



CCR Elementary Protocol 2

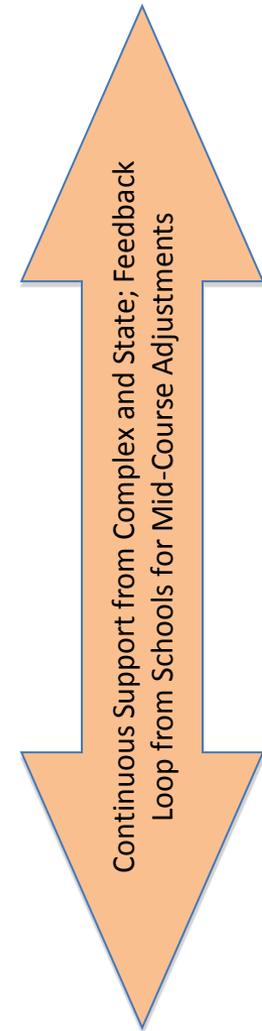
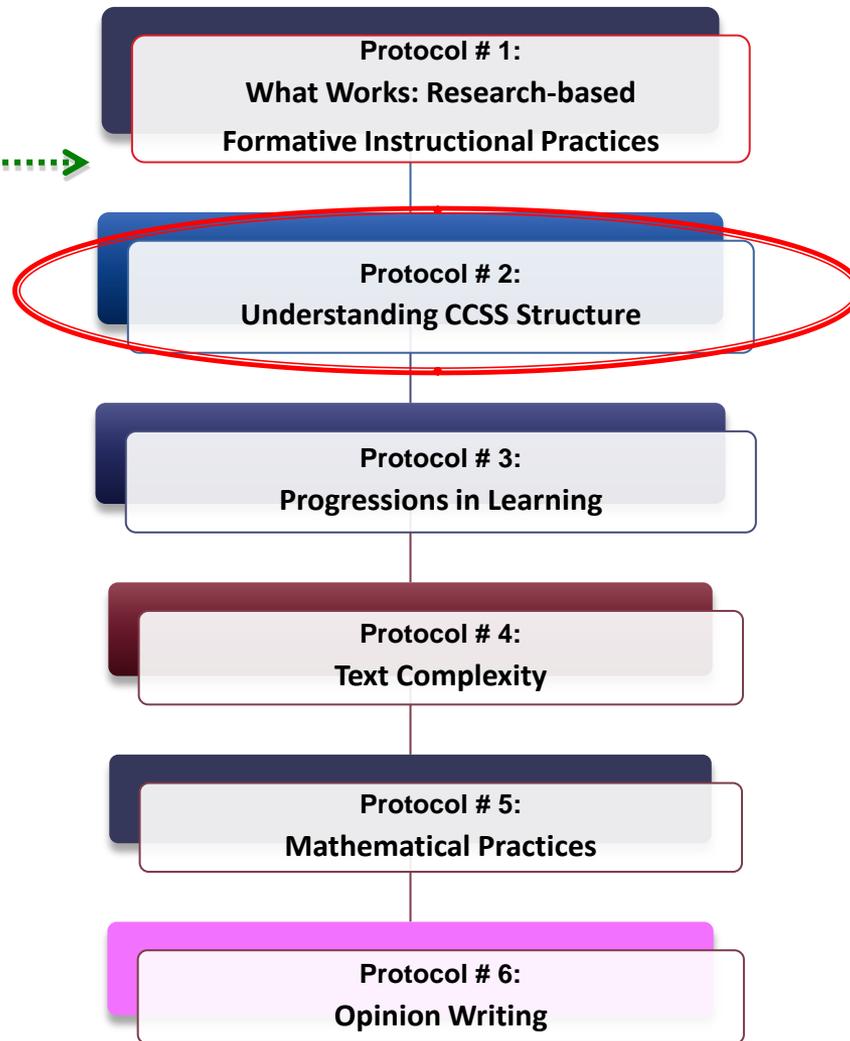
**Understanding Common Core State
Standards Structure**



College and Career Readiness: Tools for Schools

Elementary Sequence

Overview for Administrators:
Supporting Instructional Leadership with Job Embedded Professional Development





Formative Instructional Practices

Where am I going?

How do we make learning targets clear to students so that they have the same understanding of quality as teachers do?

Where am I now?

How does feedback allow students to self assess and set goals?

How do I close the gap?

What opportunities allow students to close the learning gap?





Desired Outcomes

- ▶ Understand the structure and design of the CCSS in English Language Arts and Math
- ▶ Understand the contents of the appendices
- ▶ Discuss the implications for instruction



All Means All

- ▶ The Common Core State Standards articulate rigorous expectations to prepare **all** students to be college and career ready, including English language learners and Special Education Students.
- ▶ These students likely will require additional instructional support.
- ▶ English Language Proficiency Standards (ELP) for ELL students are aligned to the CCSS.



DESIGN AND ORGANIZATION OF THE COMMON CORE STATE STANDARDS for English/Language Arts

Adapted from *A Study of the Common Core State Standards* developed by The Charles A. Dana Center at the University of Texas at Austin for the Hawaii Department of Education, Spring 2012



Common Core Shifts

- 1. Text Complexity and Range**
 - 2. Read Closely to Analyze, Infer and Give Evidence**
 - 3. Write to Sources**
 - 4. Short, Focused Research**
 - 5. Written and Spoken Argument**
 - 6. Academic Vocabulary**
 - 7. Shared Responsibility for Literacy Development Among All Teachers**
- 



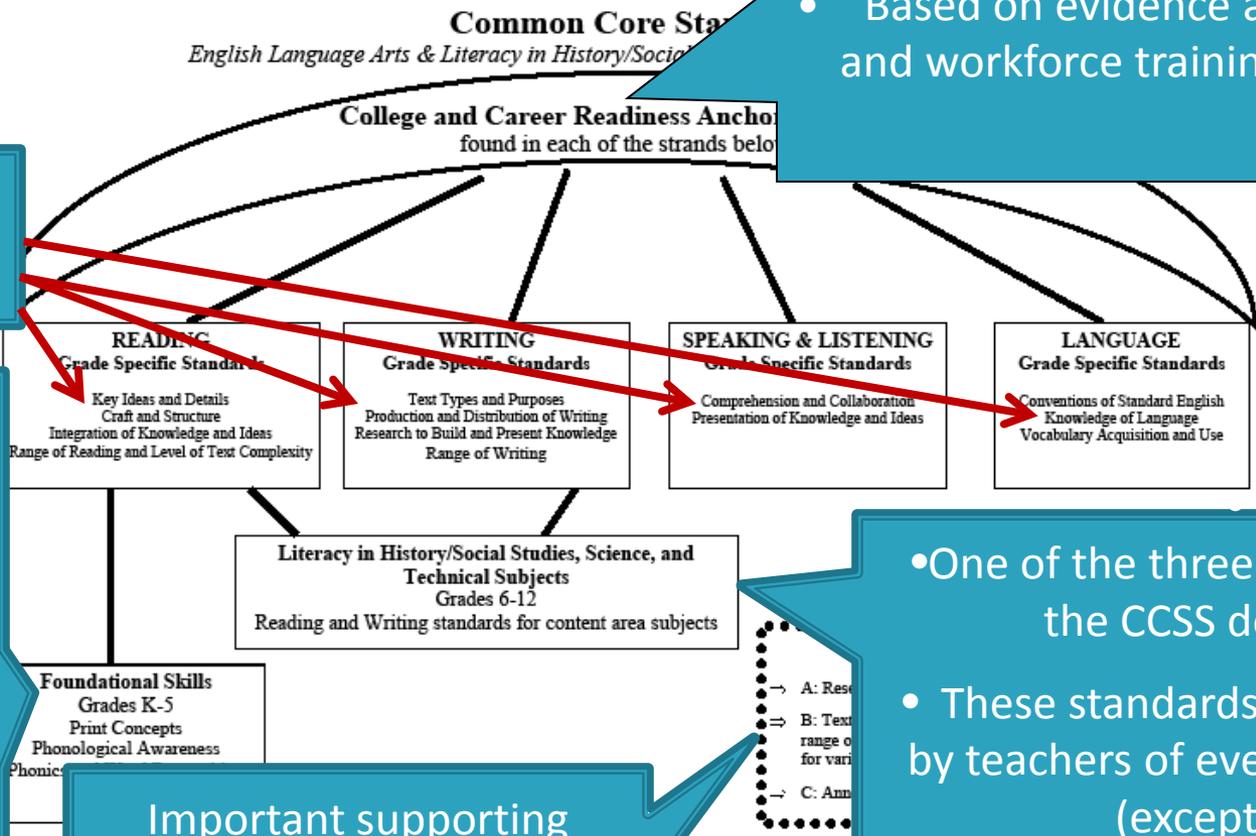
Common Core: English Language Arts Stan

College and Career Readiness (CCR)
ANCHOR Standards

- Broad expectations consistent across grades and content areas
- Based on evidence about college and workforce training expectations

Strands within the document

Sub-strand of standards only found within the K-5 section



Important supporting information can be found within the Appendices of the CCSS document

- One of the three sections within the CCSS document
- These standards must be taught by teachers of every content area (except ELA)



ELA: Elements

Anchor Standards

- ▶ General expectations that must be met for students to be prepared to enter college and workforce training programs ready to succeed

Strand

- ▶ Big broad ideas that describe the areas of focus for the English Language Arts Standards

Organizing Elements

- ▶ Categorization of ideas and standards within the strand

Grade - Specific Standards

- ▶ Expectations for each grade level





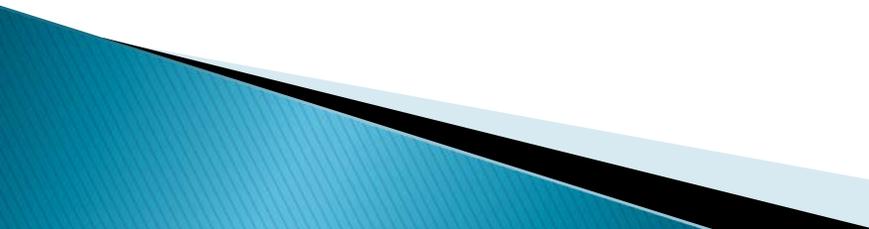
How To Read the ELA Document

The Standards comprise of ***three main sections***:

- ▶ A comprehensive K-5 section
- ▶ Two content area-specific sections for 6-12:
 - one for **ELA**
 - one for **history/social studies, science, and technical subjects.**

Each section is divided into ***strands***:

K-5 and 6-12 have Reading, Writing, Speaking and Listening, and Language strand



ELA Standards

STRANDS

Reading Literature & Informational

CCR Anchor
Standard

- 1.
2. **Key Ideas & Details**
- 3.
- 4.
5. **Craft & Structure**
- 6.
- 7.
8. **Integration of
Knowledge & Ideas**
- 9.
10. **Text Complexity**

Writing

CCR Anchor
Standard

- 1.
2. **Text Types &
Purpose**
- 3.
4. **Production &
Distribution of
Writing**
- 5.
- 6.
- 7.
8. **Research to Build
Knowledge**
- 9.
10. **Range of Writing**

Speaking/ Listening

CCR Anchor
Standard

- 1.
2. **Comprehension &
Collaboration**
- 3.
- 4.
5. **Presentation of
Knowledge & Ideas**
- 6.

Language

CCR Anchor
Standard

1. **Conventions of
Standards - English**
- 2.
3. **Knowledge of
Language**
- 4.
5. **Vocabulary
Acquisition & Use**
- 6.

K-5 FOUNDATIONAL SKILLS

- Print Concepts
- Phonological Awareness
- Phonics and Word Recognition
- Fluency



Turn and Talk

How does understanding the structure of the Common Core State Standards help me to work with my students?





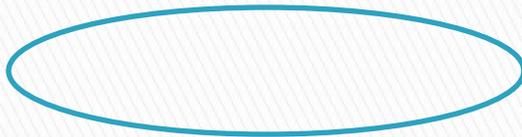
ELA: Key for Identifying the Elements



CCR ANCHOR STANDARDS



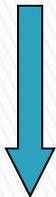
NOTES only found in introductory paragraphs



STRAND



TOPICS



GRADE-LEVEL COLUMNS



GRADE-SPECIFIC STANDARDS

Bracket the *Note*

Circle the *Strand*

College and Career Readiness Anchor Standards for Reading

Note on range and content of student reading

Box the
Anchor Standards

The K-5 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

increasingly challenging literary and informational texts. Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements. By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that will also give them the background to be better readers in all content areas. Students can only gain this foundation when the curriculum is intentionally and coherently structured to develop rich content knowledge within and across grades. Students also acquire the habits of reading independently and closely, which are essential to their future success.

Key Ideas and Details

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

Craft and Structure

4. 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.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of Reading and Level of Text Complexity

10. Read and comprehend complex literary and informational texts independently and proficiently.

Bracket the *Note* on range and content of K-5 reading for ELA classes

Circle the Strand, Sub-strand, and Code for the sub-strand

Reading Standards for Literature K-5

Underline the *Organizing Elements*

RL

The following standards offer a focus for instruction each year and help ensure that students are engaged in reading and tasks. Rigor is also expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Kindergartners:	Read through and Bracket the Notes	Grade 2 students:
<p>Key Ideas and Details</p> <p>1. With prompting and support, ask and answer questions about key details in a text.</p> <p>2. With prompting and support, retell familiar stories, including key details.</p> <p>3. With prompting and support, identify characters, settings, and major events in a story.</p>	<p>1. Ask and answer questions about key details in a text.</p> <p>2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.</p> <p>3. Describe characters, settings, and major events in a story, using key details.</p>	<p>Ask and answer such questions as <i>who, what, where, when, why, and how</i> to demonstrate understanding of key details in a text.</p> <p>Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.</p> <p>Describe how characters in a story respond to major events and challenges.</p>
<p>Craft and Structure</p> <p>4. Ask and answer questions about unknown words in a text.</p> <p>5. Recognize common types of texts (e.g., storybooks, poems).</p> <p>6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.</p>	<p>4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.</p> <p>5. Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.</p> <p>6. Identify who is telling the story at various points in a text.</p>	<p>Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.</p> <p>Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.</p> <p>Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.</p>
<p>Integration of Knowledge and Ideas</p> <p>7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).</p> <p>8. (Not applicable to literature)</p> <p>9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.</p>	<p>7. Use illustrations and details in a story to describe its characters, setting, or events.</p> <p>8. (Not applicable to literature)</p> <p>9. Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</p>	<p>Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.</p> <p>(Not applicable to literature)</p>
<p>Range of Reading and Level of Text Complexity</p> <p>10. Actively engage in group reading activities with purpose and understanding.</p>	<p>10. With prompting and support, read prose and poetry of appropriate complexity for grade 1.</p>	<p>Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.</p>

Check *Grade-specific Standards*

Draw arrows down to indicate the *Grade-level Columns*



Why does it say “Not applicable to literature”?

Integration of Knowledge and Ideas

7. Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).	7. Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.	7. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
8. (Not applicable to literature)	8. (Not applicable to literature)	8. (Not applicable to literature)
9. Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).	9. Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	9. Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.

Refer back to the CCR
Anchor Standards for
Reading



Let's Practice

- ▶ Read and review the anchor standards for
 - Writing K-5
 - Speaking & Listening K-5
 - Language

- ▶ Read through and code each of the pages and look for the correspondence between the Anchor standards and the grade level standards.

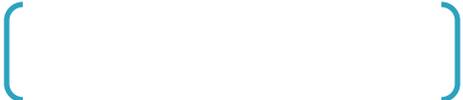


Practice Identifying the parts of the ELA CCSS

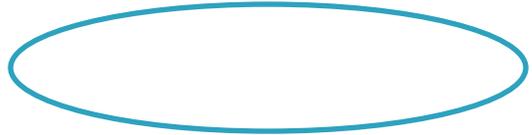
ELA: Key for Identifying the Elements



CCR ANCHOR STANDARDS



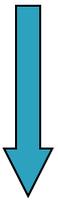
NOTES only found in introductory paragraphs



STRAND



TOPICS



GRADE-LEVEL COLUMNS



GRADE-SPECIFIC STANDARDS

College and Career Readiness Anchor Standards for Writing

The K-5 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Note on range and content of student writing

Circle the Strand

Bracket the Note

Text Types and Purposes

1. Write arguments to support claims with clear reasons and sufficient evidence. Write informative/explanatory texts (including essays, research reports, and presentations) on substantive topics or texts, using valid reasoning and relevant research and data, to examine a topic or text, and issue, and convey ideas and information clearly and accurately through the selection, organization, and analysis of content.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

Box the Anchor Standards

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Students learn to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying, and conveying real and imagined experiences and events. As they begin to adapt to the form and content of their writing to accomplish a particular task and purpose. They develop the capacity to build knowledge on a subject through research projects and to respond analytically to literary and informational sources. To meet these goals, students must devote significant time and effort to writing, producing numerous pieces over short and extended time frames throughout the year.

Research to Build and Present Knowledge

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Bracket the Note on range and content of K-5 writing for ELA classes

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (e.g., a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Circle the Strand, Sub-strand, and Code for the sub-strand

Writing Standards

Bracket the Note

The following standards for Kindergarten through Grade 2 are intended to help ensure that students gain adequate mastery of a range of skills and applications. Each year in the standards is designed to build on the skills and understandings from the previous year, showing increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and the selection of relevant content and sources. *Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.* The expected growth in student writing ability is reflected both in the standards themselves and in the collection of annotated student writing samples in Appendix C.

Kindergartners:

Grade 1 students:

Grade 2 students:

Text Types and Purposes

1. ✓ 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 . . .*).
2. ✓ Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
3. ✓ Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the order in which they occurred, and describe a reaction to what happened.

1. ✓ Write opinion pieces in which they state an opinion or idea, supply reasons that support the opinion, and use linking words (e.g., *because*, *and*, *also*) to connect opinion and reasons, and provide a concluding statement or section.
2. ✓ Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.

3. ✓ Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., *because*, *and*, *also*) to connect opinion and reasons, and provide a concluding statement or section.
2. ✓ Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.
3. ✓ Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.

Production and Distribution of Writing

4. ✓ (Begins in grade 3)
5. ✓ With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.
6. ✓ With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.

4. ✓ (Begins in grade 3)
5. ✓ With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.
6. ✓ With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

4. ✓ (Begins in grade 3)
5. ✓ With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
6. ✓

Research to Build and Present Knowledge

7. ✓ Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
8. ✓ With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
9. ✓ (Begins in grade 4)

7. ✓ Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).
8. ✓ With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
9. ✓ (Begins in grade 4)

7. ✓ Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
8. ✓ Recall information from experiences or gather information from provided sources to answer a question.
9. ✓ (Begins in grade 4)

Range of Writing

10. ✓ (Begins in grade 3)

10. ✓ (Begins in grade 3)

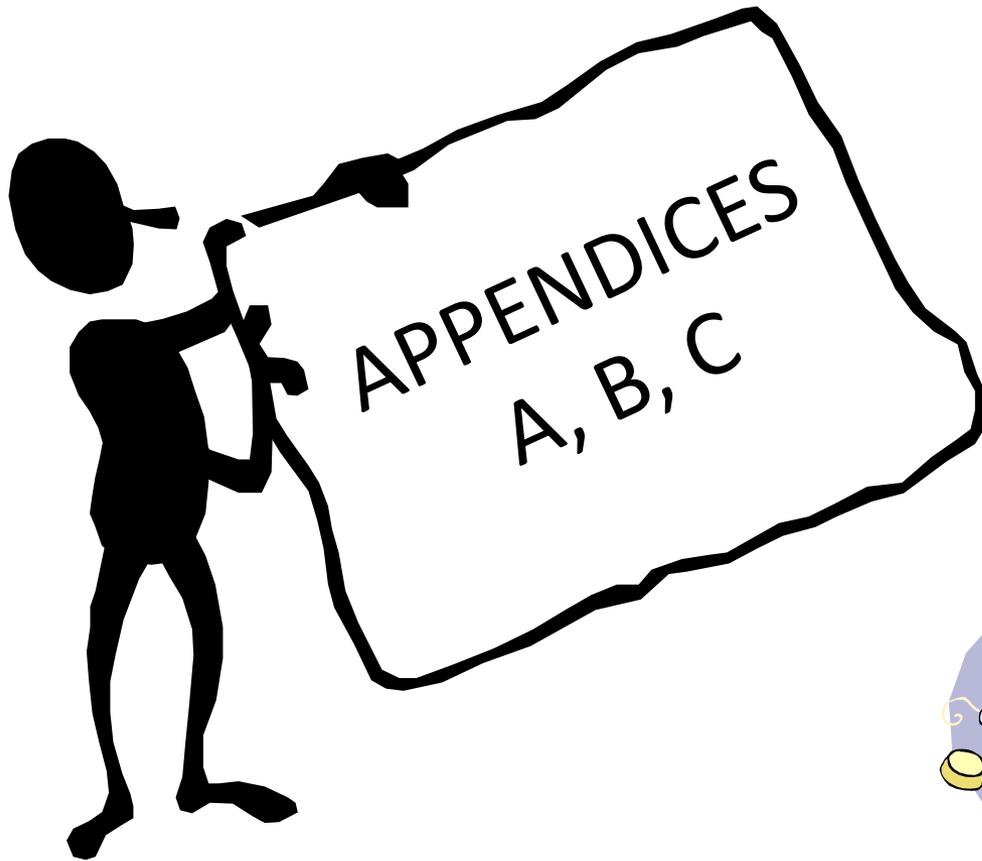
10. ✓ (Begins in grade 3)

Underline the Organizing Elements

Draw arrows down to indicate the Grade-level Columns

Check Grade-specific Standards

The TREASURE found in the ELA APPENDICES of the CCSS





Appendix A

- ▶ Researching Supporting Key Elements of the Standards
 - Reading (text complexity): pgs. 2-16
 - Reading Foundational Skills: pgs. 17-22
 - Writing: pgs. 23-25
 - Speaking and Listening: pgs. 26-27
 - Language: pgs. 28-31
 - Vocabulary: pgs. 32-35
 - ▶ Glossary of Key Terms: pgs. 42-43
- 



Appendix B

- ▶ Text Exemplars & Sample Performance Tasks
 - K-1: pgs 14 – 36
 - 2-3: pgs 37 – 61
 - 4-5: pgs 63 – 76

Note: These texts “...expressly **do not represent a partial or complete reading list.” They are neither limiting nor obligatory.*





Appendix C

- ▶ Writing samples
 - Illustrate the criteria required to meet the Common Core State Standards
 - Provides particular types of writing—argument, informative/explanatory text, and narrative—in a given grade
 - Exhibits the level of quality required to meet the writing standards for the specific grade levels



Turn and Talk

- ▶ Read through and review the contents of Appendix A, B, or C.
- ▶ What resources have you found in Appendix A, B, or C that you can use in your classroom?



Understanding Common Core State Standards Structure

Mathematics





**Common
Core:
Mathematics
Standards**

**Standards for
Mathematical
Practice
And
Content**



Standards for Mathematical Practices (K-12)

Key for Identifying the Components

———— Standard Title

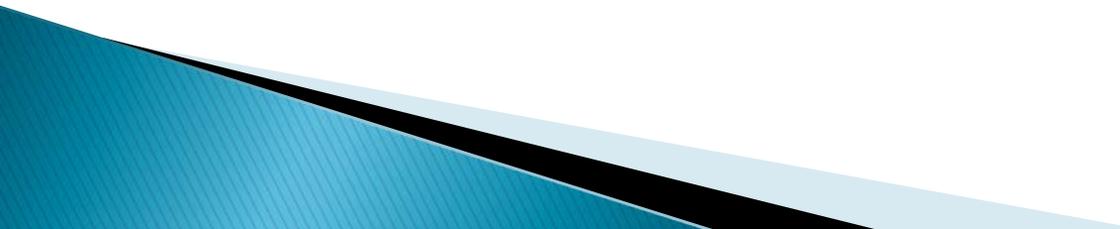
() Narrative Description

Turn to Standards for Mathematical
Practices (Page 6)



Standards for Mathematical Practice

Follow along with the *Standards for Mathematical Practice* document –
Practice 1 (page 6)

- ▶ Underline the Standard Title
 - ▶ Bracket the Narrative Description
- 

Mathematics | Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important “processes and proficiencies” with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council’s report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one’s own efficacy).

1 Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

2 Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

3 Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions,

Underline:
Standard title

Bracket:
Narrative
Description



Standards for Mathematical Practice



Review the Standards for
Mathematical Practice document.
Complete the process for Practices
two through eight (page 6 - 8)

- ▶ Underline the Standard Title
 - ▶ Bracket the Narrative Description
- 
- A decorative graphic in the bottom-left corner consisting of a blue triangle pointing right, a black diagonal line, and a light blue triangle pointing left.



Common Core State Standards for Mathematical Content

Grade Level Domains

K - 5

Counting and Cardinality
Operations and Algebraic
Thinking
Number and Operations in
Base Ten
Number and Operations –
Fractions
Measurement and Data
Geometry

6 - 8

- Ratios and Proportional Relationships
- The Number System
- Expressions and Equations
- Functions
- Geometry
- Statistics and Probability



K-8 Grade Level Standards for Mathematical Content

Introduction

- ▶ Provides important contextual information and calls out and describes critical areas of focus

Domains

- ▶ Larger groups of related standards

Cluster Headings

- ▶ Overview / quick summary of the mathematical ideas within a domain

Standards

- ▶ Define what students should understand and be able to do

Math

on

Grade K Overview

Counting and Cardinality

- Know number names and the count sequence.
- Count to tell the number of objects.
- Compare numbers.

Operations and Algebraic Thinking

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Number and Operations in Base Ten

- Work with numbers 11–19 to gain foundations for place value.

Measurement and Data

- Describe and compare measurable attributes.
- Classify objects and count the number of objects in categories.

Geometry

- Identify and describe shapes.
- Analyze, compare, create, and compose shapes.

Mathematical Practices

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.

Components: K-8 **DOMAIN** Level Mathematics

COMMON CORE STATE

CLUSTER HEADINGS

Standards within the CLUSTER

and Algebraic Thinking

2.O

Represent and solve problems involving addition and subtraction.

1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹

Add and subtract within 20.

2. Fluently add and subtract within 20 using mental strategies.² By end of Grade 2, know from memory all sums of two one-digit numbers.

Work with equal groups of objects to gain foundations for

FOOTNOTES

¹See Glossary, Table 1.

²See standard 1.OA.6 for a list of mental strategies.

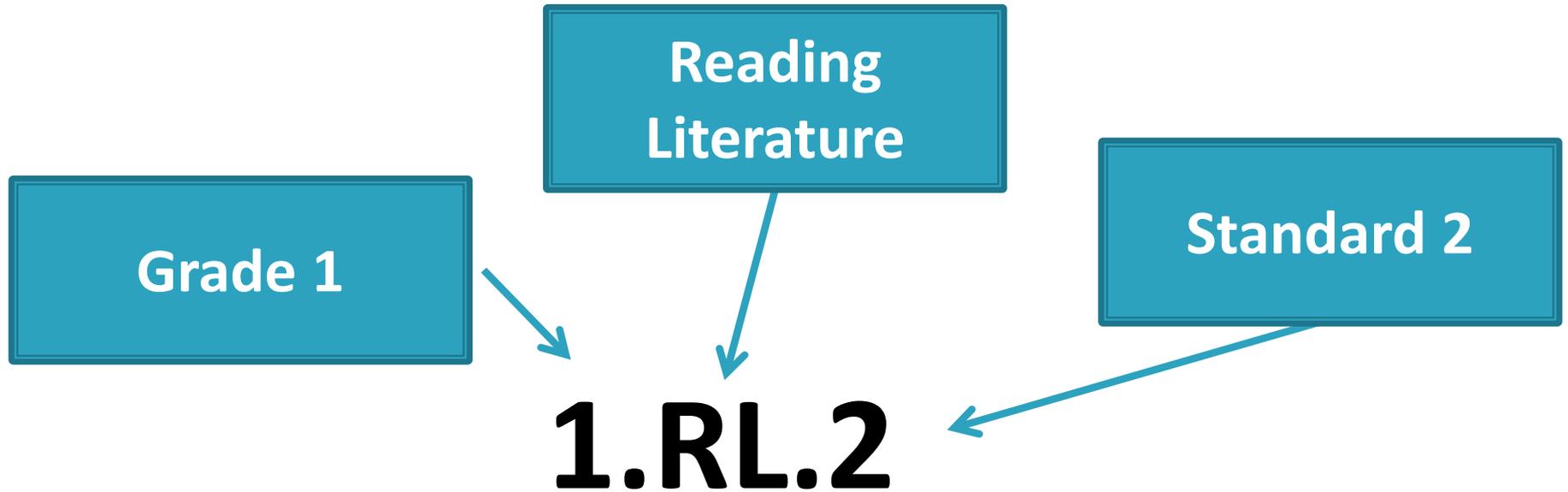
³Explanations may be supported by drawings or objects.



Turn and Talk

- ▶ How might knowing codes and how they are written help teachers?
- ▶ What are some reasons that you came up with?

CODING OF THE STANDARDS



Grade 1 - Reading Literature - Standard 2

Retell stories, including key details, and demonstrate understanding of their central message or lesson.

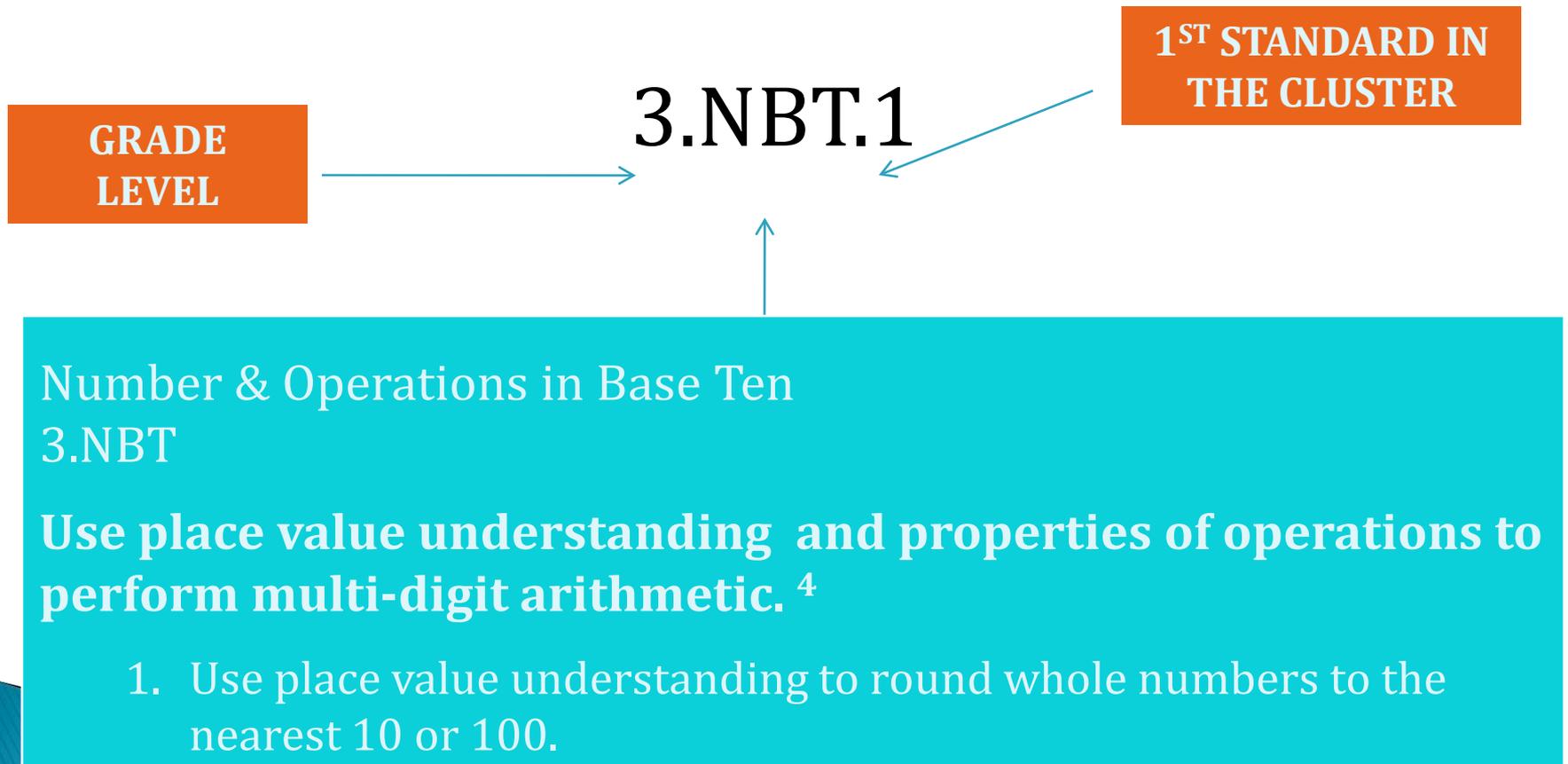


Cracking the Literacy “CODE”

Strand Code Key

Reading Standards	R
Reading Standards for Literature	RL
Reading Standards for Informational Text	RI
Reading Standards: Foundational Skills	RF
Writing Standards	W
Speaking & Listening Standards	SL
Language Standards	L

How to read a Common Core K-8 Mathematics Grade Level Standard





Can you code the following standards?

Writing, Grade 3, Standard 3

3.W.3

Language, Grade 1, Standard 3a

1.L.3a

Number and Operations-Fractions,
Grade 3, Standard 2a

3.NF.2a

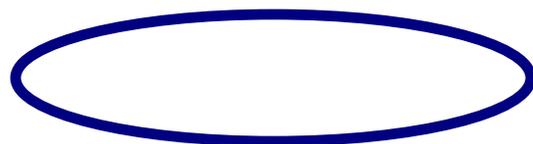




Standards for Mathematical Content (K-8) Key for Identifying the Components



Introduction



Domain



Cluster Heading



Content Standard



Mathematics | Grade 3

In Grade 3, instructional time should focus on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

(1) Students develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area models; multiplication is finding an unknown product, and division is finding an unknown factor in these situations. For equal-sized group situations, division can require finding the unknown number of groups or the unknown group size. Students use properties of operations to calculate products of whole numbers, using increasingly sophisticated strategies based on these properties to solve multiplication and division problems involving single-digit factors. By comparing a variety of solution strategies, students learn the relationship between multiplication and division.

(2) Students develop an understanding of fractions, beginning with unit fractions. Students view fractions in general as being built out of unit fractions, and they use fractions along with visual fraction models to represent parts of a whole. Students understand that the size of a fractional part is relative to the size of the whole. For example, $\frac{1}{2}$ of the paint in a small bucket could be less paint than $\frac{1}{3}$ of the paint in a larger bucket, but $\frac{1}{3}$ of a ribbon is longer than $\frac{1}{5}$ of the same ribbon because when the ribbon is divided into 3 equal parts, the parts are longer than when the ribbon is divided into 5 equal parts. Students are able to use fractions to represent numbers equal to, less than, and greater than one. They solve problems that involve comparing fractions by using visual fraction models and strategies based on noticing equal numerators or denominators.

(3) Students recognize area as an attribute of two-dimensional regions. They measure the area of a shape by finding the total number of same-size units of area required to cover the shape without gaps or overlaps, a square with sides of unit length being the standard unit for measuring area. Students understand that rectangular arrays can be decomposed into identical rows or into identical columns. By decomposing rectangles into rectangular arrays of squares, students connect area to multiplication, and justify using multiplication to determine the area of a rectangle.

(4) Students describe, analyze, and compare properties of two-dimensional shapes. They compare and classify shapes by their sides and angles, and connect these with definitions of shapes. Students also relate their fraction work to geometry by expressing the area of part of a shape as a unit fraction of the whole.

Bracket: Introduction

Grade 3 Overview

Operations and Algebraic Thinking

- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Number and Operations in Base Ten

- Use place value understanding and properties of operations to perform multi-digit arithmetic.

Number and Operations—Fractions

- Develop understanding of fractions as numbers.

Measurement and Data

- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

Geometry

- Reason with shapes and their attributes.

Mathematical Practices

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 units and labels.
6. Attend to precision.

Underline:
Cluster
Headings

Circle:
Domains

Operations and Algebraic Thinking

3.OA

Circle:
DomainRepresent and solve problems involving multiplication and division.

1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .
2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹
4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \square \div 3$, $6 \times 6 = ?$.

Note the code: 3.OA
3 (grade)
OA (domain)Check mark:
StandardUnderstand properties of multiplication and the relationship between multiplication and division.

5. Apply properties of operations as strategies to multiply and divide.² Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)
6. Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

Underline:
Cluster HeadingsMultiply and divide within 100.

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

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

8. Solve two-step word problems using the four operations. 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.³
9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.

¹See Glossary Table 2.²Students need not use formal terms for these properties.³This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).Notice
the
Footnotes!

Some standards have subparts that must be taken in conjunction with one another

Number and Operations in Base Ten 3.NBT

Use place value understanding and properties of operations to perform multi-digit arithmetic.⁴

1. Use place value understanding to round whole numbers to the nearest 10 or 100.
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Number and Operations—Fractions⁵ 3.NF

Develop understanding of fractions as numbers.

1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
 2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.
 - a. 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.
 - b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
 3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
 - a. Understand two fractions as equivalent (equal) if they are the same size and locate the same point on a number line.
 - b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- Understand whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form $3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point on a number line diagram.*
- 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.

Measurement and Data 3.MD

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Algorithms may be used.

Measurements in this domain are limited to fractions with denominators 2, 3,

Footnotes can appear at the Cluster Heading

Code:
3.NF.2a

Footnotes can appear at the Domain

Commitment to Action



- A. Chart the differences between the structure of Math and English/Language Arts Common Core State Standards
- B. In grade level groups, select Language Arts or Math:
 - Step One: Review the deconstructed standards Kentucky and North Carolina sites (ELA) and Arizona (Math).
 - What should students know and be able to do?
 - What is the level of rigor?
 - Step Two: What can you do in your classroom to implement the Common Core State Standards in the next month? Year?



RESOURCES

Common Core State Standards

<http://www.corestandards.org/the-standards>

Hawaii Standards Toolkit

http://wetserver.net/hcpsv3_staging/cc/common-core.jsp

Deconstructed Standards (Kentucky):

<http://www.education.ky.gov/kde/instructional+resources/curriculum+documents+and+resources/english+language+arts+deconstructed+standards.htm>

Unpacked Standards (North Carolina):

<http://www.ncpublicschools.org/acre/standards/common-core-tools/#unela>

Unpacked Math Standards (Arizona):

<http://www.azed.gov/standards-practices/mathematics-standards/>

HIDOE Edmodo online community:

www.edmodo.com

(join the HIDOE Grades K-2 [2nxrk4] and/or HIDOE Grades 3-5 [ds4mt4])

PDE³ Survey Reminder: <https://pde3.k12.hi.us>

Survey

You are currently viewing - Race To The Top (RTTT)

Question: 1 Rate your satisfaction level on this protocol.

Rate your satisfaction level on this protocol.

- Not at all satisfied
- Slightly satisfied
- Moderately satisfied
- Very satisfied
- Extremely satisfied

Question: 2 Rate the level of understanding learned or gained from this protocol

Rate the level of understanding learned or gained from this protocol

- Not at all
- A little
- Somewhat
- Quite a bit
- A lot

Question: 3 Rate the level of impact this protocol will have on your practice. Not at all; A little; Somewhat; Quite a bit; A lot

Rate the level of impact this protocol will have on your practice.

- Not at all
- A little
- Somewhat
- Quite a bit
- A lot

Question: 4 What other resources would be helpful?

What other resources would be helpful?

Feedback

Question: 5 Any other questions or comments about the material in this protocol.

Any other questions or comments about the material in this protocol.

Thank you for your feedback