The Common Core State Standards

California County Superintendents Educational Services Association
November 18, 2010
Tom Adams

CALIFORNIA DEPARTMENT OF EDUCATION
Jack O'Connell, State Superintendent of Public Instruction
Standards, Curriculum Frameworks and Instructional Resources Division (SCFIRD)

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The Common Core Standards

- Rigorous, research-based standards for English-language arts and mathematics for grades K-12
- Designed to prepare the nation's students with the knowledge and skills needed for success in college and the workforce
- Internationally benchmarked to ensure that students will be globally competitive
- A clear and consistent educational framework
- A collaborative effort that builds on the best of current state standards

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College and Career Readiness Standards

- In 2009, the Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices (NGA Center) committed to developing a set of standards that would help prepare students for success in college and career.
- In September 2009, College and Career Readiness standards were released.
- This work became the foundation for the Common Core.

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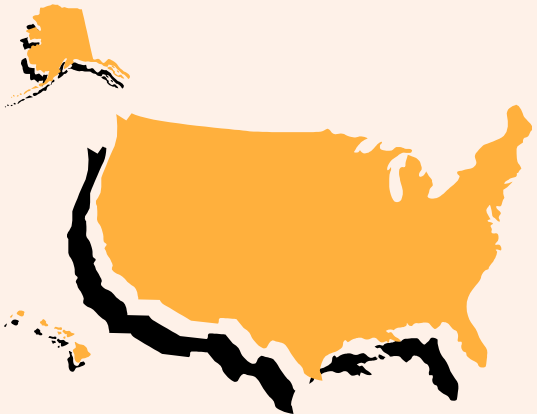
The Common Core State Standards Initiative

- A voluntary state-led effort coordinated by the CCSSO and NGA
- Includes parents, educators, content experts, researchers, national organizations and community groups from 48 states, 2 territories and the District of Columbia



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The Common Core State Standards

- Feedback and review from national organizations, including:
  - American Council on Education (ACE)
  - American Federation of Teachers (AFT)
  - Campaign for High School Equity (CHSE)
  - Conference Board of the Mathematical Sciences (CBMS)
  - Modern Language Association (MLA)
  - National Council of Teachers of English (NCTE)
  - National Council of Teachers of Mathematics (NCTM)
  - National Education Association (NEA)

California and the Common Core State Standards

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Senate Bill 1 from the Fifth Extraordinary Session (SB X5 1):

- established an Academic Content Standards Commission (ACSC) to develop standards in mathematics and English–language arts
- stated that 85 percent of the standards were to consist of the CCSS with up to 15 percent additional material
- directed the State Board of Education (SBE) to adopt or reject recommendations of the ACSC

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The Academic Content Standards Commission

- The ACSC convened during the summer of 2010 to evaluate the CCSS for rigor and alignment to California standards.
- They inserted words, phrases, and select California standards in their entirety to maintain California's high expectations for students.
- On July 15, 2010, the commission recommended that the SBE adopt the CCSS as amended.

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Next Steps

Frameworks and Instructional Materials

Milestone	Mathematics	Reading/ELA
Suspension lifted		
Framework	May 2013	May 2014
Materials	November 2014	November 2016
No legislative action		
Framework	May 2015	May 2017
Materials	November 2017	November 2019

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Next Steps

Assessments-PARCC

Milestones	Implementation
Pilot test	2011-2012
Field test	2012-2014
Implementation	2014-2015
Standard setting	2014-2015

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

- The Common Core Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects are organized around the College and Career Readiness (CCR) Standards for Reading, Writing, Speaking and Listening, and Language.
- Each strand is headed by a set of CCR anchor standards that is identical across all grades and content areas.
- The Common Core Standards for English-language arts also set requirements for reading and writing in the social and natural sciences.

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Focus on Informational Text

2009 NAEP Reading Assessment: Distribution of literary and informational passages

Grade	Literary	Informational
4	50%	50%
8	45%	55%
12	30%	70%

Source: National Assessment Governing Board. (2008). *Reading framework for the 2009 National Assessment of Educational Progress, http://www.nagb.org/publications/frameworks/reading-2009.doc*

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

The Standards comprise three main sections:

- a comprehensive K–5 section
  - includes standards for foundational skills
- two content area-specific sections for grades 6–12
  - one for English-language arts
  - one for literacy in history/social studies, science and technical subjects.

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

Reading Standards for Informational Text 6-12

The CCR anchor standards and high school grade-specific standards work in tandem to define college and career readiness expectations—the former providing broad standards, the latter providing additional specificity.

Grades 9-10 Students:	Grades 11-12 Students:
Key Ideas and Details	
1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
2. Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	2. Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.
3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	3. 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.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). **(See grade 9/10 Language standards 4-6 on page 46 for additional expectations.)**	4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10). **(See grade 11/12 Language standards 4-6 on page 46 for additional expectations.)**
5. Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). **a. Analyze the use of text features (e.g., graphics, headers, captions) in functional workplace documents.**	5. Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging. **a. Analyze the use of text features (e.g., graphics, headers, captions) in public documents.**
6. Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	6. Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.
Integration of Knowledge and Ideas	
7. Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.	7. Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.
8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	8. Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist*, presidential addresses).
9. Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts.	9. Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features.
Range of Reading and Level of Text Complexity	
10. By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently.	10. By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11–CCR text complexity band independently and proficiently.

Source: Sacramento County Office of Education at www.scoe.net

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Correlating Standards

- Use knowledge of antonyms, synonyms, homophones, and homographs to determine the meaning of words. (3.WA.1.4)
- Demonstrate knowledge of levels of specificity among grade-appropriate words and explain the importance of these relations (e.g., *dog/ mammal/ animal/ living things*) (3.WA.1.5)
- Students read and understand grade-level-appropriate material. They draw upon a variety of comprehension strategies as needed (e.g., generating and responding to essential questions, making predictions, comparing information from several sources). … (3.RC.2.0)

1997 CA Standards

☆ Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area. (3.RI.4)

2010 CCCSS

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Reading Literature

- ☆ Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. (7.RL.1)

- ☆ Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film). (7.RL.7)

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Reading Informational Text

☆ Describe the relationship 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. (3.RI.3)

☆ Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area. (3.RI.4)

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Writing

- ☆ Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation including footnotes and endnotes. (11-12.W.8)

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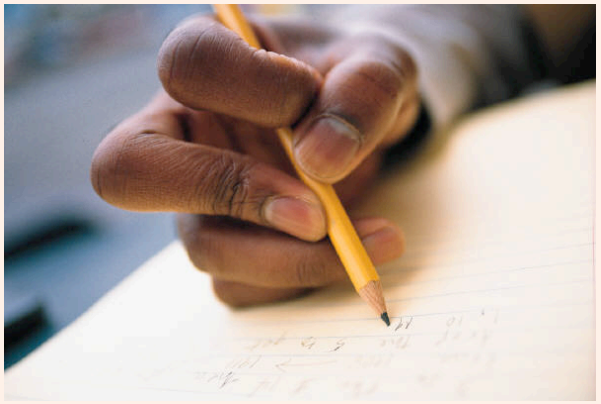
Writing

☆ Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. (2-12.W.10)



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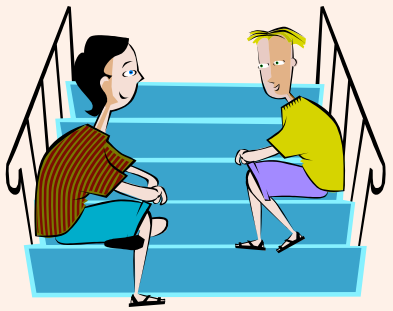
Speaking and Listening

☆ Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. (11-12.SL.5)



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Language

☆ Use knowledge of language and its conventions when writing, speaking, reading, or listening.

a. Choose words and phrases to convey ideas precisely.

b. Choose punctuation for effect.

c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).

(4.L.3)

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Focus on Text Complexity

- ☆ By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently. (5.RL.10)

- ☆ Initiate and participate effectively in a range of collaborative discussions (one-on one, in groups, and teacher-led) with diverse partners on *grades 11–12 topics, texts, and issues,* building on others' ideas and expressing their own clearly and persuasively. (11-12.SL.1)

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Vocabulary Acquisition

- ☆ Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. (2.SL.1)

- ☆ Use precise language and domain-specific vocabulary to inform about or explain the topic. (7.W.2.d)

- ☆ Determine the meaning of word and phrase as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone.) (9-10.RL.4)

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Critical Analysis and Use of Evidence

☆ Distinguish their own point of view from that of the narrator or those of the characters. (3.RL.6)

☆ Summarize the points a speaker or a media source makes and explain how each claim is supported by reason and evidence, and identify and analyze any logical fallacies. (5.SL.3)

☆ Develop claim(s) and counterclaim(s) fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases. (11-12.W.1.b)

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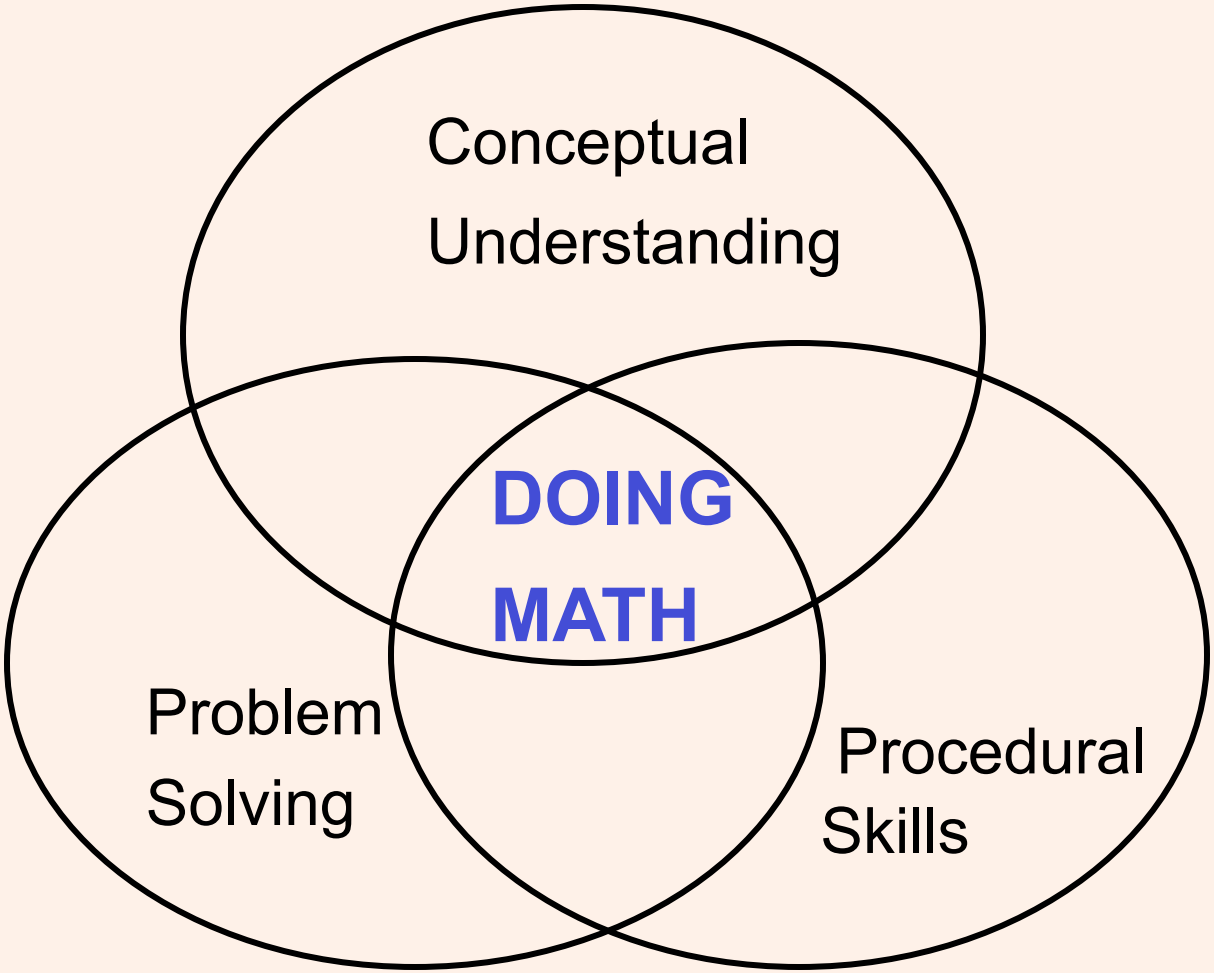
Mathematical Proficiency

as defined by the California Framework (2006)



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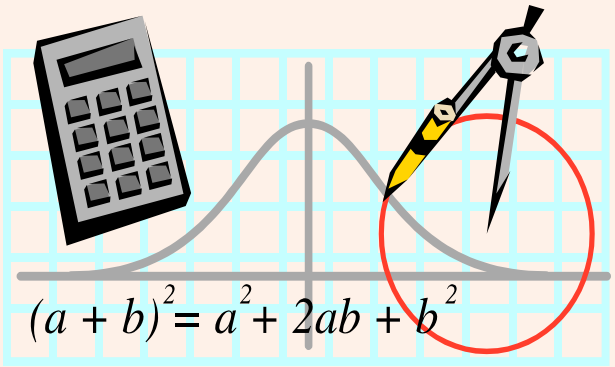
Common Core Standards for Mathematics

The standards for mathematics:

- aim for clarity and specificity
- stress conceptual understanding of key ideas
- balance mathematical understanding and procedural skill
- are internationally benchmarked



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Common Core Standards for Mathematics

Two Types of Standards

- **Mathematical Practice** (recurring throughout the grades)
- **Mathematical Content** (different at each grade level)

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Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning

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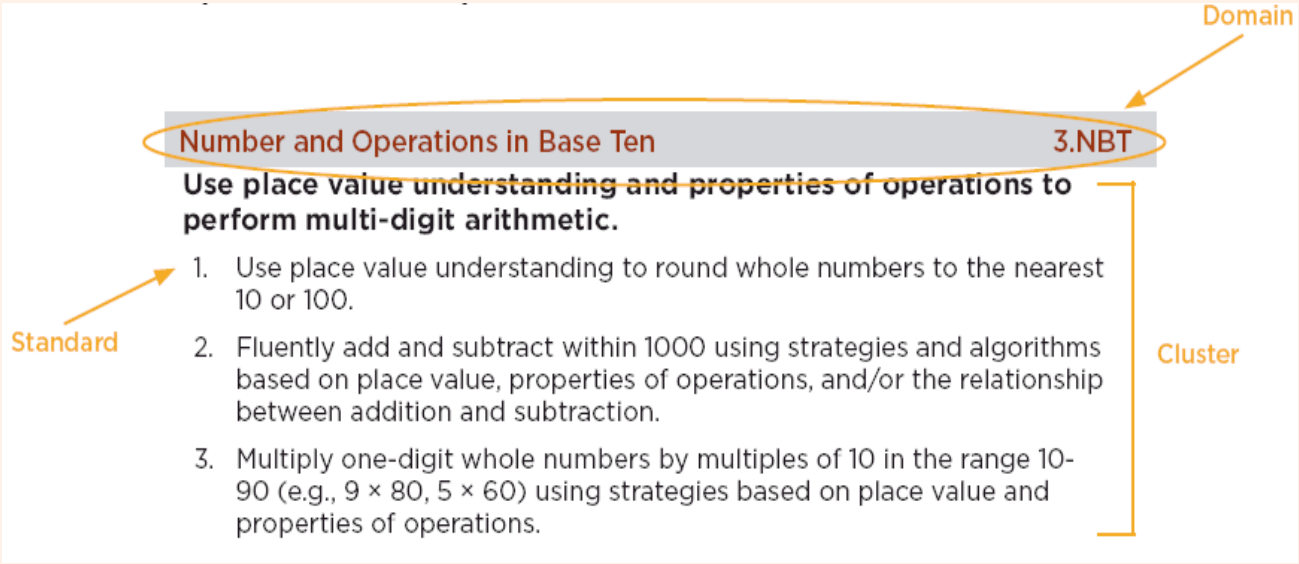
K-8 Mathematics

How the grade level standards are organized

• Standards • Clusters • Domains



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K – Grade 5 Domains

Domain	K	1	2	3	4	5
Counting and Cardinality (CC)	✓					
Operations and Algebraic Thinking (OA)	✓	✓	✓	✓	✓	✓
Number and Operations in Base Ten (NBT)	✓	✓	✓	✓	✓	✓
Measurement and Data (MD)	✓	✓	✓	✓	✓	✓
Geometry (G)	✓	✓	✓	✓	✓	✓
Number and Operations – Fractions (NF)				✓	✓	✓

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Grades 6 – 8 Domains

Domain	6	7	8
Ratios and Proportional Relationships (RP)	✓	✓	
The Number System (NS)	✓	✓	✓
Expressions and Equations (EE)	✓	✓	✓
Geometry (G)	✓	✓	✓
Statistics and Probability (SP)	✓	✓	✓
Functions (F)			✓

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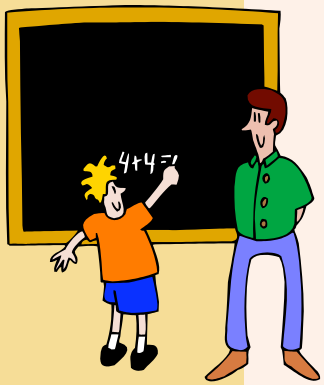
Develop Conceptual Understandings

☆ Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. (K.OA.2)

☆ Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. (2NBT.7)



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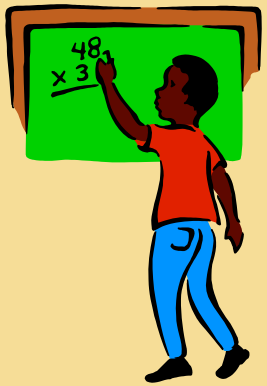
Emphasis on Fluency



- ☆ Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g. knowing that 8 x 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of grade 3, know from memory all products of two one-digit numbers. (3.OA.7)

- ☆ Fluently multiply multi-digit whole numbers using the standard algorithm. (5.NBT.5)

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Grade Shifts: Examples

Concept	1997 Standards	CCSS
Compose simple shapes to form larger shapes (e.g., 2 triangles to form a rectangle)	Grade 2	K
Introduction to Probability	Grade 3	Grade 7
Introduction of fractions as numbers	Grade 2	Grade 3
Add and subtract simple fractions	Grade 3	Grade 4

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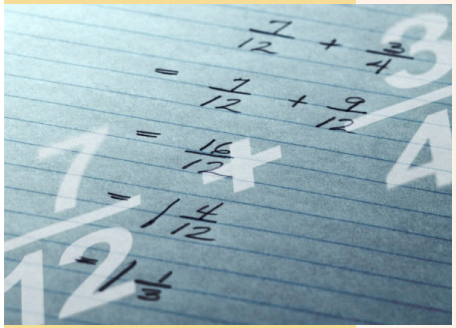
A Focus on Fractions

- ☆ Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line. (3.NF. 2.a)

- ☆ Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g. by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.* (5.NF.2)



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Fraction Concepts

☆ Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. (3.NF.3d)

Discuss how you might compare pairs of fractions using a visual fraction model. For discussion purposes, use the following two fraction pairs:

7/9 and 4/9 (same denominator)
4/9 and 4/7 (same numerator)

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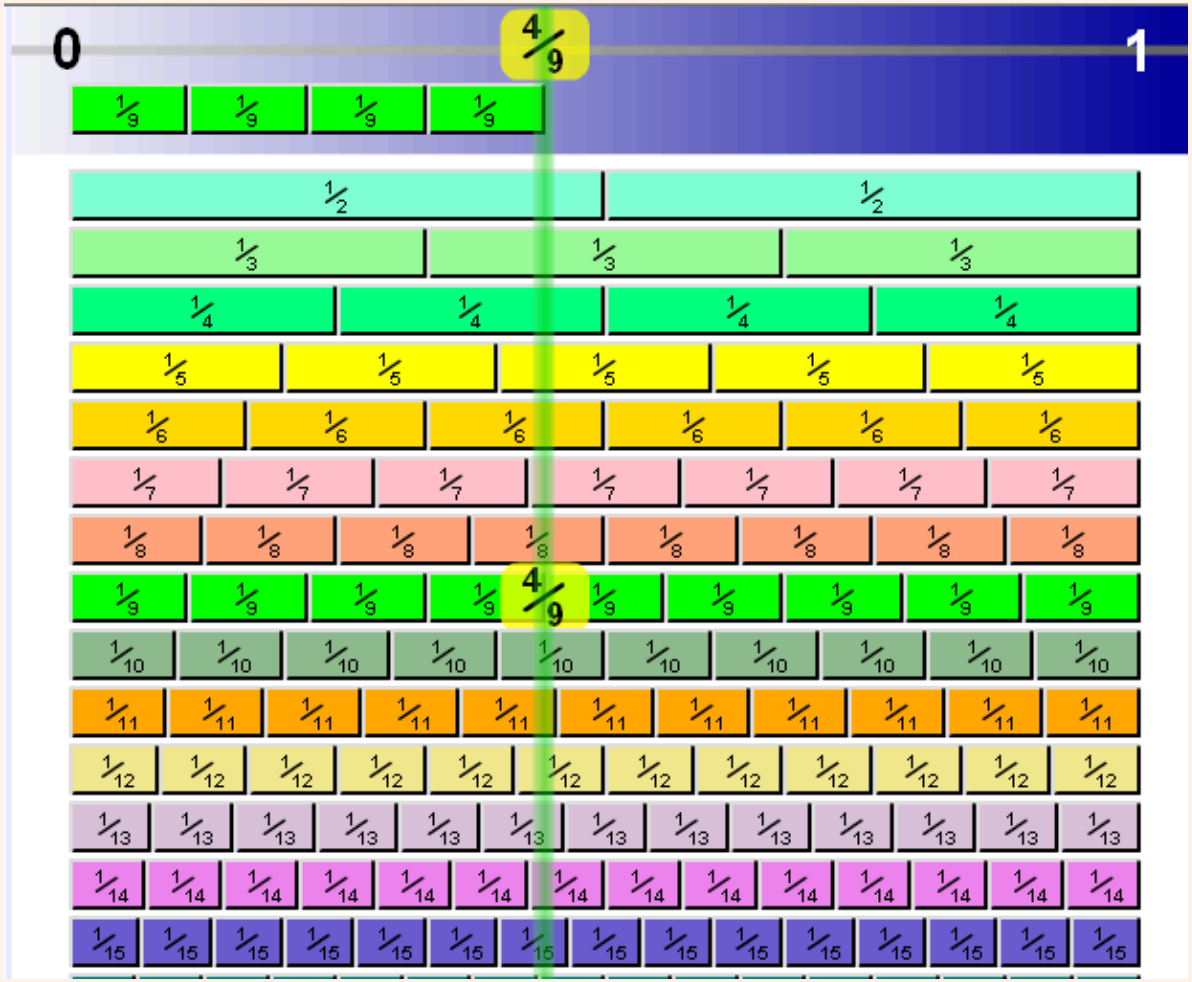
Fraction Concepts



Source: www.mathisfun.com/numbers/fraction-number-line.html

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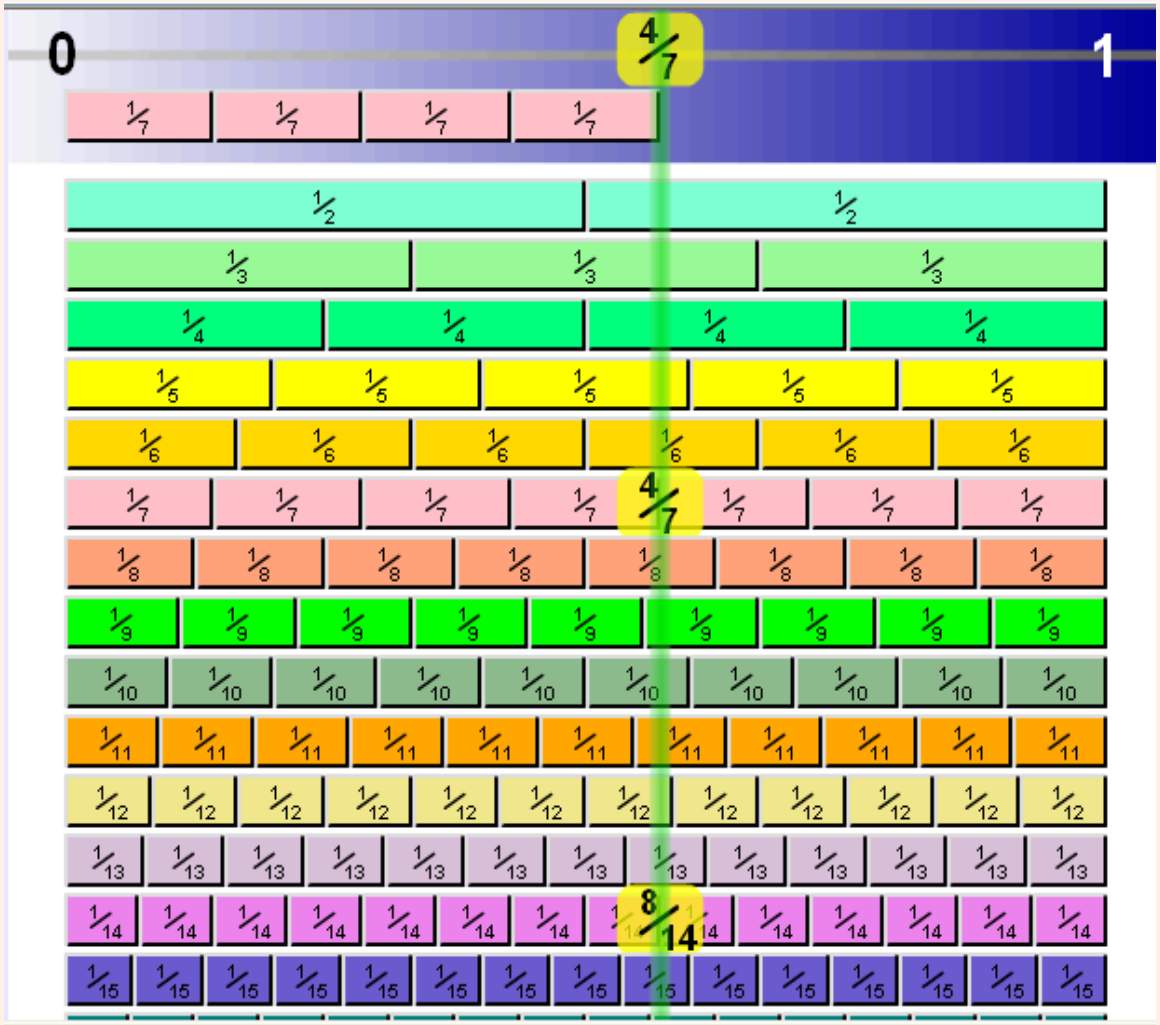
Fraction Concepts



Source: www.mathisfun.com/numbers/fraction-number-line.html

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Grade 8 Mathematics

- The CCSS prepare students for Algebra 1 in grade 8.

- The CCSS also include a set of challenging grade 8 standards to prepare students for success in higher math, including Algebra 1.

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High School Mathematics

The high school standards are listed in conceptual categories:

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

Modeling standards are indicated by a **(*)** symbol.

Standards necessary to prepare for advanced courses in mathematics are indicated by a (+) symbol.

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High School Mathematics

☆ **Build a function that models a relationship between two quantities**

1. Write a function that describes a relationship between two quantities. *
   a. Determine an explicit expression, a recursive process, or steps for calculation from a context.
   b. Combine standard function types using arithmetic operations. *For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.*
   c. (+) 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.*

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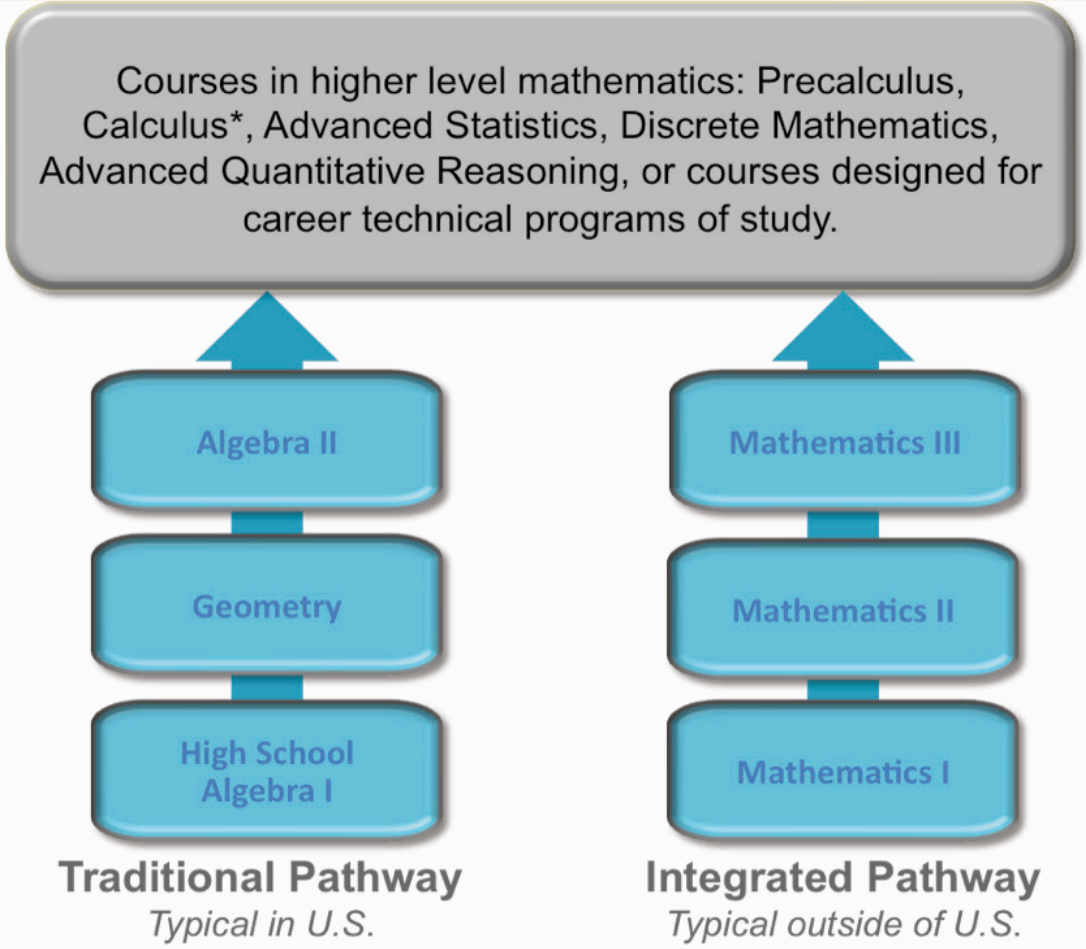
High School Mathematics



Source: Appendix A of the CCSS for Mathematics at www.corestandards.org

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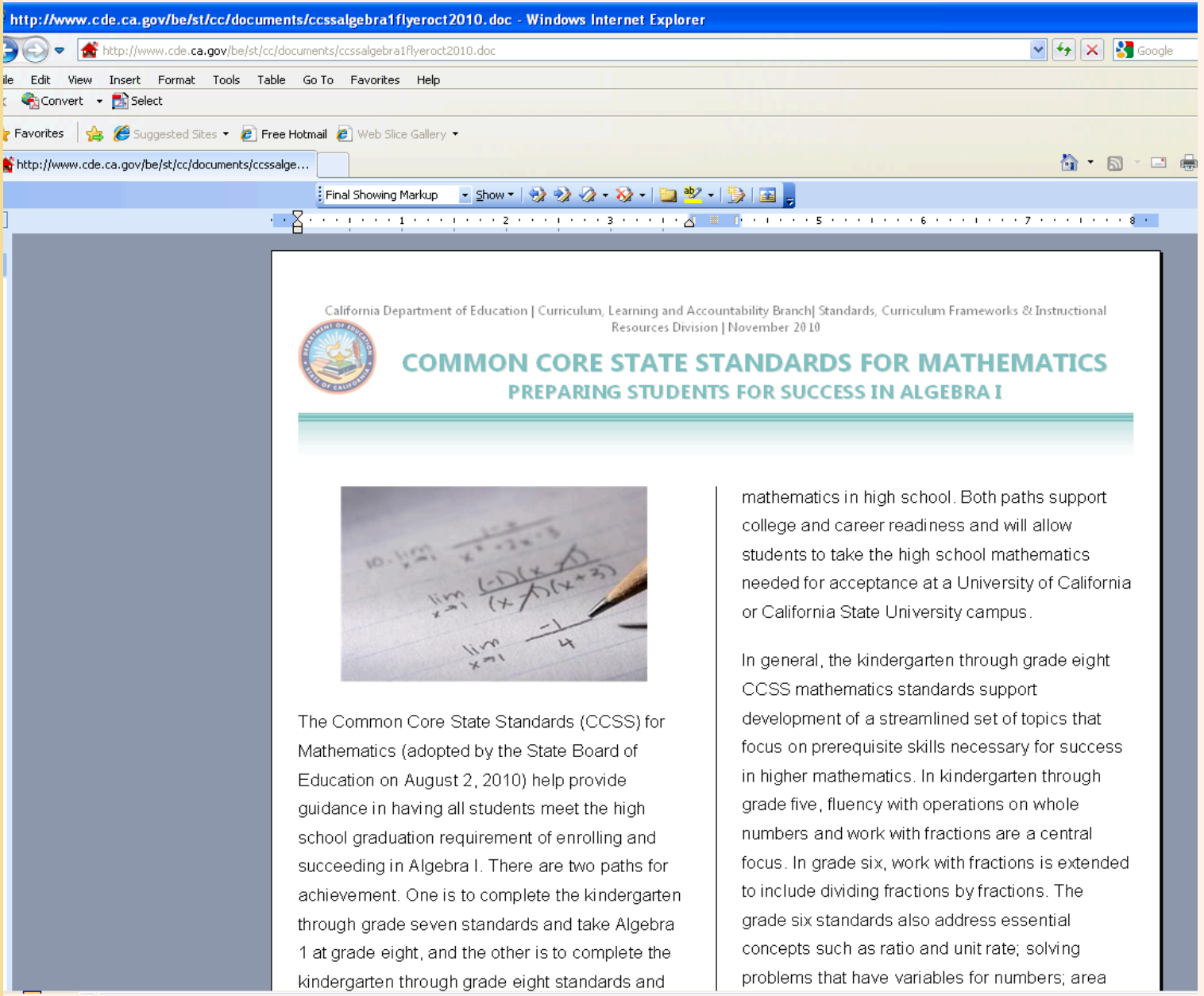

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CDE on iTunes U

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CDE on iTunes U page on Apple's iTunes Web site.

Source:http://www.cde.ca.gov/re/mm/it/

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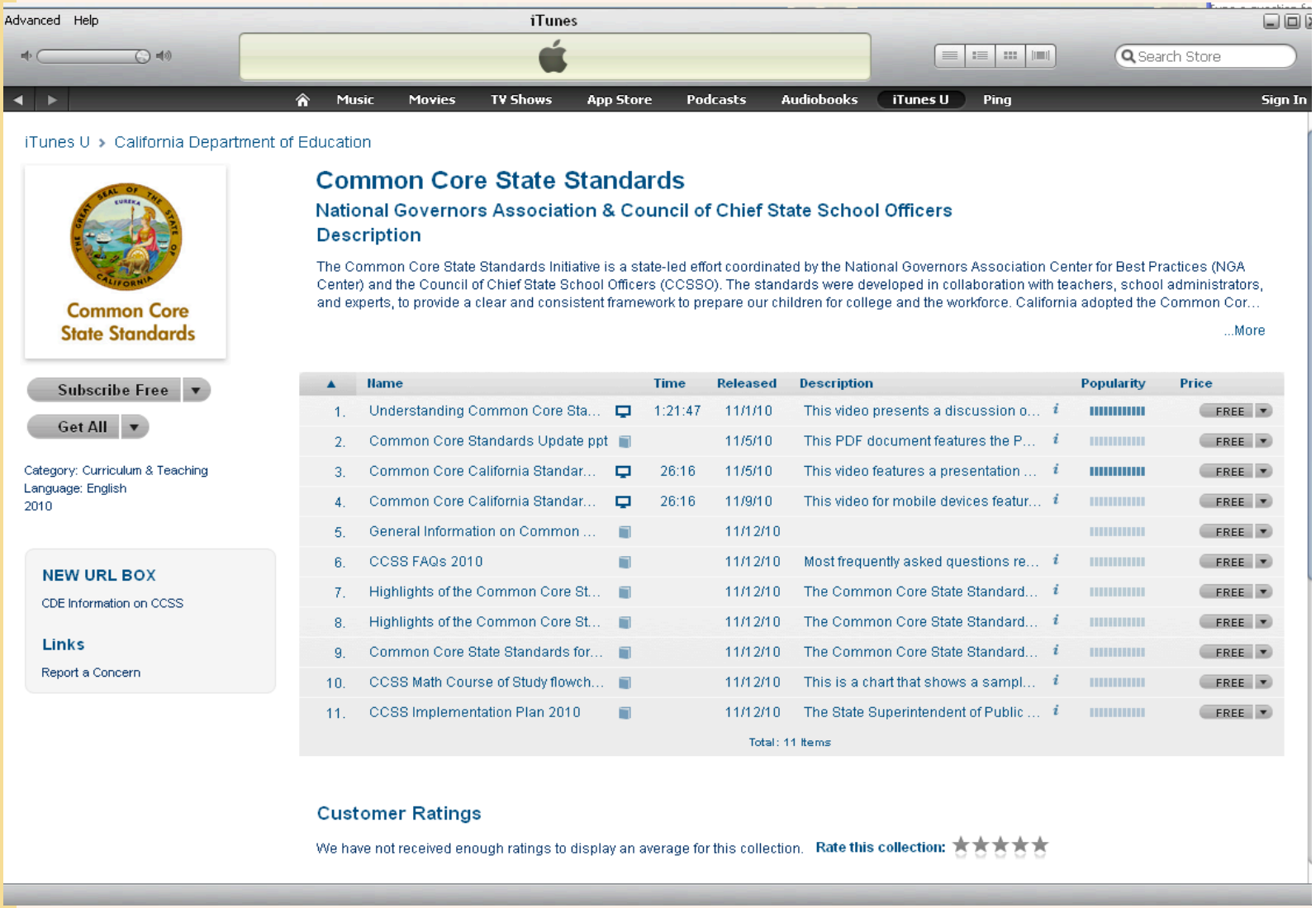

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Resources

For more information, visit the California Department of Education's Common Core State Standards Web page at:

http://www.cde.ca.gov/be/st/cc/index.asp

- The standards
- Frequently asked questions
- Informational flyers
- Additional resources

For additional information, contact:
Standards, Curriculum Frameworks and
Instructional Resources Division
Curriculum, Learning and Accountability Branch
California Department of Education
1430 N Street, Sacramento, CA 95814
916-319-0881