



California's  
**COMMON CORE**  
Content Standards  
Kindergarten

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Content Standards for  
ELA and Mathematics  
Kindergarten

**TABLE OF CONTENTS**

READING STANDARDS LITERATURE	2-7
WRITING STANDARDS	8-9
SPEAKING & LISTENING	10
LANGUAGE STANDARDS	11-12
VISUAL DATA	13-16
MATHEMATICS STANDARDS COUNTING & CARDINALITY	17-20
OPERATIONS & ALGEBRAIC FUNCTIONS	21
NUMBER & OPERATIONS IN BASE TEN	22
MEASUREMENT & DATA	22
GEOMETRY	23

# READING STANDARDS

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. *Students advancing through the grades are expected to meet each year's gradespecific standards and retain or further develop skills and understandings mastered in preceding grades.*

## LITERATURE

### Key Ideas and Details

K

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, retell familiar stories, including key details.
3. With prompting and support, identify characters, settings, and major events in a story.

1ST

1. Ask and answer questions about key details in a text.
2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.
3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.

### Craft and Structure

4. Ask and answer questions about unknown words in a text.
5. Recognize common types of texts (e.g., storybooks, poems, **fantasy, realistic text**).
6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.

4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.
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.
6. Identify who is telling the story at various points in a text.

### Integration of Knowledge and Ideas

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).
8. (Not applicable to literature)

7. Use illustrations and details in a story to describe its characters, setting, or events.
8. (Not applicable to literature)

# READING STANDARDS

K

1ST

## Range of Reading Level & Level of Text Complexity

9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

9. Compare and contrast the adventures and experiences of characters in stories.

10. Actively engage in group reading activities with purpose and understanding.

10. With prompting and support, read prose and poetry of appropriate complexity for grade 1.

**a. Activate prior knowledge related to the information and events in texts.**

**a. Activate prior knowledge related to the information and events in a text.**

**b. Use illustrations and context to make predictions about text.**

**b. Confirm predictions about what will happen next in a text.**

# READING STANDARDS

## INFORMATIONAL TEXT

### Key Ideas and Details

**K**

**1ST**

1. With prompting and support, ask and answer questions about key details in a text.

1. Ask and answer questions about key details in a text.

2. With prompting and support, identify the main topic and retell key details of a text.

2. Identify the main topic and retell key details of a text.

3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.

### Craft and Structure

4. With prompting and support, ask and answer questions about unknown words in a text.

4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

5. Identify the front cover, back cover, and title page of a book.

5. Know and use various text structures (e.g., sequence) and text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.

6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

### Integration of Knowledge and Ideas

7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).

7. Use the illustrations and details in a text to describe its key ideas.

8. With prompting and support, identify the reasons an author gives to support points in a text.

8. Identify the reasons an author gives to support points in a text.

# READING STANDARDS

K

9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

1ST

9. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

## Range of Reading & Level of text complexity

10. Actively engage in group reading activities with purpose and understanding.  
**a. Activate prior knowledge related to the information and events in texts.**  
**b. Use illustrations and context to make predictions about text.**

10. With prompting and support, read informational texts appropriately complex for grade 1.  
**a. Activate prior knowledge related to the information and events in a text.**  
**b. Confirm predictions about what will happen next in a text.**

# READING STANDARDS

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: good readers will need much less practice with these concepts than struggling readers will. The point is to teach students what they need to learn and not what they already know—to discern when particular children or activities warrant more or less attention.

## FOUNDATIONAL SKILLS

## Print Concepts

### K

1. Demonstrate understanding of the organization and basic features of print.
  - a. Follow words from left to right, top to bottom, and page by page.
  - b. Recognize that spoken words are represented in written language by specific sequences of letters.
  - c. Understand that words are separated by spaces in print.
  - d. Recognize and name all upper- and lowercase letters of the alphabet.

### 1ST

1. Demonstrate understanding of the organization and basic features of print.
  - a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

## Phonological Awareness

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
  - a. Recognize and produce rhyming words.
  - b. Count, pronounce, blend, and segment syllables in spoken words.
  - c. Blend and segment onsets and rimes of single-syllable spoken words.
  - d. Blend two to three phonemes into recognizable words.**
  - e. Isolate and pronounce the initial, medial vowel, and final sounds(phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.\* (This does not include CVCs ending with /l/, /r/, or /x/.)
  - f. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
  - a. Distinguish long from short vowel sounds in spoken single-syllable words.
  - b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.
  - c. Isolate and pronounce initial, medial vowel, and final sounds(phonemes) in spoken single-syllable words.
  - d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).

# READING STANDARDS

K

1ST

## Phonics & Word Recognition

3. Know and apply grade-level phonics and word analysis skills in decoding words **both in isolation and in text.**
- a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant.
  - b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels.\*
  - c. Read common high frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does).
  - d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

3. Know and apply grade-level phonics and word analysis skills in decoding words **both in isolation and in text.**
- a. Know the spelling-sound correspondences for common consonant digraphs.
  - b. Decode regularly spelled one-syllable words.
  - c. Know final -e and common vowel team conventions for representing long vowel sounds.
  - d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.
  - e. Decode two-syllable words following basic patterns by breaking the words into syllables.
  - f. Read words with inflectional endings.
  - g. Recognize and read grade-appropriate irregularly spelled words.

## Fluency

4. Read emergent-reader texts with purpose and understanding.

4. Read with sufficient accuracy and fluency to support comprehension.
- a. Read on-level text with purpose and understanding.
  - b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.
  - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.



# WRITING STANDARDS

The following standards for K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding 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.

## WRITING

### Text Types & Purposes

#### K

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 events in the order in which they occurred, and provide a reaction to what happened.

#### 1ST

1. Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.
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 narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.

### Production & Distribution of Writing

4. (Begins in grade 2)
5. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.

4. (Begins in grade 2)
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.

# WRITING STANDARDS

**K**

6. With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.

**1<sup>ST</sup>**

6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

## Research to Build & 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).

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.

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)

8. (Begins in grade 4)

## Range of Writing

9. (Begins in grade 2)

10. (Begins in grade 2).

# SPEAKING & LISTENING

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *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.*

K

1ST

## Comprehension & Collaboration

1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
  - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
  - b. Continue a conversation through multiple exchanges.

2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
  - a. **Understand and follow one- and two-step oral directions**

3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
  - a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
  - b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
  - c. Ask questions to clear up any confusion about the topics and texts under discussion.

2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
  - a. Give, restate, and follow simple two-step directions

3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

## Presentation of Knowledge & Ideas

4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.

5. Add drawings or other visual displays to descriptions as desired to provide additional detail.

6. Speak audibly and express thoughts, feelings, and ideas clearly.

4. Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.

- a. Memorize and recite poems, rhymes, and songs with expression.

5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

6. Produce complete sentences when appropriate to task and situation.

# LANGUAGE STANDARDS

The following standards for grades K–5 offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. *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.* Beginning in grade 3, skills and understandings that are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking are marked with an asterisk (\*).

K

1ST

## Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
  - a. Print many upper- and lowercase letters.
  - b. Use frequently occurring nouns and verbs.
  - c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., *dog, dogs; wish, wishes*).
  - d. Understand and use question words (interrogatives) (e.g., *who, what, where, when, why, how*).
  - e. Use the most frequently occurring prepositions (e.g., *to, from, in, out, on, off, for, of, by, with*).
  - f. Produce and expand complete sentences in shared language activities.

2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
  - a. Capitalize the first word in a sentence and the pronoun I.
  - b. Recognize and name end punctuation.
  - c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).
  - d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
  - a. Print all upper- and lowercase letters.
  - b. Use common, proper, and possessive nouns.
  - c. Use singular and plural nouns with matching verbs in basic sentences (e.g., *He hops; We hop*).
  - d. Use personal (subject, object), possessive, and indefinite pronouns (e.g., *I, me, my; they, them, their, anyone, everything*).
  - e. Use verbs to convey a sense of past, present, and future (e.g., *Yesterday I walked home; Today I walk home; Tomorrow I will walk home*).
  - f. Use frequently occurring adjectives.
  - g. Use frequently occurring conjunctions (e.g., *and, but, or, so, because*).
  - h. Use determiners (e.g., articles, demonstratives).
  - i. Use frequently occurring prepositions (e.g., *during, beyond, toward*).
  - j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.

2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
  - a. Capitalize dates and names of people.
  - b. Use end punctuation for sentences.
  - c. Use commas in dates and to separate single words in a series.
  - d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.
  - e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.

# LANGUAGE STANDARDS

K

1ST

## Knowledge of Language

3. (Begins in grade 2)

3. (Begins in grade 2)

## Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *kindergarten reading and content*.
- a. Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb to *duck*).
  - b. Use the most frequently occurring inflections and affixes (e.g., *-ed*, *-s*, *re-*, *un-*, *pre-*, *-ful*, *-less*) as a clue to the meaning of an unknown word.

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 1 reading and content*, choosing flexibly from an array of strategies.
- a. Use sentence-level context as a clue to the meaning of a word or phrase.
  - b. Use frequently occurring affixes as a clue to the meaning of a word.
  - c. Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g., *looks, looked, looking*).

5. With guidance and support from adults, explore word relationships and nuances in word meanings.
- a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
  - b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).
  - c. Identify real-life connections between words and their use (e.g., note places at school that are *colorful*).
  - d. Distinguish shades of meaning among verbs describing the same general action (e.g., *walk, march, strut, prance*) by acting out the meanings.

5. With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.
- a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.
  - b. Define words by category and by one or more key attributes (e.g., a *duck* is a bird that swims; a *tiger* is a large cat with stripes).
  - c. Identify real-life connections between words and their use (e.g., note places at home that are *cozy*).
  - d. Distinguish shades of meaning among verbs differing in manner (e.g., *look, peek, glance, stare, glare, scowl*) and adjectives differing in intensity (e.g., *large, gigantic*) by defining or choosing them or by acting out the meanings.

6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., *I named my hamster Nibblet because she nibbles too much because she likes that*).

## LANGUAGE PROGRESSIVE SKILLS, BY GRADE

The following skills, marked with an asterisk (\*) in Language standards 1-3, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.

Standard	Grade(s)							
	3	4	5	6	7	8	9-10	11-12
<b>L.3.1f.</b> Ensure subject-verb and pronoun-antecedent agreement.								
<b>L.3.3a.</b> Choose words and phrases for effect.								
<b>L.4.1f.</b> Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.								
<b>L.4.1g.</b> Correctly use frequently confused words (e.g., <i>to/too/two</i> ; <i>there/their</i> ).								
<b>L.4.3a.</b> Choose words and phrases to convey ideas precisely.*								
<b>L.4.3b.</b> Choose punctuation for effect.								
<b>L.5.1d.</b> Recognize and correct inappropriate shifts in verb tense.								
<b>L.5.2a.</b> Use punctuation to separate items in a series.†								
<b>L.6.1c.</b> Recognize and correct inappropriate shifts in pronoun number and person.								
<b>L.6.1d.</b> Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).								
<b>L.6.1e.</b> Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.								
<b>L.6.2a.</b> Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.								
<b>L.6.3a.</b> Vary sentence patterns for meaning, reader/listener interest, and style.‡								
<b>L.6.3b.</b> Maintain consistency in style and tone.								
<b>L.7.1c.</b> Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.								
<b>L.7.3a.</b> Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.								
<b>L.8.1d.</b> Recognize and correct inappropriate shifts in verb voice and mood.								
<b>L.9-10.1a.</b> Use parallel structure.								

\*Subsumed by L.7.3a

†Subsumed by L.9-10.1a

‡Subsumed by L.11-12.3a

## Measuring Text Complexity: Three Factors



**Qualitative evaluation of the text:** Levels of meaning, structure, language conventionality and clarity, and knowledge demands

**Quantitative evaluation of the text:** Readability measures and other scores of text complexity

**Matching reader to text and task:** Reader variables (such as motivation, knowledge, and experiences) and task variables (such as purpose and the complexity generated by the task assigned and the questions posed)

**Note:** More detailed information on text complexity and how it is measured is contained in Appendix A

## Range of Text Types for K-5

Students in grades K-5 apply the Reading standards to the following range of text types, with texts selected from a broad range of cultures and periods.

Literature		Informational Text	
<b>Stories</b>	<b>Drama</b>	<b>Literary Nonfiction</b>	
Includes children's adventure stories, folktales, legends, fables, fantasy, realistic fiction, and myth	Includes staged dialogue and brief familiar scenes	Includes biographies and autobiographies; history, social studies, science, and the arts; technical texts, including directions, forms, and information displayed in graphs, charts, or maps; and digital sources on a range of topics	Includes nursery rhymes and the subgenres of the narrative poem, limerick, and free verse poem

# TEXT ILLUSTRATING THE COMPLEXITY, QUALITY, AND RANGE OF STUDENT READING K-5

	Literature: Stories, Dramas, Poetry	Informational Texts: Literary Nonfiction and Historical, Scientific, and Technical Texts
K*	<ul style="list-style-type: none"> <li>• <i>Over in the Meadow</i> by John Langstaff (traditional) (c1800)*</li> <li>• <i>A Boy, a Dog, and a Frog</i> by Mercer Mayer (1967)</li> <li>• <i>Pancakes for Breakfast</i> by Tomie DePaola (1978)</li> <li>• <i>A Story, A Story</i> by Gail E. Haley (1970)*</li> <li>• <i>Kitten's First Full Moon</i> by Kevin Henkes (2004)*</li> </ul>	<ul style="list-style-type: none"> <li>• <i>My Five Senses</i> by Ailiki (1962)**</li> <li>• <i>Truck</i> by Donald Crews (1980)</li> <li>• <i>I Read Signs</i> by Tana Hoban (1987)</li> <li>• <i>What Do You Do With a Tail Like This?</i> by Steve Jenkins and Robin Page (2003)*</li> <li>• <i>Amazing Whales!</i> by Sarah L. Thomson (2005)*</li> </ul>
1*	<ul style="list-style-type: none"> <li>• "Mix a Pancake" by Christina G. Rossetti (1893)**</li> <li>• <i>Mr. Popper's Penguins</i> by Richard Atwater (1938)*</li> <li>• <i>Little Bear</i> by Else Holmelund Minarik, illustrated by Maurice Sendak (1957)**</li> <li>• <i>Frog and Toad Together</i> by Arnold Lobel (1971)**</li> <li>• <i>Hil Fly Guy</i> by Tedd Arnold (2006)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>A Tree Is a Plant</i> by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)**</li> <li>• <i>Starfish</i> by Edith Thacher Hurd (1962)</li> <li>• <i>Follow the Water from Brook to Ocean</i> by Arthur Dorros (1991)**</li> <li>• <i>From Seed to Pumpkin</i> by Wendy Pfeffer, illustrated by James Graham Hale (2004)*</li> <li>• <i>How People Learned to Fly</i> by Fran Hodgkins and True Kelley (2007)*</li> </ul>
2-3	<ul style="list-style-type: none"> <li>• "Who Has Seen the Wind?" by Christina G. Rossetti (1893)</li> <li>• <i>Charlotte's Web</i> by E. B. White (1952)*</li> <li>• <i>Sarah, Plain and Tall</i> by Patricia MacLachlan (1985)</li> <li>• <i>Tops and Bottoms</i> by Janet Stevens (1995)</li> <li>• <i>Poppleton in Winter</i> by Cynthia Rylant, illustrated by Mark Teague (2001)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>A Medieval Feast</i> by Ailiki (1983)</li> <li>• <i>From Seed to Plant</i> by Gail Gibbons (1991)</li> <li>• <i>The Story of Ruby Bridges</i> by Robert Coles (1995)*</li> <li>• <i>A Drop of Water: A Book of Science and Wonder</i> by Walter Wick (1997)</li> <li>• <i>Moonshot: The Flight of Apollo 11</i> by Brian Floca (2009)</li> </ul>
4-5	<ul style="list-style-type: none"> <li>• <i>Alice's Adventures in Wonderland</i> by Lewis Carroll (1865)</li> <li>• "Casey at the Bat" by Ernest Lawrence Thayer (1888)</li> <li>• <i>The Black Stallion</i> by Walter Farley (1941)</li> <li>• "Zlateh the Goat" by Isaac Bashevis Singer (1984)</li> <li>• <i>Where the Mountain Meets the Moon</i> by Grace Lin (2009)</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Discovering Mars: The Amazing Story of the Red Planet</i> by Meivin Berger (1992)</li> <li>• <i>Hurricanes: Earth's Mightiest Storms</i> by Patricia Lauber (1996)</li> <li>• <i>A History of US</i> by Joy Hakim (2005)</li> <li>• <i>Horses</i> by Seymour Simon (2006)</li> <li>• <i>Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea</i> by Sy Montgomery (2006)</li> </ul>

**Note:** Given space limitations, the illustrative texts listed above are meant only to show individual titles that are representative of a wide range of topics and genres. (See Appendix B for excerpts of these and other texts illustrative of K–5 text complexity, quality, and range.) At a curricular or instructional level, within and across grade levels, texts need to be selected around topics or themes that generate knowledge and allow students to study those topics or themes in depth. On the next page is an example of progressions of texts building knowledge across grade levels.

\*Children at the kindergarten and grade 1 levels should be expected to read texts independently that have been specifically written to correlate to their reading level and their word knowledge. Many of the titles listed above are meant to supplement carefully structured independent reading with books to read along with a teacher or that are read aloud to students to build knowledge and cultivate a joy in reading.



# STAYING ON TOPIC WITHIN A GRADE AND ACROSS GRADES: HOW TO BUILD KNOWLEDGE SYSTEMATICALLY IN ENGLISH LANGUAGE ARTS K-5

Building knowledge systematically in English language arts is like giving children various pieces of a puzzle in each grade that, over time, will form one big picture. At a curricular or instructional level, texts—within and across grade levels—need to be selected around topics or themes that systematically develop the knowledge base of students. Within a grade level, there should be an adequate number of titles on a single topic that would allow children to study that topic for a sustained period. The knowledge children have learned about particular topics in early grade levels should then be expanded and developed in subsequent grade levels to ensure an increasingly deeper understanding of these topics. Children in the upper elementary grades will generally be expected to read these texts independently and reflect on them in writing. However, children in the early grades (particularly K–2) should participate in rich, structured conversations with an adult in response to the written texts that are read aloud, orally comparing and contrasting as well as analyzing and synthesizing, in the manner called for by the Standards.

Preparation for reading complex informational texts should begin at the very earliest elementary school grades. What follows is one example that uses domain-specific nonfiction titles across grade levels to illustrate how curriculum designers and classroom teachers can infuse the English language arts block with rich, age-appropriate content knowledge and vocabulary in history/social studies, science, and the arts. Having students listen to informational read-alouds in the early grades helps lay the necessary foundation for students' reading and understanding of increasingly complex texts on their own in subsequent grades.

## Exemplar Texts on a Topic Across Grades

K

The Human Body

Students can begin learning about the human body starting in kindergarten and then review and extend their learning during each subsequent grade.

The five senses and associated body parts

- *My Five Senses* by Ailiki (1989)
- *Hearing* by Maria Rius (1985)
- *Sight* by Maria Rius (1985)
- *Smell* by Maria Rius (1985)
- *Taste* by Maria Rius (1985)
- *Touch* by Maria Rius (1985)

Taking care of your body:

Overview (hygiene, diet, exercise, rest)

- *My Amazing Body: A First Look at Health & Fitness* by Pat Thomas (2001)
- *Get Up and Go!* by Nancy Carlson (2008)
- *Go Wash Up* by Doering Tourville (2008)
- *Sleep* by Paul Showers (1997)
- *Fuel the Body* by Doering Tourville (2008)

1

Introduction to the systems of the human body and associated body parts

- *Under Your Skin: Your Amazing Body* by Mick Manning (2007)
- *Me and My Amazing Body* by Joan Sweeney (1999)
- *The Human Body* by Gallimard Jeunesse (2007)
- *The Busy Body Book* by Lizzy Rockwell (2008)
- *First Encyclopedia of the Human Body* by Fiona Chandler (2004)

Taking care of your body: Germs, diseases, and preventing illness

- *Germs Make Me Sick* by Marilyn Berger (1995)
- *Tiny Life on Your Body* by Christine Taylor-Butler (2005)
- *Germ Stories* by Arthur Kornberg (2007)
- *All About Scabs* by Genichiro Yagu (1998)

2–3

Digestive and excretory systems

- *What Happens to a Hamburger* by Paul Showers (1985)
- *The Digestive System* by Christine Taylor-Butler (2008)
- *The Digestive System* by Rebecca L. Johnson (2006)
- *The Digestive System* by Kristin Petrie (2007)

Taking care of your body:  
Healthy eating and nutrition

- *Good Enough to Eat* by Lizzy Rockwell (1999)
- *Showdown at the Food Pyramid* by Rex Barron (2004)

Muscular, skeletal, and nervous systems

- *The Mighty Muscular and Skeletal Systems* Crabtree Publishing (2009)
- *Muscles* by Seymour Simon (1998)
- *Bones* by Seymour Simon (1998)

4–5

Circulatory system

- *The Heart* by Seymour Simon (2006)
- *The Heart and Circulation* by Carol Ballard (2005)
- *The Circulatory System* by Kristin Petrie (2007)
- *The Amazing Circulatory System* by John Burstein (2009)

Respiratory system

- *The Lungs* by Seymour Simon (2007)
- *The Respiratory System* by Susan Glass (2004)
- *The Respiratory System* by Kristin Petrie (2007)
- *The Remarkable Respiratory System* by John Burstein (2009)

Endocrine system

- *The Endocrine System* by Rebecca Olien (2006)
- *The Exciting Endocrine System* by John Burstein (2009)

- *The Astounding Nervous System* Crabtree Publishing (2009)
- *The Nervous System* by Joelle Riley (2004)

# MATHEMATICS STANDARDS

## Introduction

### Toward greater focus and coherence

*Mathematics experiences in early childhood settings should concentrate on (1) number (which includes whole number, operations, and relations) and (2) geometry, spatial relations, and measurement, with more mathematics learning time devoted to number than to other topics. Mathematical process goals should be integrated in these content areas.*

—National Research Council, 2009

*The composite standards [of Hong Kong, Korea and Singapore] have a number of features that can inform an international benchmarking process for the development of K–6 mathematics standards in the U.S. First, the composite standards concentrate the early learning of mathematics on the number, measurement, and geometry strands with less emphasis on data analysis and little exposure to algebra. The Hong Kong standards for grades 1–3 devote approximately half the targeted time to numbers and almost all the time remaining to geometry and measurement.*

— Ginsburg, Leinwand and Decker, 2009

*Because the mathematics concepts in [U.S.] textbooks are often weak, the presentation becomes more mechanical than is ideal. We looked at both traditional and non-traditional textbooks used in the US and found this conceptual weakness in both.*

— Ginsburg et al., 2005

*There are many ways to organize curricula. The challenge, now rarely met, is to avoid those that distort mathematics and turn off students.*

— Steen, 2007

For over a decade, research studies of mathematics education in high-performing countries have pointed to the conclusion that the mathematics curriculum in the United States must become substantially more focused and coherent in order to improve mathematics achievement in this country. To deliver on the promise of common standards, the standards must address the problem of a curriculum that is “a mile wide and an inch deep.” These Standards are a substantial answer to that challenge.

It is important to recognize that “fewer standards” are no substitute for focused standards. Achieving “fewer standards” would be easy to do by resorting to broad, general statements. Instead, these Standards aim for clarity and specificity.

Assessing the coherence of a set of standards is more difficult than assessing their focus. William Schmidt and Richard Houang (2002) have said that content standards and curricula are coherent if they are:

*articulated over time as a sequence of topics and performances that are logical and reflect, where appropriate, the sequential or hierarchical nature of the disciplinary content from which the subject matter derives. That is, what and how students are taught should reflect not only the topics that fall within a certain academic discipline, **but also the key ideas** that determine how knowledge is organized and generated within that discipline. This implies that “to be coherent,” a set of content standards must evolve from particulars (e.g., the meaning and operations of whole numbers, including simple math facts and routine computational procedures associated with whole numbers and fractions) to deeper structures inherent in the discipline. These deeper structures then serve as a means for connecting the particulars (such as an understanding of the rational number system and its properties). (emphasis added)*

These Standards endeavor to follow such a design, not only by stressing conceptual understanding of key ideas, but also by continually returning to organizing principles such as place value or the laws of arithmetic to structure those ideas.

In addition, the “sequence of topics and performances” that is outlined in a body of mathematics standards must also respect what is known about how students learn. As Confrey (2007) points out, developing “sequenced obstacles and challenges for students...absent the insights about meaning that derive from careful study of learning, would be unfortunate and unwise.” In recognition of this, the development of these Standards began with research-based learning progressions detailing what is known today about how students’ mathematical knowledge, skill, and understanding develop over time.

# MATHEMATICS STANDARDS

## Understanding mathematics

These Standards define what students should understand and be able to do in their study of mathematics. Asking a student to understand something means asking a teacher to assess whether the student has understood it. But what does mathematical understanding look like? One hallmark of mathematical understanding is the ability to justify, in a way appropriate to the student's mathematical maturity, why a particular mathematical statement is true or where a mathematical rule comes from. There is a world of difference between a student who can summon a mnemonic device to expand a product such as  $(a + b)(x + y)$  and a student who can explain where the mnemonic comes from. The student who can explain the rule understands the mathematics, and may have a better chance to succeed at a less familiar task such as expanding  $(a + b + c)(x + y)$ . Mathematical understanding and procedural skill are equally important, and both are assessable using mathematical tasks of sufficient richness.

The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. It is also beyond the scope of the Standards to define the full range of supports appropriate for English language learners and for students with special needs. At the same time, all students must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post-school lives. The Standards should be read as allowing for the widest possible range of students to participate fully from the outset, along with appropriate accommodations to ensure maximum participation of students with special education needs. For example, for students with disabilities reading should allow for use of Braille, screen reader technology, or other assistive devices, while writing should include the use of a scribe, computer, or speech-to-text technology. In a similar vein, speaking and listening should be interpreted broadly to include sign language. No set of grade-specific standards can fully reflect the great variety in abilities, needs, learning rates, and achievement levels of students in any given classroom. However, the Standards do provide clear signposts along the way to the goal of college and career readiness for all students.

<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>HS</b>
Counting & Cardinality									
Number & Operations Base Ten						Ratios & Proportional Relationships			Number & Quantity
	Number & Operations Fractions			The Number System					
Operations & Algebraic Thinking						Expressions & Equations		Algebra	
							Functions		Functions
Geometry									Geometry
Measurement & Data						Statistics & Probability			Statistics & Probability

Findell & Foughty (2011)

*College and Career-Readiness through the Common Core State Standards for Mathematics*

# MATHEMATICS STANDARDS

## KINDERGARTEN - OVERVIEW

**In Kindergarten, instructional time should focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.**

1. Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as  $5 + 2 = 7$  and  $7 - 2 = 5$ . (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.
2. Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

# MATHEMATICS STANDARDS

## COUNTING & CARDINALITY

### KNOW NUMBER NAMES AND THE COUNT SEQUENCE.

1. Count to 100 by ones and tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

### COUNT TO TELL THE NUMBER OF OBJECTS.

4. Understand the relationship between numbers and quantities; connect counting to cardinality.
  - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
  - b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
  - c. Understand that each successive number name refers to a quantity that is one larger.
5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.

### COMPARE NUMBERS.

6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.<sup>1</sup>
7. Compare two numbers between 1 and 10 presented as written numerals.

# MATHEMATICS STANDARDS

## OPERATIONS & ALGEBRAIC THINKING

UNDERSTAND ADDITION AS PUTTING TOGETHER AND ADDING TO, AND UNDERSTAND SUBTRACTION AS TAKING APART AND TAKING FROM.

1. Represent addition and subtraction with objects, fingers, mental images, drawings<sup>2</sup>, sounds (e.g., claps), acting out situations, verbal explanations, expressions or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g.,  $5 = 2 + 3$  and  $5 = 4 + 1$ ).
4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
5. Fluently add and subtract within 5.

<sup>1</sup>Include groups with up to ten objects.

<sup>2</sup>Drawings need not show details, but should show the mathematics in the problem.  
(This applies wherever drawings are mentioned in the Standards.)

# MATHEMATICS STANDARDS

## NUMBER & OPERATIONS IN BASE TEN

WORK WITH NUMBERS 11–19 TO GAIN  
FOUNDATIONS FOR PLACE VALUE.

1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

## MEASUREMENT & DATA

DESCRIBE AND COMPARE MEASURABLE ATTRIBUTES.

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

CLASSIFY OBJECTS AND COUNT THE NUMBER OF  
OBJECTS IN EACH CATEGORY.

3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count<sup>3</sup>.
4. Demonstrate an understanding of concepts time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar). (CAStandard MG 1.2)
  - a. Name the days of the week. (CA-Standard MG 1.3)
  - b. Identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock, bedtime is 8 o'clock at night).

# MATHEMATICS STANDARDS

## GEOMETRY

IDENTIFY AND DESCRIBE SHAPES (SQUARES, CIRCLES, TRIANGLES, RECTANGLES, HEXAGONS, CUBES, CONES, CYLINDERS, AND SPHERES).

1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

ANALYZE, COMPARE, CREATE, AND COMPOSE SHAPES.

4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

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<sup>3</sup>Limit category counts to be less than or equal to 10.



