $px + q = r$, $p(x + q) = r$
8	Solve simple 2×2 systems by inspection



Overview of High School Mathematics Standards



The high school mathematics standards:

- ◆ Call on students to practice *applying mathematical ways of thinking* to real world issues and challenges
- ◆ Require students to develop a *depth of understanding and ability to apply mathematics to novel situations*, as college students and employees regularly are called to do
- ◆ Emphasize *mathematical modeling*, the use of mathematics and statistics to *analyze empirical situations*, understand them better, and improve decisions
- ◆ Identify the mathematics that all students should study in order to be *college and career ready*



Grades 9-12 Conceptual Categories



Conceptual categories portray a coherent view of HS mathematics.

- **Number and Quantity**
- **Algebra**
- **Functions**
- **Modeling**
- **Geometry**
- **Statistics and Probability**





Common Core State
Standards for *English
Language Arts and
Literacy in History/
Social Studies, Science,
and Technical Subjects*

Key Instructional Shifts in ELA/Literacy



- ◆ In Reading, the major advances are the shift away from literature-focused standards to a ***balance of literature and informational texts*** to reflect college- and career-ready expectations. There is also a greater focus on ***text complexity*** and at what level students should be reading.
- ◆ In Writing, there is a strong emphasis on ***argument and informative/ explanatory writing***, along with an emphasis on writing about sources or ***using evidence*** to inform an argument.
- ◆ The Common Core also include ***Speaking and Listening*** expectations, including a focus on formal and informal talk, which can be done through presentations and group work.
- ◆ The Language standards put a stress on ***both general academic*** and ***domain-specific vocabulary***.
- ◆ The Common Core also address ***reading, writing and literacy across the curriculum***, and include literacy standards for science, social studies and technical subjects. These standards complement rather than replace content standards in those subjects, and are the responsibility of teachers in those specific disciplines, making literacy a shared ***responsibility across educators***.



Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects



College and Career Readiness (CCR) Standards

- ◆ Overarching standards for each strand that are further defined by grade-specific standards

Grade-Level Standards in English Language Arts

- ◆ K-8, grade-by-grade
- ◆ 9-10 and 11-12 grade bands for high school
- ◆ Four strands: *Reading*, *Writing*, *Speaking and Listening*, and *Language*

Standards for Literacy in History/Social Studies, Science, and Technical Subjects

- ◆ Standards are embedded at grades K-5
- ◆ Content-specific literacy standards are provided for grades 6-8, 9-10, and 11-12



Overview of Reading Strand



Reading

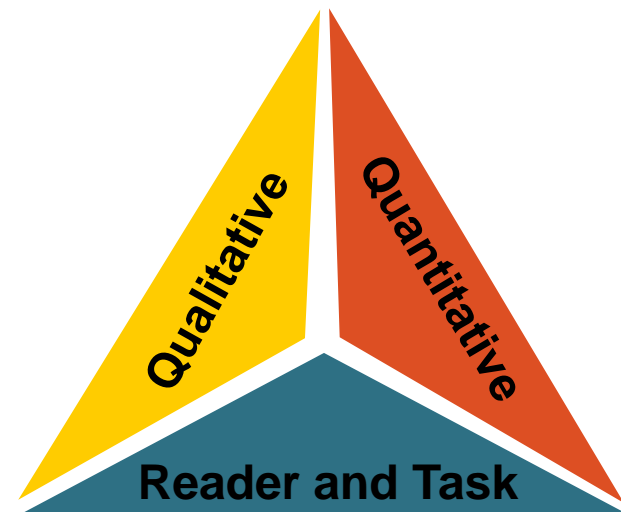
- ◆ Progressive development of reading comprehension; students gain more from what they read
- ◆ Emphasize the importance of grade-level texts that are of appropriate difficulty and are increasingly sophisticated
 - Standards for Reading Foundational Skills (K-5)
 - Reading Standards for Literature (K-12)
 - Reading Standards for Informational Text (K-12)
 - Reading Standards for Literacy in History/Social Studies (6-12)
 - Reading Standards for Literacy in Science and Technical Subjects (6-12)



Overview of Text Complexity



- ◆ Reading Standards include over exemplar texts (stories and literature, poetry, and informational texts) that illustrate appropriate level of complexity by grade
- ◆ Text complexity is defined by:
 1. Qualitative measures – levels of meaning, structure, language conventionality and clarity, and knowledge demands
 2. Quantitative measures – readability and other scores of text complexity
 3. Reader and Task – background knowledge of reader, motivation, interests, and complexity generated by tasks assigned



Example of Grade-Level Progression in Reading



CCR Reading Standard 3: Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Reading Standards for Literature

Grade 3: Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

Grade 7: Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot)

Grades 11-12: Analyze the impact of the author’s choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).



Reading Standards for Informational Text

Grade 3: Describe the relationships between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.

Grade 7: Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

Grades 11-12: Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.



Overview of Writing Strand



Writing

- ◆ Expect students to compose arguments and opinions, informative/explanatory pieces, and narrative texts
- ◆ Focus on the use of reason and evidence to substantiate an argument or claim
- ◆ Emphasize ability to conduct research – short projects and sustained inquiry
- ◆ Require students to incorporate technology as they create, refine, and collaborate on writing
- ◆ Include student writing samples that illustrate the criteria required to meet the standards (See standards' appendices for writing samples)



Overview of Speaking and Listening and Language Strands



Speaking and Listening

- ◆ Focus on speaking and listening in a range of settings, both formal and informal
 - academic, small-group, whole-class discussions
- ◆ Emphasize effective communication practices
- ◆ Require interpretation and analysis of message as presented through oral, visual, or multimodal formats

Language

- ◆ Include conventions for writing and speaking
- ◆ Highlight the importance of vocabulary acquisition through a mix of conversation, direct instruction, and reading
- ◆ To be addressed in context of reading, writing, speaking and listening

Media and Technology are integrated throughout the CCSS



Overview of Standards for History/Social Studies, Science, and Technical Subjects



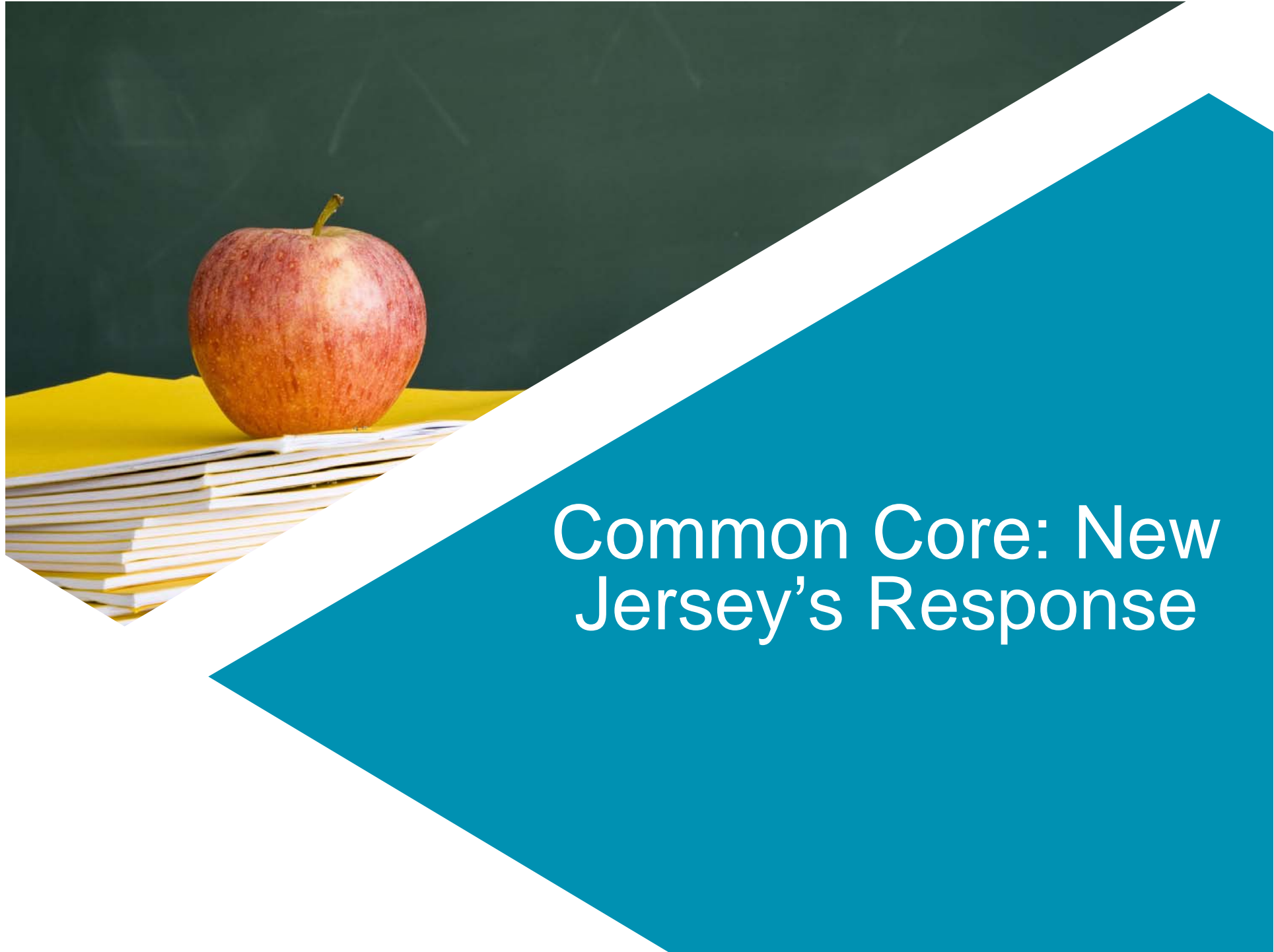
Reading Standards for History/Social Studies, Science, and Technical Subjects

- ◆ Knowledge of domain-specific vocabulary
- ◆ Analyze, evaluate, and differentiate primary and secondary sources
- ◆ Synthesize quantitative and technical information, including facts presented in maps, timelines, flowcharts, or diagrams

Writing Standards for History/Social Studies, Science, and Technical Subjects

- ◆ Write arguments on discipline-specific content and informative/explanatory texts
- ◆ Use of data, evidence, and reason to support arguments and claims
- ◆ Use of domain-specific vocabulary





Common Core: New Jersey's Response

Why should the NJDOE develop a “Model” Curriculum



Models can effectively inform curriculum development : 2012 K-5 & H.S. Math, K-12 Reading/Language Arts

Leverage state and nation-wide expertise

Commonness

Continuous improvement



Model Curriculum 1.0



CCSS aligned unit learning objectives (SLOs)

Scaffolded SLOs

Quality 6-week unit assessments (UDL)

- Model Curriculum 1.0
- Model Curriculum 2.0

	What Students need to Learn	HOW/Teaching Strategies		PROCESS for Assessing "the what"
Standard	Student Learning Objectives	Model Lessons/Instructional Strategies	Formative Assessments	Summative/Formative
CCSS Std. 1	#1 – #2 –	Model Lessons Model Performance Tasks	Effective Checks for Understanding Model Formative Assessments	Unit Assessment SLOs 1-5
CCSS Std. 2	#3 – #4 – #5 –	Engaging Instructional Strategies		
GENERAL BANK OF ASSESSMENT ITEMS 1.0				
GENERAL BANK OF ASSESSMENT ITEMS 2.0				



Break Out Session...



Look at Model Curriculum for your course/grade level and ensure that all the Student Learning Objectives (SLOs) are being met in our Scope and Sequence Documents or UbD units.

The model curriculum can be found at:

<http://www.state.nj.us/education/modelcurriculum/>

