



TENNESSEE
STATE BOARD OF EDUCATION

MATH AND ENGLISH LANGUAGE ARTS STANDARDS

JANUARY 28, 2016

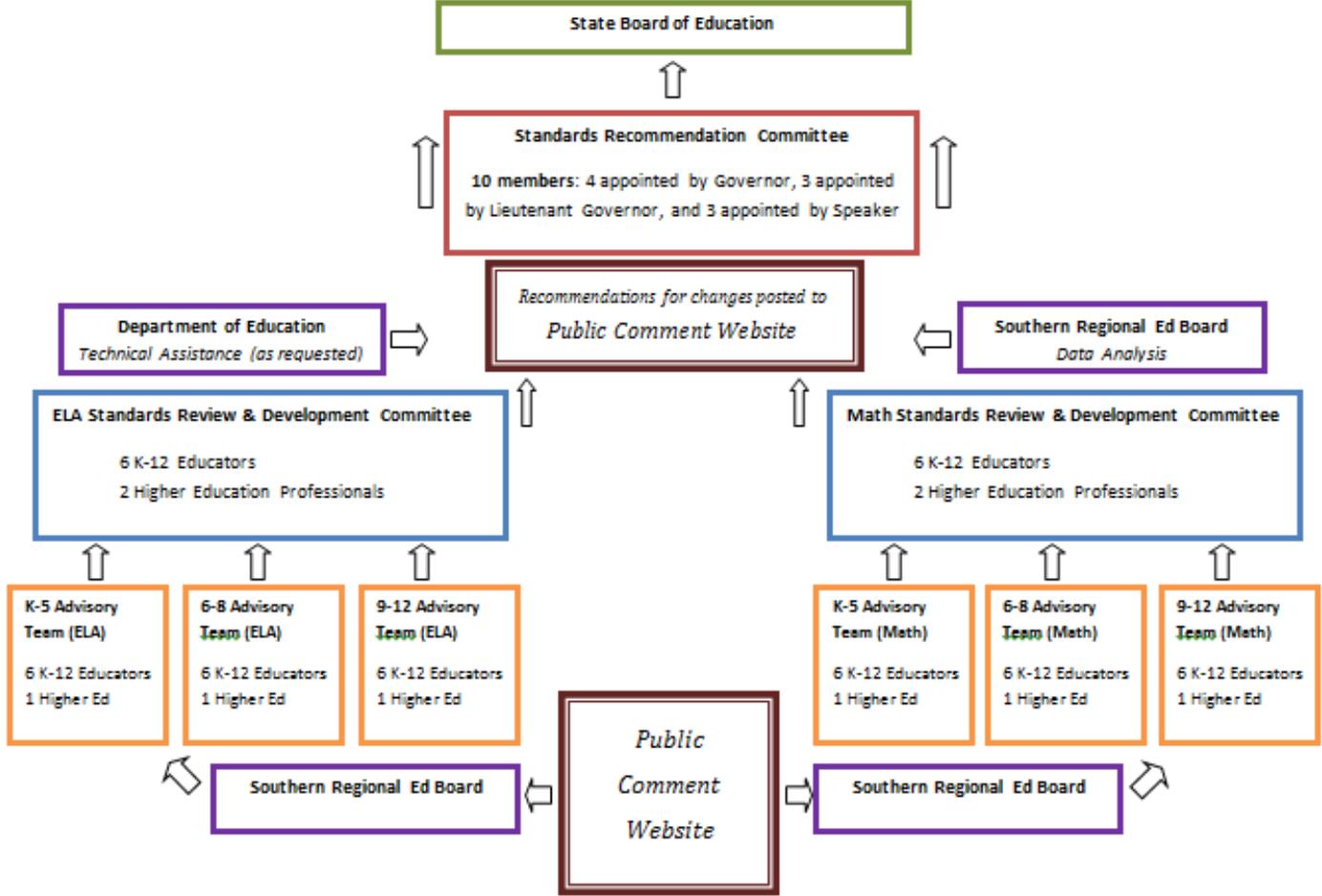
STATE BOARD OF EDUCATION WORKSHOP

AGENDA

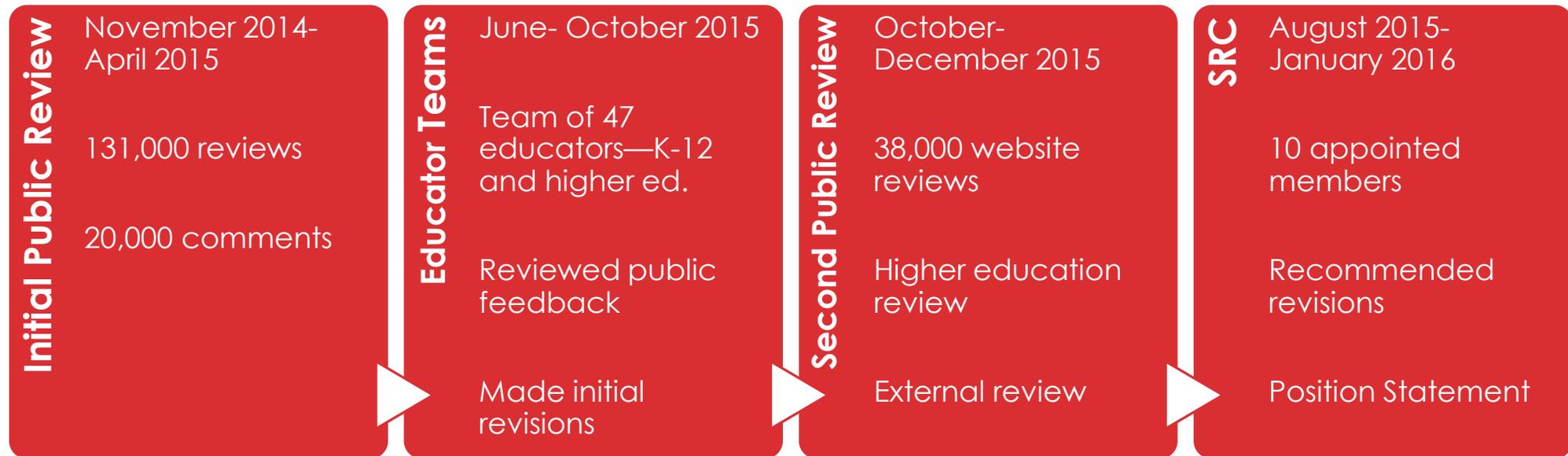
- Standards Review Process
- Standards Recommendation Committee
- Key Changes in English Language Arts
- Key Changes in Mathematics

STANDARDS REVIEW PROCESS

REVIEW PROCESS



REVIEW PROCESS



STANDARDS RECOMMENDATION COMMITTEE

STANDARDS RECOMMENDATION COMMITTEE MEMBERS

- Chairman Dr. Lyle Ailshie (Lt. Governor's Appointee)
- Vice Chairman David Pickler (House Speaker's Appointee)
- Dr. Sharen Cypress (Governor's Appointee)
- Dr. Shirley Curry (Lt. Governor's Appointee)
- Ms. Darcie Finch (Lt. Governor's Appointee)
- Ms. Shannon Duncan (House Speaker's Appointee)
- Ms. Cathy Kolb (House Speaker's Appointee)
- Ms. Amy Gullion (Governor's Appointee)
- Ms. Tracy Franklin (Governor's Appointee)
- Mr. Douglas Hungate (Governor's Appointee)

SRC REVIEW

- Met 7 times via meetings or conference calls between August 2015 and January 2016. The SRC's work included:
 - Observed educator advisory teams' work
 - Reviewed public feedback from the first and second websites
 - Attended regional roundtable meetings to directly hear feedback from parents and educators
 - Heard feedback presentations from higher education and the Southern Regional Education Board (SREB)

SRC POSITION STATEMENT

- Developed a Position Statement outlining our key beliefs:
 - Professional Development and Preparation
 - Supplemental Resources
 - Parent Communication
 - Empowering Educators
 - Flexibility

1. PROFESSIONAL DEVELOPMENT AND PREPARATION

- **SRC recognizes that teacher and leader professional development is integral to successful implementation:**
 - Urge TDOE to develop and deploy a training plan during the 2016-17 school year
 - Help educators to develop a deep understanding of student learning expectations
 - Focus on consistency and high quality delivery, using current TN educators
 - Include educator preparation providers in training

2. SUPPLEMENTAL RESOURCES

- **SRC acknowledges the standards documents alone are not sufficient for successful implementation.**
- High quality resources and supplemental documents are needed to provide additional examples and help educators unpack the standards.

3. PARENT COMMUNICATION

- **SRC recognizes the essential role parents play in student learning.**
- To support parents a communications plan should highlight the important role of standards in postsecondary and workforce readiness and include:
 - Descriptions of the standards document
 - Overview of expectations at each grade level
 - Frequently Asked Questions document
 - Clear explanation of the difference between standards and curriculum

4. EMPOWERING EDUCATORS

- **SRC sought to empower teachers and preserve teacher autonomy.**
- The recommended standards:
 - Do not prescribe a particular teaching strategy
 - Do not endorse or advocate for particular resources
 - Allow for flexibility and teacher discretion to determine the best teaching methods and instructional resources

5. FLEXIBILITY

- SRC urges the State Board to monitor implementation and consider whether additional flexibilities in the accountability system might need to be made during the standards transition.

SRC RECOMMENDATIONS

- Made a series of 19 specific recommendations for revision to both the math and ELA standards.
- These recommendations were sent back to the educator teams to complete the revisions.

ELA RECOMMENDATIONS

- A sample of recommendations is included below:
 - Creating a new coding system for the standards
 - Define “grade-level” and “text complexity”
 - Clarify standards in K-1 to improve developmental appropriateness
 - Determine if additional vocabulary standards should be added
 - Review the progression to identify any gaps in coherence
 - Clarify expectations for the time devoted to literature and informational texts

MATH RECOMMENDATIONS

- A sample of recommendations is included below:
 - Present a clearer vision of the vertical progression
 - Revise the coding system and user-friendliness of the document
 - Correct and revise issues with the examples
 - Reexamine the Geometry progression
 - Correct inconsistencies between the Traditional and Integrated sequences in high school courses
 - Review the number of required Algebra II standards

THE RESULT

- The SRC approved the Tennessee Academic Standards for English Language Arts and Mathematics.
- We recommend these standards to the State Board of Education for approval.
- These standards represent a rigorous, set of Tennessee-specific standards that will push our state forward and prepare our students for excellence.

KEY ELA CHANGES

NORMS AND WORKING AGREEMENTS

- **OUR NORMS:**

- Keep student learning as the focus of our work.
- Hold high expectations and anchor to meaningful expectations.
- Be deeply respectful of all feedback.
- Work carefully and methodically.

- **OUR WORKING AGREEMENTS:**

- Please use cellphones and check email during the provided tech breaks.

EXAMPLE- READING LITERATURE

4.RL.CS.4

Original Standard	Revised Standard
Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).	Determine the meaning of words and phrases as they are used in a text, including those that refer to significant characters and situations found in literature and history.

Cornerstone Standard: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

Keep: 45%

Review: 40%

Remove: 15%

EXAMPLE- READING LITERATURE

4.RL.CS.4

Original Standard	Revised Standard
Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).	Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters and situations found in literature and history.

**New Coding System
Consistent with Math Standards
Grade.Strand.Focus.Standard#
4th Grade
Reading Literature
Craft and Structure
Standard #4**

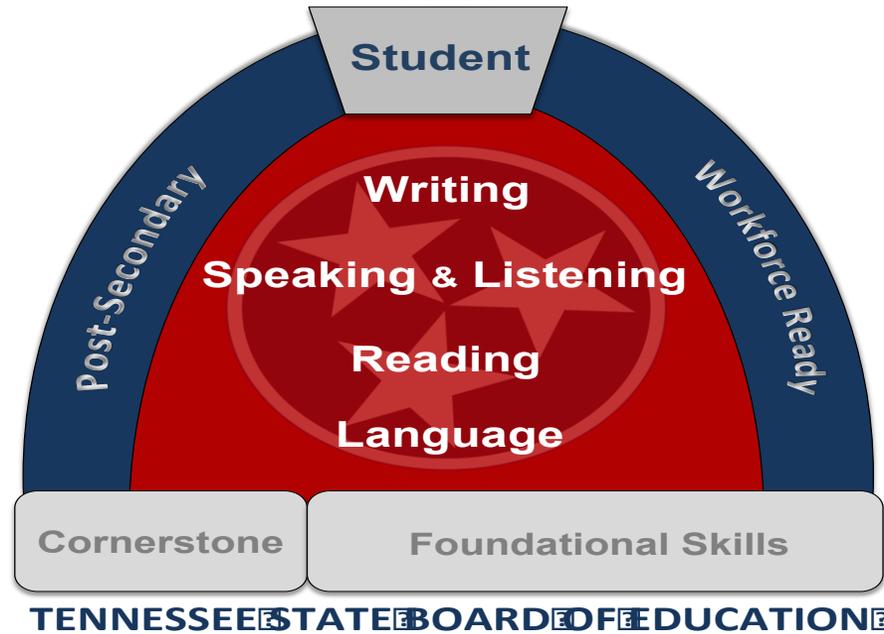
Cornerstone Standard: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

Keep: 45%

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LEARNING PROGRESSION



STUDYING THE PROGRESSION

L1 (5)

Element	K	1	2	3	4	5	6	7	8	9	10	11	12
Noun													
Verbs													
Pron.													
Adj													
Adv.													
Phrases													
Adverbial													
Prep													
Int. conj.													

The table is a grid with 14 rows and 14 columns. The columns are labeled K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. The rows are labeled Element, Noun, Verbs, Pron., Adj, Adv., Phrases, Adverbial, Prep, Int. conj. The grid is filled with various colored sticky notes (yellow, orange, pink, purple, green) and diagonal lines. Some sticky notes contain handwritten text, such as 'From the placement of the prep in the sentence' and 'From the placement of the int. conj. in the sentence'. There are also some orange sticky notes at the top of the grid.

LAYOUT CHANGE – ORIGINAL

6TH GRADE

Strand	Standard	
Literature	Key Ideas and Details	<ol style="list-style-type: none"> 1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. 2. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. 3. Describe how a particular story’s or drama’s plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.
	Craft and Structure	<ol style="list-style-type: none"> 4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone. 5. Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot. 6. Explain how an author develops the point of view of the narrator or speaker in a text.
	Integration of Knowledge and Ideas	<ol style="list-style-type: none"> 7. Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they “see” and “hear” when reading the text to what they perceive when they listen or watch. 8. (Not applicable to literature) 9. Compare and contrast texts in different forms or genres (e.g., stories and poems, historical novels and fantasy stories) in terms of their approaches to similar themes and topics.
	Range of Reading and Level of Text Complexity	<ol style="list-style-type: none"> 10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

LAYOUT – NEW

READING STANDARD 1 K-12

READING STANDARDS: Craft and Structure – Standard #6
R.CS.6

Cornerstone: Assess how point of view or purpose shapes the content and style of a text.

GRADE SPAN	LITERATURE	INFORMATIONAL TEXT
11-12	11.-12.RL.CS.6 Analyze how point of view and/or author purpose requires distinguishing what is directly stated in texts and what is implied.	11-12.RI.CS.6 Determine an author’s point of view and/or purpose in a text, analyzing how style and content contribute to its effectiveness.
9-10	9-10.RL.CS Analyze how point of view and/or author purpose shapes the content and style of diverse texts.	9-10.RI.CS.6 Determine an author’s point of view or purpose and analyze how an author uses rhetoric to advance that point of view or purpose.
8	8.RL.CS.6 Analyze how similarities and differences in the points of view of the audience and the characters create effects such as suspense, humor, or dramatic irony.	8.RI.CS.6 Determine an author’s point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
7	7.RL.CS.6 Analyze how an author establishes, conveys, and contrasts the points of view of different characters or narrators in a text.	7.RI.CS.6 Determine an author’s point of view or purpose in a text and analyze how an author distinguishes his or her position from that of others.

K-5 PRESENT AND REVISED

PRESENT STANDARDS

Reading Literature

Reading Informational Text

Reading Foundations

Writing

Speaking and Listening

Language

PROPOSED REVISIONS

Reading Literature

Reading Informational Text

Foundational Literacy

- 3 additional strands
- Vocabulary and Language integrated into FL

Writing

Speaking and Listening

FOUNDATIONAL LITERACY

- Print Concepts
- Phonological Awareness
- Phonics and Word Recognition
- Word Composition
- Fluency
- Sentence Composition
- Vocabulary Acquisition and Use

FOUNDATIONAL LITERACY STANDARDS

- Foundational writing
 - Word composition (not currently addressed)
 - Sentence composition (not currently addressed)
- Language comprehension
 - Vocabulary (currently in Language)
 - Grammar/syntax (currently in Language)

RATIONALE FOR FOUNDATIONAL LITERACY STANDARDS

CURRENT STANDARDS

Reading Literature and Informational Text

Writing

Speaking and Listening

FOUNDATIONAL STANDARDS

Concepts of print, phonological awareness, phonics, fluency, vocabulary

Printing letters, word composition, sentence composition, writing fluency, vocabulary, language (grammar and mechanics)

Vocabulary, language (grammar, syntax), sentence and passage comprehension, morphology

WRITING

CURRENT STANDARD-KINDERGARTEN

Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., *My favorite book is . . .*).

Compare to the proposed revised standard on the next slide.

FL. SC. 6. K Demonstrate command of the conventions of standard English grammar and usage when speaking and conventions of standard English grammar and usage, including capitalization and punctuation, when writing.

With modeling or verbal prompts, **orally produce complete sentences.**

Use frequently occurring nouns and verbs **when speaking and in shared language activities.**

Form regular plural nouns **when speaking and in shared language activities.**

Understand and use question words (interrogatives) **when speaking and in shared language activities.**

Use the most frequently occurring prepositions **when speaking and in shared language activities.**

Produce and expand complete sentences **in shared language activities.**

Capitalize the first word in a sentence and the pronoun *I*.

LANGUAGE STANDARD

Current Standard	Proposed Revised Standard	Public Feedback
<p>L. 1. j-Produce and expand simple and declarative, interrogative, imperative, and exclamatory sentences in response to prompts.</p>	<p>LF.1 6-Demonstrate command of the conventions of standard English grammar and usage when speaking and conventions of standard English grammar and usage, including capitalization and punctuation, when writing.</p> <p>i. Produce and expand simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.</p>	<p>-“Writing compound sentences should be moved to a higher grade.”</p> <p>-“Focus on just writing and identifying the four types of sentences.”</p> <p>-“Students should learn to RECOGNIZE the types of sentences.”</p> <p>-“What???? These are six-year-olds!!!”</p>

EXAMPLE- READING INFORMATIONAL TEXT 9

Original Standard	Revised Standard
Analyze seminal US documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, etc.), including how they address related themes and concepts.	Analyze a variety of thematically-related texts of historical and literary significance for the way they address related topics, facts, and concepts.

Cornerstone Standard: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches an author takes.

Keep: 64%

Review: 20%

Remove: 16%

EXAMPLE- NARRATIVE WRITING, STANDARD 3

Original Standard	Revised Standard
Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	Write narrative fiction or literary nonfiction to convey experiences and/or events using effective techniques, well-chosen details, and well-structured event sequences.

Cornerstone Standard: Write narratives to develop real or imagined experiences or events using effective techniques, well-chosen details, and well-structured event sequences.

Keep: 83%

Review: 9%

Remove: 8%

EXAMPLE- SPEAKING & LISTENING, STANDARD 1

Original Standard	Revised Standard
Engage effectively in a range of collaborative discussions (one-on-one, in groups, teacher-led) with diverse partners on grade level topics, texts, and issues, building on on others' ideas and expressing their own clearly.	Prepare for collaborative discussions on 6th grade level topics and texts; engage effectively with varied partners, building on others' ideas and expressing their own ideas clearly.

Cornerstone Standard: Prepare for and participate effectively in a range of conversations and collaborations with varied partners, building on others' ideas and expressing their own clearly and persuasively.

Keep: 86%

Review: 5%

Remove: 9%

FINAL THOUGHTS AND WRAP UP



KEY MATH CHANGES

REINTRODUCED TIME AND MONEY INTO EARLY GRADES

- **K.MD.B.3** Identify the penny, nickel, dime, and quarter and recognize the value of each
- **1.MD.B.3** Tell and write time in hours and half-hours using analog and digital clocks
- **1.MD.B.4** Count the value of a set of like coins less than one dollar using the ¢ symbol only
- **2.MD.C.7** Tell and write time in quarter hours and to the nearest five minutes (in a.m. and p.m.) using analog and digital clocks
- **2.MD.C.8** Solve contextual problems involving dollar bills, quarters, dimes, nickels, and pennies using ¢ and \$ symbols appropriately

INCREASED FLUENCY EXPECTATIONS

- **K.OA.A.3** Decompose numbers less than or equal to 10 into addend pairs in more than one way (e.g., $5 = 2 + 3$ and $5 = 4 + 1$) by using objects or drawings. Record each decomposition using a drawing or writing an equation
- **K.OA.A.5** Fluently add and subtract within 10 using mental strategies.
- **1.OA.C.5** Add and subtract within 20 using strategies such as counting on, counting back, making 10, using fact families and related known facts, and composing/ decomposing numbers with an emphasis on making ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$ or adding $6 + 7$ by creating the known equivalent $6 + 4 + 3 = 10 + 3 = 13$)
- **1.OA.C.6** Fluently add and subtract within 20 using mental strategies. By the end of Grade 1, know from memory all sums up to 10

INCORPORATED ADDITIONAL STATISTICS STANDARDS

- 6th Grade: Develop understanding of statistical variability
- 7th Grade: Use random sampling to draw inferences about a population.
- 8th Grade: Investigate patterns of association in bivariate data.
- Algebra I/II: Summarize, represent, and interpret data on a single count or measurement variable.

REVISED FORMATTING

Operations and Algebraic Thinking (OA)

Cluster Headings

Content Standards

<p>A. Use the four operations with whole numbers to solve problems.</p> <p>(See Table 1 - Addition and Subtraction Situations and Table 2 - Multiplication and Division Situations)</p>	<p>4.OA.A.1 Interpret a multiplication equation as a comparison, (e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5). Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>4.OA.A.2 Multiply or divide to solve contextual problems involving multiplicative comparison and distinguish multiplicative comparison from additive comparison. For example, school A has 300 students and school B has 600 students: to say that school B has two times as many students is an example of multiplicative comparison; to say that school B has 300 more students is an example of additive comparison.</p> <p>4.OA.A.3 Solve multi-step contextual problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>
<p>B. Gain familiarity with factors and multiples.</p>	<p>4.OA.B.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p>
<p>C. Generate and analyze patterns.</p>	<p>4.OA.C.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</p>

NARROWED ALGEBRA II CONTENT

- Moved some standards to Precalculus or Statistics
- Revised some standards to limit their scope
- Clear limits on types of functions to be used
- Restricted logarithms to particular bases

SIGNIFICANT REVISIONS TO 4TH YEAR COURSES

- Created a New Course: Applied Mathematical Concepts
 - Probability Concepts, Financial Math, Linear Programming
- Revisions to Existing Courses:
 - Statistics
 - Bridge Math
 - Precalculus
 - Calculus
- Eliminated Courses:
 - Discrete Math
 - Finite Math

QUESTIONS?
