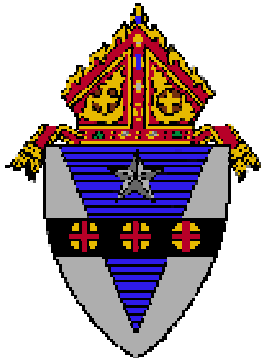


Archdiocese of Philadelphia



Curriculum Standards

English Language Arts and Mathematics

Grade One

INTRODUCTION

The mission statement of the Office of Catholic Education boldly proclaims that:

Catholic Schools form Catholic students to be full and practicing members of the Church, are centers of evangelization that call all to live fully the message of Jesus Christ, and are centers of academic excellence that rigorously prepare students to be life-long learners and contributing members of the global community.

From this we draw our primary focus, the faith formation of our students. Of major importance, too, is the academic preparation our students receive which will enable them to be college- and career-ready upon commencement from their experience in archdiocesan schools.

This document is a response to the call to prepare our students to become “contributing members of the global community.” It is the product of an in-depth study of the data related to existing curriculum, current research, input from respected professional organizations and hours of intense work and dialogue on the part of teachers and administrators from throughout the archdiocese.

Our data study encouraged us to build on the patterns of excellence which have been a hallmark of education in Archdiocesan schools. A review of the existing curriculum and input from many teachers called us to re-focus curriculum content so that instruction and learning would incorporate higher-level thinking and in-depth teaching. At the recommendation of the National Governors’ Association, we are moving forward with the adoption of the Common Core State Standards as the basis for curriculum content.

Included in this document are the Common Core State Standards for this level as well as the implementation guides prepared by the curriculum committee members who spent a great deal of time working on them.

As we move forward in the period of transition to full adoption of the Standards and to assessing archdiocesan students using national assessments, we feel confident that our teachers will continue to move forward with the same dedication that will prepare our students to stand shoulder-to-shoulder with the best students both nationally and internationally.

ACKNOWLEDGEMENTS

We would like to acknowledge the following curriculum committee members for their tireless efforts in the preparation of this document:

| English Language Arts | | Mathematics | |
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We are also grateful to the **Elementary Technology Committee** for preparing web links to these guidelines.

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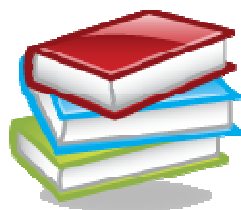
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NOTE:

The English Language Arts and Mathematics content are intentionally contained in the same document. With research indicating that skills should be presented in an integrated context, it is the hope that teachers will be more aware of the total curriculum at this level rather than isolated subject matter and make deliberate connections between skills presented in each area.

Also included at each level (with the exception of Kindergarten) are the Common Core State Standards for the grade below and the grade above each level. These are placed here so that, during the transition period leading up to full implementation of the Standards, the teacher is aware of skills that should have been presented at an earlier level and makes plans to incorporate these skills in the event that they have not been presented. It is important, too, that skills designated for higher levels are not anticipated at the current instructional level.



English Language Arts

Grade 1

Common Core State Standards – English Language Arts – Kindergarten
Common Core State Standards – English Language Arts – Grade 1
Common Core Standards – English Language Arts – Grade 2
Archdiocesan Implementation Guides – Grade 1

Key Points In English Language Arts

Reading

- The standards establish a “staircase” of increasing complexity in what students must be able to read so that all students are ready for the demands of college- and career-level reading no later than the end of high school. The standards also require the progressive development of reading comprehension so that students advancing through the grades are able to gain more from whatever they read.
- Through reading a diverse array of classic and contemporary literature as well as challenging informational texts in a range of subjects, students are expected to build knowledge, gain insights, explore possibilities, and broaden their perspective. Because the standards are building blocks for successful classrooms, but recognize that teachers, school districts and states need to decide on appropriate curriculum, they intentionally do not offer a reading list. Instead, they offer numerous sample texts to help teachers prepare for the school year and allow parents and students to know what to expect at the beginning of the year.
- The standards mandate certain critical types of content for all students, including classic myths and stories from around the world, foundational U.S. documents, seminal works of American literature, and the writings of Shakespeare. The standards appropriately defer the many remaining decisions about what and how to teach to states, districts, and schools.

Writing

- The ability to write logical arguments based on substantive claims, sound reasoning, and relevant evidence is a cornerstone of the writing standards, with opinion writing---a basic form of argument---extending down into the earliest grades.
- Research---both short, focused projects (such as those commonly required in the workplace) and longer term in depth research---“is emphasized throughout the standards but most prominently in the writing strand since a written analysis and presentation of findings is so often critical.
- Annotated samples of student writing accompany the standards and help establish adequate performance levels in writing arguments, informational/explanatory texts, and narratives in the various grades.

Speaking and Listening

- The standards require that students gain, evaluate, and present increasingly complex information, ideas, and evidence through listening and speaking as well as through media.
- An important focus of the speaking and listening standards is academic discussion in one-on-one, small-group, and whole-class settings. Formal presentations are one important way such talk occurs, but so is the more informal discussion that takes place as students collaborate to answer questions, build understanding, and solve problems.

Language

- The standards expect that students will grow their vocabularies through a mix of conversations, direct instruction, and reading. The standards will help students determine word meanings, appreciate the nuances of words, and steadily expand their repertoire of words and phrases.
- The standards help prepare students for real life experience at college and in 21st century careers. The standards recognize that students must be able to use formal English in their writing and speaking but that they must also be able to make informed, skillful choices among the many ways to express themselves through language.
- Vocabulary and conventions are treated in their own strand not because skills in these areas should be handled in isolation but because their use extends across reading, writing, speaking, and listening.

Media and Technology

- Just as media and technology are integrated in school and life in the twenty-first century, skills related to media use (both critical analysis and production of media) are integrated throughout the standards.



Key Features of the Standards

Reading: Text complexity and the growth of comprehension

The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by-grade “staircase” of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts.

Writing: Text types, responding to reading, and research

The Standards acknowledge the fact that whereas some writing skills, such as the ability to plan, revise, edit, and publish, are applicable to many types writing, other skills are more properly defined in terms of specific writing types: arguments, informative/explanatory texts, and narratives. Standard 9 stresses the importance of the writing-reading connection by requiring students to draw upon and write about evidence from literary and informational texts. Because of the centrality of writing to most forms of inquiry, research standards are prominently included in this strand, though skills important to research are infused throughout the document.

Speaking and Listening: Flexible communication and collaboration

Including but not limited to skills necessary for formal presentations, the Speaking and Listening standards require students to develop a range of broadly useful oral communication and interpersonal skills. Students must learn to work together, express and listen carefully to ideas, integrate information from oral, visual, quantitative, and media sources, evaluate what they hear, use media and visual displays strategically to help achieve communicative purposes, and adapt speech to context and task.

Language: Conventions, effective use, and vocabulary

The Language standards include the essential “rules” of standard written and spoken English, but they also approach language as a matter of craft and informed choice among alternatives. The vocabulary standards focus on understanding words and phrases, their relationships, and their nuances and on acquiring new vocabulary, particularly general academic and domain-specific words and phrases.

Appendices A, B, and C

- Appendix A contains supplementary material on reading, writing, speaking and listening, and language as well as a glossary of key terms.

- Appendix B consists of text exemplars illustrating the complexity, quality, and range of reading appropriate for various grade levels with accompanying sample performance tasks.
- Appendix C includes annotated samples demonstrating at least adequate performance in student writing at various grade levels

Anchor Standards for Reading

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.

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.¹
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.

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.

Text Types and Purposes

1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
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.

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.

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.

Range of Writing

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

Note on range and content in student writing

To build a foundation for college and career readiness, students need to 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. They learn to appreciate that a key purpose of writing is to communicate clearly to an external, sometimes unfamiliar audience, and they begin to adapt 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.

Anchor Standards for Speaking and Listening

Comprehension and Collaboration

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Note on range and content of student speaking and listening

To build a foundation for college and career readiness, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner. Being productive members of these conversations requires that students contribute accurate, relevant information; respond to and develop what others have said; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains.

New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. Digital texts confront students with the potential for continually updated content and dynamically changing combinations of words, graphics, images, hyperlinks, and embedded video and audio.

Anchor Standards for Language

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.

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of word relationships and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

Note on range and content of student language use

To build a foundation for college and career readiness in language, students must gain control over many conventions of standard English grammar, usage, and mechanics as well as learn other ways to use language to convey meaning effectively. They must also be able to determine or clarify the meaning of grade-appropriate words encountered through listening, reading, and media use; come to appreciate that words have nonliteral meanings, shadings of meaning, and relationships to other words; and expand their vocabulary in the course of studying content. The inclusion of Language standards in their own strand should not be taken as an indication that skills related to conventions, effective language use, and vocabulary are unimportant to reading, writing, speaking, and listening; indeed, they are inseparable from such contexts.

Reading: Literature

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 grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Key Ideas and Details

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

RL.K.2. With prompting and support, retell familiar stories, including key details.

RL.K.3. With prompting and support, identify characters, settings, and major events in a story.

Craft and Structure

RL.K.4. Ask and answer questions about unknown words in a text.

RL.K.5. Recognize common types of texts (e.g., storybooks, poems).

RL.K.6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.

Integration of Knowledge and Ideas

RL.K.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).

RL.K.8. (Not applicable to literature)

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

Reading: Informational Text

Key Ideas and Details

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

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

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

Craft and Structure

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

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

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

Integration of Knowledge and Ideas

RI.K.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).

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

RI.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).

Range of Reading and Level of Text Complexity

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

Kindergarten

Reading: Foundational Skills

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.

Print Concepts

RF.K.1. Demonstrate understanding of the organization and basic features of print.

- Follow words from left to right, top to bottom, and page by page.
- Recognize that spoken words are represented in written language by specific sequences of letters.
- Understand that words are separated by spaces in print.
- Recognize and name all upper- and lowercase letters of the alphabet.

Phonological Awareness

RF.K.2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

- Recognize and produce rhyming words.
- Count, pronounce, blend, and segment syllables in spoken words.
- Blend and segment onsets and rimes of single-syllable spoken words.
- Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words.¹ (This does not include CVCs ending with /l/, /r/, or /x/.)
- Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

Phonics and Word Recognition

RF.K.3. Know and apply grade-level phonics and word analysis skills in decoding words.

- Demonstrate basic knowledge of letter-sound correspondences by producing the primary or most frequent sound for each consonant.
- Associate the long and short sounds with the common spellings (graphemes) for the five major vowels.
- Read common high-frequency words by sight (e.g., *the, of, to, you, she, my, is, are, do, does*).
- Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

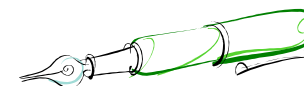
Fluency

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

1

Words, syllables, or phonemes written in /slashes/ refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.

Writing



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.

Text Types and Purposes

- W.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...*).
- W.K.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.
- W.K.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.

Production and Distribution of Writing

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

Research to Build and Present Knowledge

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

Range of Writing

- W.K.10. (Begins in grade 3)



Speaking & Listening

Comprehension and Collaboration

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

Continue a conversation through multiple exchanges.

SL.K.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.

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

Presentation of Knowledge and Ideas

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

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

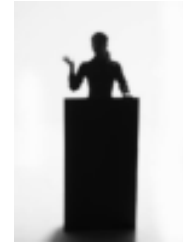
SL.K.6. Speak audibly and express thoughts, feelings, and ideas clearly.

Language

Conventions of Standard English

L.K.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

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



L.K.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- Capitalize the first word in a sentence and the pronoun *I*.
- Recognize and name end punctuation.
- Write a letter or letters for most consonant and short-vowel sounds (phonemes).
- Spell simple words phonetically, drawing on knowledge of sound-letter relationships.

Knowledge of Language

L.K.3. (Begins in grade 2)

Vocabulary Acquisition and Use

L.K.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.

- Identify new meanings for familiar words and apply them accurately (e.g., knowing *duck* is a bird and learning the verb to *duck*).
- 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.

L.K.5. With guidance and support from adults, explore word relationships and nuances in word meanings.

- Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
- Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).

- Identify real-life connections between words and their use (e.g., note places at school that are colorful).
- Distinguish shades of meaning among verbs describing the same general action (e.g., *walk*, *march*, *strut*, *prance*) by acting out the meanings.

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

ELA Standards for Grade One

Reading: Literature

Key Ideas and Details

RL.1.1. Ask and answer questions about key details in a text.

RL.1.2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.

RL.1.3. Describe characters, settings, and major events in a story, using key details.

Craft and Structure

RL.1.4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

RL.1.5. Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.

RL.1.6. Identify who is telling the story at various points in a text.

Integration of Knowledge and Ideas

RL.1.7. Use illustrations and details in a story to describe its characters, setting, or events.

RL.1.8. (Not applicable to literature)

RL.1.9. Compare and contrast the adventures and experiences of characters in stories.

Range of Reading and Level of Text Complexity

RL.1.10. With prompting and support, read prose and poetry of appropriate complexity for grade 1.

Reading: Informational Text



Key Ideas and Details

RI.1.1. Ask and answer questions about key details in a text.

RI.1.2. Identify the main topic and retell key details of a text.

RI.1.3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.

Craft and Structure

RI.1.4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

RI.1.5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.

RI.1.6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

Integration of Knowledge and Ideas

RI.1.7. Use the illustrations and details in a text to describe its key ideas.

RI.1.8. Identify the reasons an author gives to support points in a text.

RI.1.9. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Range of Reading and Level of Text Complexity

RI.1.10. With prompting and support, read informational texts appropriately complex for grade 1.



Reading: Foundational Skills

Print Concepts

RF.1.1. Demonstrate understanding of the organization and basic features of print.

- Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

Phonological Awareness

RF.1.2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).

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

Phonics and Word Recognition

RF.1.3. Know and apply grade-level phonics and word analysis skills in decoding words.

- Know the spelling-sound correspondences for common consonant digraphs (two letters that represent one sound).
- Decode regularly spelled one-syllable words.
- Know final -e and common vowel team conventions for representing long vowel sounds.
- Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.
- Decode two-syllable words following basic patterns by breaking the words into syllables.
- Read words with inflectional endings.
- Recognize and read grade-appropriate irregularly spelled words.

Fluency

RF.1.4. Read with sufficient accuracy and fluency to support comprehension.

- Read grade-level text with purpose and understanding.
- Read grade-level text orally with accuracy, appropriate rate, and expression.
- Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Writing

Text Types and Purposes

W.1.1. 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.

W.1.2. Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.

W.1.3. 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 and Distribution of Writing

W.1.4. (Begins in grade 3)

W.1.5. 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.

W.1.6. 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 and Present Knowledge

W.1.7. 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).

W.1.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

W.1.9. (Begins in grade 4)

Range of Writing

W.1.10. (Begins in grade 3)

Speaking and Listening

Comprehension and Collaboration

SL.1.1. Participate in collaborative conversations with diverse partners about *grade 1 topics and texts* with peers and adults in small and larger groups.

- 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).
- Build on others’ talk in conversations by responding to the comments of others through multiple exchanges.
- Ask questions to clear up any confusion about the topics and texts under discussion.

SL.1.2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

SL.1.3. 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 and Ideas

SL.1.4. Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.

SL.1.5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.

SL.1.6. Produce complete sentences when appropriate to task and situation.

Language

Conventions of Standard English

L.1.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- Print all upper- and lowercase letters.
- Use common, proper, and possessive nouns.
- Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).
- Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).
- 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).
- Use frequently occurring adjectives.
- Use frequently occurring conjunctions (e.g., *and*, *but*, *or*, *so*, *because*).
- Use determiners (e.g., articles, demonstratives).
- Use frequently occurring prepositions (e.g., *during*, *beyond*, *toward*).
- Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts

L.1.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- Capitalize dates and names of people.
- Use end punctuation for sentences.
- Use commas in dates and to separate single words in a series.
- Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.
- Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.

Knowledge of Language

L.1.3. (Begins in grade 2)

Vocabulary Acquisition and Use

L.1.4. 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.

- Use sentence-level context as a clue to the meaning of a word or phrase.
- Use frequently occurring affixes as a clue to the meaning of a word.
- Identify frequently occurring root words (e.g., *look*) and their inflectional forms (e.g., *looks, looked, looking*).

L.1.5. With guidance and support from adults, demonstrate understanding of figurative language, word relationships and nuances in word meanings.

- Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.
- 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).
- Identify real-life connections between words and their use (e.g., note places at home that are *cozy*).
- 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.

L.1.6. 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., *because*).



ELA Standards for Grade 2

Reading Standards for Literature

Key Ideas and Details

- RL.2.1. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- RL.2.2. Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.
- RL.2.3. Describe how characters in a story respond to major events and challenges.

Craft and Structure

- RL.2.4. Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.
- RL.2.5. Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.
- RL.2.6. Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.

Integration of Knowledge and Ideas

- RL.2.7. Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
- RL.2.8 Not applicable at this level.
- RL.2.9. Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.

Range of Reading and Level of Text Complexity

- RL.2.10. By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Reading Standards for Informational Text

Key Ideas and Details

RI.2.1. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

RI.2.2. Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.

RI.2.3. Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

Craft and Structure

RI.2.4. Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.

RI.2.5. Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

RI.2.6. Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

Integration of Knowledge and Ideas

RI.2.7. Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RI.2.8. Describe how reasons support specific points the author makes in a text.

RI.2.9. Compare and contrast the most important points presented by two texts on the same topic.

Range of Reading and Level of Text Complexity

RI.2.10. By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Reading Standards: Foundational Skills

Phonics and Word Recognition

RF.2.3. Know and apply grade-level phonics and word analysis skills in decoding words.

- Distinguish long and short vowels when reading regularly spelled one-syllable words.
- Know spelling-sound correspondences for additional common vowel teams.
- Decode regularly spelled two-syllable words with long vowels.
- Decode words with common prefixes and suffixes.
- Identify words with inconsistent but common spelling-sound correspondences.
- Recognize and read grade-appropriate irregularly spelled words.

Fluency

RF.2.4. Read with sufficient accuracy and fluency to support comprehension.

- Read on-level text with purpose and understanding.
- Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.
- Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Writing Standards

Text Types and Purposes

W.2.1. 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.

W.2.2. Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

W.2.3. 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

W.2.4. (Begins at Grade 3)

W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.

W.2.6. 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 and Present Knowledge

W.2.7. 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).

W.2.8. Recall information from experiences or gather information from provided sources to answer a question.

W.2.9. Begins in Grade 4

W.2.10 Begins in Grade 3

Speaking and Listening Standards

Comprehension and Collaboration

SL.2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

- Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- Build on others' talk in conversations by linking their comments to the remarks of others.
- Ask for clarification and further explanation as needed about the topics and texts under discussion.

SL.2.2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

SL.2.3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

Presentation of Knowledge and Ideas

SL.2.4. Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.

SL.2.5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.

SL.2.6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

Language Standards

Conventions of Standard English

L.2.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- Use collective nouns (e.g., group).
- Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish).
- Use reflexive pronouns (e.g., myself, ourselves).
- Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told).
- Use adjectives and adverbs, and choose between them depending on what is to be modified.
- Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).

L.2.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- Capitalize holidays, product names, and geographic names.
- Use commas in greetings and closings of letters.
- Use an apostrophe to form contractions and frequently occurring possessives.
- Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil).
- Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

Knowledge of Language

L.2.3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.

- Compare formal and informal uses of English.

Vocabulary Acquisition and Use

L.2.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.

- Use sentence-level context as a clue to the meaning of a word or phrase.
- Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).
- Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).
- Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).
- Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.

5. Demonstrate understanding of word relationships and nuances in word meanings.

- Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).
- Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny).

6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).



Measuring Text Complexity

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)

Students in 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 |
|---|--|--|--|
| Stories | Dramas | Poetry | Literary Nonfiction and Historical, Scientific, and Technical Texts |
| Includes children's adventure stories, folktales, legends, fables, fantasy, realistic fiction, and myth | Includes staged dialogue and brief familiar scenes | Includes nursery rhymes and the subgenres of the narrative poem, limerick, and free verse poem | Includes biographies and autobiographies; books about 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 |

Texts Illustrating the Complexity, Quality, & Range of Student Reading K–1-2

| | Literature: Stories, Drama, Poetry | Informational Texts: Literary Nonfiction and Historical, Scientific, and Technical Texts |
|----------------|--|---|
| K ¹ | <p><i>Over in the Meadow</i> by John Langstaff (traditional) (c1800)*</p> <p><i>A Boy, a Dog, and a Frog</i> by Mercer Mayer (1967)</p> <p><i>A Story, A Story</i> by Gail E. Haley (1970)*</p> <p><i>Pancakes for Breakfast</i> by Tomie DePaola (1978)</p> <p><i>Kitten's First Full Moon</i> by Kevin Henkes (2004)*</p> | <p><i>My Five Senses</i> by Alike (1962)**</p> <p><i>Truck</i> by Donald Crews (1980)</p> <p><i>I Read Signs</i> by Tana Hoban (1987)</p> <p><i>What Do You Do With a Tail Like This?</i> by Steve Jenkins and Robin Page (2003)*</p> <p><i>Amazing Whales!</i> by Sarah L. Thomson (2005)*</p> |
| 1 ¹ | <p>"Mix a Pancake" by Christina G. Rossetti (1893)**</p> <p><i>Mr. Popper's Penguins</i> by Richard Atwater (1938)*</p> <p><i>Little Bear</i> by Else Holmelund Minarik, illustrated by Maurice Sendak (1957)**</p> <p><i>Frog and Toad Together</i> by Arnold Lobel (1971)**</p> <p><i>Hi! Fly Guy</i> by Tedd Arnold (2006)</p> | <p><i>A Tree Is a Plant</i> by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)**</p> <p><i>Starfish</i> by Edith Thacher Hurd (1962)</p> <p><i>Follow the Water from Brook to Ocean</i> by Arthur Dorros (1991)**</p> <p><i>From Seed to Pumpkin</i> by Wendy Pfeffer, illustrated by James Graham Hale (2004)*</p> <p><i>How People Learned to Fly</i> by Fran Hodgkins and True Kelley (2007)*</p> |
| 2-3 | <ul style="list-style-type: none"> • <i>Who Has Seen the Wind?</i> by Christina G. Rossetti (1893) • <i>Charlotte's Web</i> by E. B. White (1952)* • <i>Sarah, Plain and Tall</i> by Patricia MacLachlan (1985) • <i>Tops and Bottoms</i> by Janet Stevens (1995) • <i>Poppleton in Winter</i> by Cynthia Rylant, illustrated by Mark Teague (2001) | <ul style="list-style-type: none"> • <i>A Medieval Feast</i> by Alike (1983) • <i>From Seed to Plant</i> by Gail Gibbons (1991) • <i>The Story of Ruby Bridges</i> by Robert Coles (1995)* • <i>A Drop of Water: A Book of Science and Wonder</i> by Walter Wick (1997) <p><i>Moonshot: The Flight of Apollo 11</i> by Brian Floca (2009)</p> |

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 of the Common Core Standards 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.

Staying on Topic Within a Grade & Across Grades

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.

This is only a sample. Full chart can be found on Standards web site.

| Exemplar Texts on a Topic Across Grades | K | 1 | 2 |
|--|---|--|--|
| 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 <i>My Five Senses</i> by Ailiki (1989) <i>Hearing</i> by Maria Rius (1985) <i>Sight</i> by Maria Rius (1985) <i>Smell</i> by Maria Rius (1985) <i>Taste</i> by Maria Rius (1985) <i>Touch</i> by Maria Rius (1985) Taking care of your body: Overview (hygiene, diet, exercise, rest) <i>My Amazing Body: A First Look at Health & Fitness</i> by Pat Thomas (2001) | Introduction to the systems of the human body and associated body parts <i>Under Your Skin: Your Amazing Body</i> by Mick Manning (2007) <i>Me and My Amazing Body</i> by Joan Sweeney (1999) <i>The Human Body</i> by Gallimard Jeunesse (2007) <i>The Busy Body Book</i> by Lizzy Rockwell (2008) <i>First Encyclopedia of the Human Body</i> by Fiona Chandler (2004) Taking care of your body: Germs, diseases, and preventing illness | Digestive and excretory systems <i>What Happens to a Hamburger</i> by Paul Showers (1985) <i>The Digestive System</i> by Christine Taylor-Butler (2008) <i>The Digestive System</i> by Rebecca L. Johnson (2006) <i>The Digestive System</i> by Kristin Petrie (2007) |

Implementation Guide – Grade 1 ELA

Implementing the Common Core Standards may seem to be a daunting task; however, the ELA Curriculum Committee has created four sample guidelines/templates to introduce you to the standards. We have provided a guideline for each of the four types of writing prescribed for each grade. You will see that we have correlated Reading Standards with each Writing piece. These guidelines are meant to be a starting point and while they are comprehensive they do not include every standard. Our intent is that teachers will plug-in other standards as needed. The book companies have created correlations to the Common Core Standards so you will have them to use as well, and you will have the flexibility to add ELA standards from each category (Reading, Writing, Speaking and Listening, and Language) depending on the theme or story.

Coding: ELA.1.A.1 refers to English Language Arts –Grade 1- Topic A – Skill 1

| | | |
|--|--|--|
| Opinion - Grade 1 | Writing Standards: ELA. M Text Type and Purposes 1. Writing an opinion in which student introduces the topic or name of the book they are writing about, state an opinion and supply a reason for the opinion, and provide some sense of closure. | Reading Standards: ELA A. Key Ideas and Details for Literature; E. Key Ideas and Details for Informational Text |
| Essential Questions <i>What should I be able to answer?</i> <i>What guides my thinking?</i> | What is an opinion? How do I support my opinion? Is my opinion the only one or do other students have different opinions about this? Could/Would I change my opinion based on what others write? | What is the main topic of my book? |

| | | |
|---|--|---|
| Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i> | <p>The students will be able to write an opinion piece in which they introduce the topic or name the book, state an opinion, supply a reason for the opinion, and provide some sense of closure.</p> | <p>Lists key details and the main topic of the text.</p> |
| Skills <i>What skills do I need to have in order to answer the essential questions?</i> | <p>Discuss main idea and topics with partners and larger group</p> <p>describe people, places, things, and events with relevant details.</p> <p>Identify fact versus opinion.</p> <p>Survey other students who have read the same story.</p> <p>Know that you can have more than one opinion about a book.</p> | <p>.Ask and answer questions about key details in a text.</p> <p>Retell stories, including key details, and demonstrate understanding of their central message or lesson.</p> <p>Identify key details and the main topic of text.</p> <p>Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p> |
| Content <i>What content do I need to know in order to answer the essential questions?</i> | <p>Identify appropriate books or stories from literary series.</p> <p>Examples of fact and opinion.</p> | |

| | | |
|---|---|-----------------------------------|
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | A book or story that I read Rubric appropriate for assignment Refer to the PSAS website | Rubric appropriate for assignment |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Use a book about science or social studies, or any subject area Accept the opinions of others by responding appropriately. | |

Which 21st Century Skills are woven into this standard?

☐ Critical Thinking/Problem Solving

☐ Collaboration

☐ Communications

☐ Creativity/Innovation

What level of rigor will I be using? (A, C) _____

What level of relevance will I be using? _____ (B, D)

| | | |
|---|---|---|
| Narrative – Grade 1 | Writing Standards: ELA. M.3. Text Types and Purposes Write narratives | Reading Standards: ELA A.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. A.3 Describe characters, settings, and major events in a story, using key details. |
| Essential Questions <i>What should I be able to answer?</i> <i>What guides my thinking?</i> | <p>What is narrative writing?</p> <p>What is the sequence of the story?</p> <p>What words signal time in a story?</p> <p>How do I end a narrative?</p> <p>How do I write dates and the names of people in a narrative?</p> <p>How do I choose better vocabulary words in a narrative?</p> | <p>Do I understand the story elements that tell: who, what, when, where, or how?</p> <p>How can I tell what the central message of a story is?</p> <p>What key details do I need to describe characters? Settings? Or major events?</p> |
| Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i> | Write a narrative in which students 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. | <p>Explain major differences between books that tell stories and books that give information, drawing on a wide range of reading text types.</p> <p>Describe characters, settings, and major events in a story, using key details.</p> |

| | | |
|--|---|--|
| <p>Skills <i>What skills do I need to have in order to answer the essential questions?</i></p> | <p>Understand the concepts of beginning, middle and end</p> <p>Distinguish beginning, middle, and end</p> <p>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.</p> <p>Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.</p> <p>Produce complete sentences when appropriate to task and situation.</p> <p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>Print all upper- and lowercase letters. Use verbs to convey a sense of past, present, and future.</p> <p>Use frequently occurring prepositions. Use frequently occurring adjectives.</p> <p>Capitalize dates and names of people</p> <p>Identify real-life connections between words and their use</p> | <p>Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.</p> <p>Identify who is telling the story at various points in a text.</p> |
|--|---|--|

| | | |
|---|--|---|
| Content <i>What content do I need to know in order to answer the essential questions?</i> | The beginning, middle, and end of a story Words that signify time | Re-tell story using words and phrases and sentences Describe characters, settings, and major events in a story, using key details. |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | This assignment could be integrated into science or social studies curriculum. This assignment could be used to have students re-tell a story from Scripture. | Read parables and stories from Scripture Use anthology to share or review stories for the elements of a narrative. |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Stories about the season or a certain topic. Digital resources in order to present the narrative writing | Bible or scripture stories Digital resources in order to present the information |

Which 21st Century Skills are woven into this standard?

☐ Critical Thinking/Problem Solving

☐ Collaboration

☐ Communications

☐ Creativity/Innovation

What level of rigor will I be using? (A, C)_____ What level of relevance will I be using?_____ (B,D)

| | | |
|-------------------------------------|--|--|
| Informational text – Grade 1 | Writing Standards: ELA.1.O.7. Participate in shared research and writing projects; O.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. | Reading Standards: ELA 1. G.9. Identify basic similarities in and differences between two texts on the same topic. H.10. With prompting and support, read informational texts appropriately complex for grade 1. |
|-------------------------------------|--|--|

| | | |
|---|---|--|
| Essential Questions <i>What should I be able to answer? What guides my thinking?</i> | What are sources to use to find information about a topic? Are some sources better than other sources? Do the pictures or illustrations help to clarify or complete the information for me? | What kinds of books should I use to find information about a topic? |
| Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i> | Write a sequence of instructions on how to take care of an animal or pet. | Complete a graphic organizer with information about an animal or another topic. |
| Skills <i>What skills do I need to have in order to answer the essential questions?</i> | Distinguishing between fact and fiction Read on-level text with purpose and understanding Use context to confirm or self-correct word recognition and understanding, rereading as necessary. Produce and expand complete simple and compound sentences in response to prompts. | With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. |

| | | |
|---|---|--|
| Content <i>What content do I need to know in order to answer the essential questions?</i> | Use the classroom or school library to find books about a topic. Read the stories to learn about the topic. | Look at a selection of books on a topic. |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Make connections with science or social studies. | |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Refer to the PSAS website CCSS website for additional literature and non-fiction sources | See selection of sources at http://commoncore.org/maps |

Which 21st Century Skills are woven into this standard?

___Critical Thinking/Problem Solving

___Collaboration

___Communications

___Creativity/Innovation

What level of rigor will I be using? (A, C)_____ What level of relevance will I be using? _____ (B,D)

| Research-Grade 1 | Writing Standards: ELA.1.O– Research to Build and Present Knowledge | Reading Standards: ELA.1.G- Integration of Knowledge and Ideas |
|---|---|--|
| Essential Questions <i>What should I be able to answer?</i> <i>What guides my thinking?</i> | What is research? What does good research look like? What is the most effective way to present the information? How will I write the information? | How do we distinguish the difference between fact and interpretation? What types of resources do I need to read to develop my topic? |
| Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i> | Research process Peer review and editing Completed report and/or presentation | Select key concepts from various sources Read informational texts appropriately |
| Skills <i>What skills do I need to have in order to answer the essential questions?</i> | 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). With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. | Use the illustrations and details in a text to describe its key ideas. Identify the reasons an author gives to support points in a text. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). |

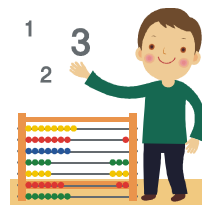
| | | |
|---|---|---|
| Content <i>What content do I need to know in order to answer the essential questions?</i> | Read and understand information from a number of books on a given topic Recall information from experiences or gather information from provided sources to answer a question | Use illustrations and details in a text to describe key ideas Identify the reasons an author gives to support points in a text Identify the basic differences between two texts on the same topic |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Content area topics Technology- Presentation skills | Content area topics Technology – Internet sites |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Digital resources Reference materials, How-to books Primary sources | Reference materials and digital resources |

Which 21st Century Skills are woven into this standard? ☐ Critical Thinking/Problem Solving ☐ Collaboration
☐ Communications ☐ Creativity/Innovation

What level of rigor will I be using? (A, C) ☐ What level of relevance will I be using? ☐ (B,D)

Mathematics

Grade 1



Common Core State Standards – Kindergarten
Common Core State Standards – Grade One
Common Core State Standards – Grade Two
Implementation Guide – Grade One

Key Points In Mathematics

- The K-5 standards provide students with a *solid foundation in whole numbers, addition, subtraction, multiplication, division, fractions and decimals*—which help young students build the foundation to successfully apply more demanding math concepts and procedures, and move into applications.
- In kindergarten, the standards follow successful international models and recommendations from the National Research Council's Early Math Panel report, by focusing kindergarten work on the number core: learning how numbers correspond to quantities, and learning how to put numbers together and take them apart (the beginnings of addition and subtraction).
- The K-5 standards build on the best state standards to provide detailed guidance to teachers on how to navigate their way through knotty topics such as *fractions, negative numbers, and geometry*, and do so by maintaining a continuous progression from grade to grade.
- The standards stress not only procedural skill but also conceptual understanding, to make sure students are learning and absorbing the critical information they need to succeed at higher levels - rather than the current practices by which many students learn enough to get by on the next test, but forget it shortly thereafter, only to review again the following year.
- Having built a strong foundation K-5, students can do hands on learning in geometry, algebra and probability and statistics. Students who have completed 7th grade and mastered the content and skills through the 7th grade will be *well-prepared for algebra* in grade 8.
- The middle school standards are robust and provide a coherent and rich *preparation for high school mathematics*.
- The high school standards call on students to *practice applying mathematical ways of thinking to real world issues and challenges*; they prepare students to think and reason mathematically.
- The high school standards set a *rigorous definition of college and career readiness*, by helping students develop a depth of understanding and ability to apply mathematics to novel situations, as college students and employees regularly do.
- The high school standards *emphasize mathematical modeling*, the use of mathematics and statistics to analyze empirical situations, understand them better, and improve decisions. For example, the standards state: Modeling links classroom mathematics and statistics to everyday life, work, and decision-making. It is the process of choosing and using appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. Quantities and their relationships in physical, economic, public policy, social and everyday situations can be modeled using mathematical and statistical methods. When making mathematical models, technology is valuable for varying assumptions, exploring consequences, and comparing predictions with data.

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, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

4 Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

5 Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website,

and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

6 Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

7 Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y .

8 Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Connecting the Standards for Mathematical Practice to the Standards for Mathematical Content

The Standards for Mathematical Practice describe ways in which developing student practitioners of the discipline of mathematics increasingly ought to engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle and high school years. Designers of curricula, assessments, and professional development should all attend to the need to connect the mathematical practices to mathematical content in mathematics instruction.

The Standards for Mathematical Content are a balanced combination of procedure and understanding. Expectations that begin with the word “understand” are often especially good opportunities to connect the practices to the content. Students who lack understanding of a topic may rely on procedures too heavily. Without a flexible base from which to work, they may be less likely to consider analogous problems, represent problems coherently, justify conclusions, apply the mathematics to practical situations, use technology mindfully to work with the mathematics, explain the mathematics accurately to other students, step back for an overview, or deviate from a known procedure to find a shortcut. In short, a lack of understanding effectively prevents a student from engaging in the mathematical practices. In this respect, those content standards which set an expectation of understanding are potential “points of intersection” between the Standards for Mathematical Content and the Standards for Mathematical Practice. These points of intersection are intended to be weighted toward central and generative concepts in the school mathematics curriculum that most merit the time, resources, innovative energies, and focus necessary to qualitatively improve the curriculum, instruction, assessment, professional development, and student achievement in mathematics.



MATHEMATICS - KINDERGARTEN

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.

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**

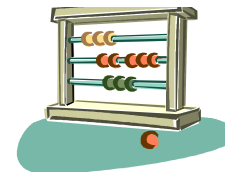
- Work with numbers 11-19 to gain foundations for place value.

- **Measurement and Data**

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

- **Geometry**

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



Mathematics » Kindergarten » Counting & Cardinality

Know number names and the count sequence.

K.CC.1. Count to 100 by ones and by tens.

K.CC.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

K.CC.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.

K.CC.4. Understand the relationship between numbers and quantities; connect counting to cardinality.

- 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.
- 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.
- Understand that each successive number name refers to a quantity that is one larger.

K.CC.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.

K.CC.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.¹

K.CC.7. Compare two numbers between 1 and 10 presented as written numerals.

¹ Include groups with up to ten objects.

Operations and Algebraic Thinking

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

K.OA.1. Represent addition and subtraction with objects, fingers, mental images, drawings¹, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

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

K.OA.3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and .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.

K.OA.5. Fluently add and subtract within 5.

¹ Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

Number and Operations in Base 10

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

K.NBT.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 (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Measurement and Data



Describe and compare measurable attributes.

K.MD.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.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.

K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.¹

¹ Limit category counts to be less than or equal to 10.

Geometry

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

- K.G.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*.
- K.G.2. Correctly name shapes regardless of their orientations or overall size.
- K.G.3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

Analyze, compare, create, and compose shapes.

- K.G.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).
- K.G.5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- K.G.6. Compose simple shapes to form larger shapes. *For example, “Can you join these two triangles with full sides touching to make a rectangle?”*

Grade 1

Introduction

In Grade 1, instructional time should focus on four critical areas:

- (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20;
 - (2) developing understanding of whole number relationships and place value, including grouping in tens and ones;
 - (3) developing understanding of linear measurement and measuring lengths as iterating length units; and
 - (4) reasoning about attributes of, and composing and decomposing geometric shapes.
1. Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. They use a variety of models, including discrete objects and length-based models (e.g., cubes connected to form lengths), to model add-to, take-from, put-together, take-apart, and compare situations to develop meaning for the operations of addition and subtraction, and to develop strategies to solve arithmetic problems with these operations. Students understand connections between counting and addition and subtraction (e.g., adding two is the same as counting on two). They use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., “making tens”) to solve addition and subtraction problems within 20. By comparing a variety of solution strategies, children build their understanding of the relationship between addition and subtraction.
 2. Students develop, discuss, and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. They compare whole numbers (at least to 100) to develop understanding of and solve problems involving their relative sizes. They think of whole numbers between 10 and 100 in terms of tens and ones (especially recognizing the numbers 11 to 19 as composed of a ten and some ones). Through activities that build number sense, they understand the order of the counting numbers and their relative magnitudes.
 3. Students develop an understanding of the meaning and processes of measurement, including underlying concepts such as iterating (the mental activity of building up the length of an object with equal-sized units) and the transitivity principle for indirect measurement.¹
 4. Students compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral) and build understanding of part-whole relationships as well as the properties of the original and composite shapes. As they combine shapes, they recognize them from different perspectives and orientations, describe their geometric attributes, and determine how they are alike and different, to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

Grade 1 Overview

- **Operations and Algebraic Thinking**

- Represent and solve problems involving addition and subtraction.
- Understand and apply properties of operations and the relationship between addition and subtraction.
- Add and subtract within 20.
- Work with addition and subtraction equations.

- **Number and Operations in Base Ten**

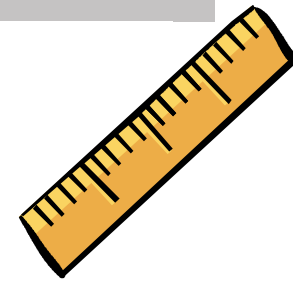
- Extend the counting sequence.
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

- **Measurement and Data**

- Measure lengths indirectly and by iterating length units.
- Tell and write time.
- Represent and interpret data.

- **Geometry**

- Reason with shapes and their attributes.



Operations & Algebraic Thinking

Represent and solve problems involving addition and subtraction.

- 1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.¹
- 1.OA.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction.

- 1.OA.3. Apply properties of operations as strategies to add and subtract.² Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)
- 1.OA.4. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8. Add and subtract within 20.

Add and subtract within 20.

- 1.OA.5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- 1.OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

Work with addition and subtraction equations.

- 1.OA.7.** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
- 1.OA.8.** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.

Number & Operations in Base Ten

Extend the counting sequence.

- 1.NBT.1.** Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

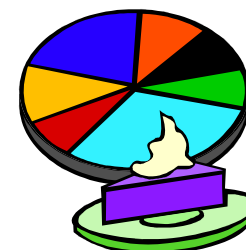
Understand place value.

- 1.NBT.2.** Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
- 10 can be thought of as a bundle of ten ones — called a “ten.”
 - The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
 - The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
- 1.NBT.3.** Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

Use place value understanding and properties of operations to add and subtract.

- 1.NBT.4.** Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- 1.NBT.5.** Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- 1.NBT.6.** Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Measurement & Data



Measure lengths indirectly and by iterating length units.

- 1.MD.1.** Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- 1.MD.2.** Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.
Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

Tell and write time.

- 1.MD.3.** Tell and write time in hours and half-hours using analog and digital clocks.

Represent and interpret data.

- 1.MD.4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

Geometry

Reason with shapes and their attributes.

- 1.G.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes.
- 1.G.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.¹
- 1.G.3. Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.



Grade 2

In Grade 2, instructional time should focus on four critical areas: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

- 1. Students extend their understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units, including comparing. Students understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones (e.g., 853 is 8 hundreds + 5 tens + 3 ones).
- 2. Students use their understanding of addition to develop fluency with addition and subtraction within 100. They solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations. They select and accurately apply methods that are appropriate for the context and the numbers involved to mentally calculate sums and differences for numbers with only tens or only hundreds.
- 3. Students recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units. They recognize that the smaller the unit, the more iterations they need to cover a given length.
- 4. Students describe and analyze shapes by examining their sides and angles. Students investigate, describe, and reason about decomposing and combining shapes to make other shapes. Through building, drawing, and analyzing two- and three-dimensional shapes, students develop a foundation for understanding area, volume, congruence, similarity, and symmetry in later grades.

Grade 2 Overview

• Operations and Algebraic Thinking .

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

• Number and Operations in Base Ten .

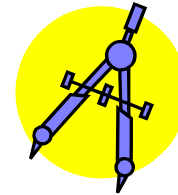
- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

• Measurement and Data .

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

• Geometry .

- Reason with shapes and their attributes.



Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

2.OA.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.

Add and subtract within 20.

2.OA.2. Fluently add and subtract within 20 using mental strategies. 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 multiplication.

2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Number and Operations in Base Ten

Understand place value.

2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:

- 100 can be thought of as a bundle of ten tens — called a “hundred.”

- The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
- 2..NBT.2. Count within 1000; skip-count by 5s, 10s, and 100s.
- 2..NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
- 2..NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Use place value understanding and properties of operations to add and subtract.

- 2..NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- 2..NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.
- 2..NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
- 2..NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
- 2..NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations. *[Explanations may be supported by drawings or objects.]*

Measurement and Data

Measure and estimate lengths in standard units.

- 2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- 2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- 2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters.
- 2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

Relate addition and subtraction to length.

- 2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- 2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

Work with time and money.

- 2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
- 2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.

Example: If you have 2 dimes and 3 pennies, how many cents do you have?

Represent and interpret data.

- 2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
- 2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.



Geometry

Reason with shapes and their attributes.

- 2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.
[Sizes are compared directly or visually, not compared by measuring.] Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
- 2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- 2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

Implementation Guide – Grade 1 Mathematics

Code: M.1.A.1 refers to: Mathematics –Grade 1 – Topic A – Skill 1

CATEGORY: Operations and Algebraic Thinking. M1.A Represent and solve problems involving addition and subtractions Standard:1

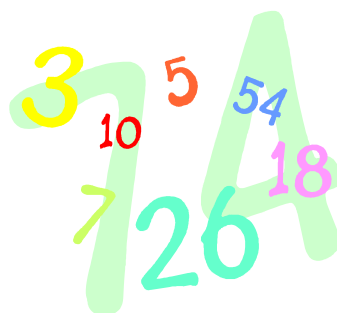
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| <p>Essential Questions <i>What should I be able to answer?</i> <i>What guides my thinking?</i></p> | <p>What is addition? How does addition affect me and other people? What is subtraction? How does subtraction affect me and other people?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative: students write word problems; think, pair, share; write an addition or subtraction word problem; act out an addition or subtraction word problem; teacher observation of children playing addition and subtraction games and solving word problems in order to see how students use mental math, paper and pencil, manipulatives, or a combination of strategies; Think aloud; collaborative pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; exit card; Rubric Novice/Apprentice/Practitioner; Gold Seal Lessons e.g. Shake, Add and Subtract Math #30 Summative Solve teacher developed addition and subtraction word problems; students develop addition and subtraction word problems; performance assessment e.g. using a picture of the shelves in a toy store or in a food market or using prepared plastic bags of manipulatives which will be used to solve addition and subtraction problems based on the materials</p> |

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| <p>Skills <i>What skills do I need to have in order to answer the essential questions?</i></p> | <p>M.1.A.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> <p>M.1.A.2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p> |
| <p>Content <i>What content do I need to know in order to answer the essential questions?</i></p> | <p>Numbers 0-20; represent a number of objects with a written numeral 0-20; the relationship between number and quantities; represent addition and subtraction with objects, fingers, mental images, drawings, verbal explanations, expressions or equations; four main types of addition and subtraction situations</p> <p>Vocabulary: add, addend, addition sentence, count on/up, count back, difference, doubles, doubles + 1, doubles -, equals, fact family, join, minus, missing addend, number sentence, order, part + part = whole, plus, related addition facts, related subtraction facts, subtract, subtraction sentence, sum, take away, ten-frame, & whole – part = part</p> |
| <p>Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i></p> | <p>Children’s literature; real life problems related to sports scores, collections, family members;</p> <p>ELA writing to explain addition and subtraction; poetry about addition and subtraction; write word problems</p> <p>Science using addition and subtraction in science investigations and experiments e.g. Gold Seal Lesson Earth-Friendly Lunch #9</p> |

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| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Manipulatives e.g. inch and centimeter cubes, straws, buttons, pattern blocks,; Board Games; Computer Games; See the recommended websites from the Technology Committee; textbook |
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Which 21st Century Skills are woven into this standard? ___Critical Thinking/Problem Solving ___Collaboration
 ___Communications ___Creativity/Innovation

What level of rigor will I be using? (A, C)_____ What level of relevance will I be using?_____ (B,D)



CATEGORY: Operations and Algebraic Thinking. M.1.B Understand and apply properties of operations and the relationship between addition and subtraction.

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| <p>Essential Questions <i>What should I be able to answer?</i> <i>What guides my thinking?</i></p> | <p>How can I use what I know about addition to help me subtract?</p> <p>What strategies can I use to add and subtract?</p> <p>Why do we need efficient methods to add and subtract?</p> <p>What is the quickest way I can add?</p> <p>What is the quickest way I can subtract?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative</p> <p>students write word problems; think, pair, share, write an addition or subtraction word problem; act out an addition or subtraction word problem; teacher observation of children playing addition and subtraction games and solving word problems in order to see how students use mental math, paper and pencil, manipulatives, or a combination of strategies; Think aloud; collaborative pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; exit card; Rubric Novice/Apprentice/Practitioner; Gold Seal Lessons</p> <p>Summative</p> <p>Write a letter to a friend explaining how addition can be helpful when subtracting. Teacher made test; create a poster with examples and labels; apply knowledge to real life task; model operations with concrete objects; timed math fact practice;</p> |

Skills

What skills do I need to have in order to answer the essential questions?

- M.1.B.1. Apply properties of operations as strategies to add and subtract. *[Students need not use formal terms for these properties.] Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)*
- M.1.B.2. Understand subtraction as an unknown-addend problem. *For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8. Add and subtract within 20.*
- M.1.B.3. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- M.1.B.4. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$). Work with addition and subtraction equations.
- M.1.B.5. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.*
- M.1.B.6. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = \square - 3$, $6 + 6 = \square$.*

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| Content <i>What content do I need to know in order to answer the essential questions?</i> | <p>Numbers 0-20; represent a number of objects with a written numeral 0-20; the relationship between number and quantities; represent addition and subtraction with objects, fingers, mental images, drawings, verbal explanations, expressions or equations; four main types of addition and subtraction situations</p> <p>Vocabulary: add, addend, addition sentence, count on/up, count back, difference, doubles, doubles + 1, doubles -, equals, fact family, join, minus, missing addend, number sentence, order, part + part = whole, plus, related addition facts, related subtraction facts, subtract, subtraction sentence, sum, take away, ten-frame, & whole – part = part</p> |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | <p>Children's literature; real life problems related to classroom life; ELA letter writing, writing word problems ; Science activities- check Gold Seal Lessons; Religion count days of Advent or Lent answer the question How many more days to Christmas or Easter?</p> |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | <p>Balance scales, number lines, random number generators, playing cards, board games, flash cards, Math manipulatives e.g. inch and centimeter cubes, straws, buttons, pattern blocks,; Board Games; Computer Games;</p> <p>See the recommended websites from the Technology Committee; textbook</p> |

Which 21st Century Skills are woven into this standard?

___Critical Thinking/Problem Solving

___Collaboration

___Communications

___Creativity/Innovation

What level of rigor will I be using? (A, C)_____

What level of relevance will I be using?_____ (B,D)

CATEGORY: Number and Operations in Base Ten. M.1.C Extend the counting sequence.:

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| <p>Essential Questions <i>What should I be able to answer?</i> <i>What guides my thinking?</i></p> | <p>Where do we see numerals in the real world? How do we use counting in everyday life? What do numerals represent?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative</p> <p>Observe students counting orally; use counting jars; observe students making sets and hopping forward and back on a number-line; journal entries related to counting; develop and label displays of materials illustrating various quantities; Think, Pair, Share; write a counting word problem; teacher observation of children using counting games and manipulatives; Think Aloud; collaborative pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; Exit Card; I Can./Not Yet; Rubric-- Novice/Apprentice/Practitioner;</p> <p>Summative</p> <p>performance assessment counting and labeling given collections; write and model numbers using base ten blocks; complete 100 Grids with randomized blank squares;</p> |

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| Skills <i>What skills do I need to have in order to answer the essential questions?</i> | M.1.C.1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. |
| Content <i>What content do I need to know in order to answer the essential questions?</i> | Count orally by ones (may use 2s, 5s, 10s); use counters to count out a specified number; count forward and backward; identify sets with one-to-one correspondence; read the symbols for the numbers; write numerals; use objects, words, &/or symbols to express understanding of numbers; count from different starting points e.g. begin at 47, 82, ... |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Teach the correct formation of numerals in handwriting; Count out supplies, snacks, specified amounts of items for a party; identify the number of objects used in a building project, Answer questions such as How many tickets are needed to get on an amusement park ride, What is the temperature recorded on a thermometer?, |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Children's Literature Board Games: e.g. Chutes and Ladders; Dino Math Tracks; Mancala; Collect 15; Race to 100 Card and Dice Games See the recommended websites from the Technology Committee; textbook |

Which 21st Century Skills are woven into this standard?

___Critical Thinking/Problem Solving

___Collaboration

___Communications

___Creativity/Innovation

What level of rigor will I be using? (A, C)_____

What level of relevance will I be using?_____ (B,D)

CATEGORY: Number and Operations in Base Ten. M.1.D. Understand place value

Essential Questions

*What should I be able to answer?
What guides my thinking?*

Why do we have numbers with more than one digit?
How can you tell the value of a digit from its placement?
How are place value patterns repeated in large numbers?

Assessment

*What will I be expected to know,
understand, and be able to do in
order to demonstrate my learning?*

Formative

Observe students comparing the value of one, two and three digit numbers; journal entries related to place value; develop and label displays of materials illustrating various quantities; Think, Pair, Share; teacher observation of children using counting games and manipulatives; Think Aloud; Collaborative Pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; Exit Card; I Can./Not Yet; Rubric--
Novice/Apprentice/Practitioner

Summative

Draw pictures representing given quantities; Create a number book; performance assessment where children model numbers using manipulatives and write about their model; create a poster of numbers using the symbols $>$, $=$, and $<$ to illustrate the comparison of the numbers

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| <p>Skills What skills do I need to have in order to answer the essential questions?</p> | <p>M.1.D.1. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <p>a. 10 can be thought of as a bundle of ten ones — called a “ten.”</p> <p>b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</p> <p>c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).</p> <p>M.1.D.2. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.</p> |
| <p>Content What content do I need to know in order to answer the essential questions?</p> | <p>Understanding the value of 10; counting and grouping/bundling 10 objects; comparing the value of various two-, and three-digit numbers by looking at the numbers that have the highest place values; common terms e.g. about, after, before, equal, near, closer to, between, a little less than, more than, equivalent, non-equivalent, tens, hundreds; use the number line to compare numbers; use symbols for comparison $+$, $-$, $=$, $<$, $>$</p> |
| <p>Integration of Learning How does this learning connect to my other areas (subjects) of learning?</p> | <p>Use real life number lines e.g. rulers, thermometers; organize supply boxes to have a given amount of items; Money number of pennies in a dime, dimes in a dollar; Gold Seal Lessons</p> |
| <p>Tools for Learning Which tools will I use that will assist me in my learning?</p> | <p>Children’s Literature</p> <p>Manipulatives, base-ten blocks, ten-frames,</p> <p>Board Games e.g. Dino Math Tracks, Treasure Chest</p> <p>See the recommended websites from the Technology Committee; textbook</p> |

Which 21st Century Skills are woven into this standard?

___Critical Thinking/Problem Solving

___Collaboration

___Communications

___Creativity/Innovation

What level of rigor will I be using? (A, C)_____ What level of relevance will I be using? _____ (B,D)

CATEGORY: Number and Operations in Base Ten M.1.E. Use place value understanding and properties of operations to add and subtract.

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| <p>Essential Questions <i>What should I be able to answer?</i> <i>What guides my thinking?</i></p> | <p>How does understanding place value help me solve double digit addition and subtraction problems?</p> <p>How can I use what I know about tens and ones to add and subtract two-digit numbers?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative</p> <p>students write word problems; think, pair, share, write an addition or subtraction word problem; act out an addition or subtraction word problem; teacher observation of children playing addition and subtraction games and solving word problems in order to see how students use mental math, paper and pencil, manipulatives, or a combination of strategies; Think Aloud; Collaborative Pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; Exit Card; I Can. Not Yet.; Rubric-- Novice/Apprentice/Practitioner; use Base Ten Blocks (rods, flats and cubes)</p> <p>Summative</p> <p>Model and record addition and subtraction in a variety of ways.</p> <p>Record strategies for solving, combining, and separating problems using pictures, numbers, equations & words</p> <p>Performance Assessment solving addition and subtraction word problems based on one and two digit numbers within 100; Gold Seal Lessons Math e.g. Shake, Add, and Subtract! #30</p> |

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| <p>Skills <i>What skills do I need to have in order to answer the essential questions?</i></p> | <p>M.1.E.1. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>M.1.E.2. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p> <p>M.1.E.3. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p> |
| <p>Content <i>What content do I need to know in order to answer the essential questions?</i></p> | <p>Numbers 0-120; represent a number of objects with a written numeral 0-120; the relationship between number and quantities; represent addition and subtraction with objects, fingers, mental images, drawings, verbal explanations, expressions or equations; Fluency with addition and subtraction facts; knowledge of place value; apply place value skills to decompose numbers into 10s and 1s; add and subtract multiples of ten; counting up and back by 10s</p> <p>Vocabulary: add, addend, sum, count on/up, count back (by ones, by tens), difference, equals, digit, 2-digit number, 3-digit number, 10 ones = 1 ten, 10 tens = 1 hundred, 1 hundred = 10 tens</p> |

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| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Children's literature; real life problems e.g. comparing temperatures, comparing dates on a calendar, comparing ages of adults; ELA writing word problems, journal entries explaining the addition an subtraction of two digit numbers |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Manipulatives e.g. inch and centimeter cubes, straws, buttons, pattern blocks, base ten blocks; Board Games e.g. Dino Math Tracks ; Computer Games See the recommended websites from the Technology Committee; textbook |

Which 21st Century Skills are woven into this standard? ___Critical Thinking/Problem Solving ___Collaboration
 ___Communications ___Creativity/Innovation

What level of rigor will I be using? (A, C)_____ What level of relevance will I be using?_____ (B,D)

CATEGORY: Measurement and Data M.1.F Measure lengths indirectly and by iterating length units.

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| <p>Essential Questions <i>What should I be able to answer? What guides my thinking?</i></p> | <p>How do we measure the world around us?</p> <p>What are different ways to collect, display, and analyze data?</p> <p>What types of problems are solved with measurement?</p> <p>What are tools of measurement and how are they used?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative</p> <p>students write word problems; think, pair, share, write a measurement word problem; teacher observation of children measuring and solving word problems in order to see how students use measurement tools; Think aloud; collaborative pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; exit card; Rubric Novice/Apprentice/Practitioner;</p> <p>Summative</p> <p>Performance assessment which involves ordering and measuring specified items; Gold Seal Lessons e.g. In My Estimation #13 Math;</p> |
| <p>Skills <i>What skills do I need to have in order to answer the essential questions?</i></p> | <p>M.1.F. 1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p> <p>M.1.F. 2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.</i></p> |

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| Content <i>What content do I need to know in order to answer the essential questions?</i> | Vocabulary: long, short, longer, shorter, wide, length, tall, short, long, far, close height, depth The measuring tools we use have agreed upon standards. Measurements are estimates and are close enough rather than exact. |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Widespread use in daily life e.g. how deep is the swimming pool; how long is a shark; how tall is John or Marie; which is longer the table or the door; Science investigations and activities e.g. Gold Seal Lesson adapt to non-standard units Science #1 Block Science |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Non-standard units of measurement e.g. paper clips, unifix cubes, markers; Standard measurement tools e.g. ruler, yard stick, meter stick, tape measures; Literature; Websites e.g. http://cfbstaff.cfbisd.edu/library/Great%20Weblinks/math%20page.htm#Counting http://nlvm.usu.edu/en/nav/topic_t_1.html www.primarygames.com/curriculum/math.htm coolmath.com/ |

Which 21st Century Skills are woven into this standard?

___Critical Thinking/Problem Solving

___Collaboration

___Communications

___Creativity/Innovation

What level of rigor will I be using? (A, C)_____

What level of relevance will I be using?_____ (B,

CATEGORY: M.1.G. Tell and write time.

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| <p>Essential Questions <i>What should I be able to answer? What guides my thinking?</i></p> | <p>What do we do with time? How does time influence our lives? What would happen without time? How would we live without clocks?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative students think, pair, share, teacher observation of children using clocks in order to see how students represent time on analog and digital clocks; paper and pencil representation of time on clocks and in sentences; Think aloud; collaborative pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; exit card; Rubric Novice/Apprentice/Practitioner; Summative Performance Assessment in which children display and name times displayed on digital and analog clocks</p> |
| <p>Skills <i>What skills do I need to have in order to answer the essential questions?</i></p> | <p>M.1.G.1. Tell and write time in hours and half-hours using analog and digital clocks.</p> |
| <p>Content <i>What content do I need to know in order to answer the essential questions?</i></p> | <p>Design of analog clock and digital clock Vocabulary: before, after, early, late, morning, afternoon, evening, night, second, minute, hour, half-hour, o'clock, hour hand, minute hand, second hand, 24 hours in a day, A.M., P.M.,</p> |

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| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Anticipate and record daily activities in hours and minutes; record daily schedule in hours and minutes Clocks are important in business, science, travel, cooking, sports ELA Gold Seal Lessons English K-4 #1 All In A Day's Time |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Moveable analog and digital clocks; timers, stop watches, sand timers, sun dials; children's literature; Websites e.g. http://cfbstaff.cfbisd.edu/library/Great%20Weblinks/math%20page.htm#Counting http://nlvm.usu.edu/en/nav/topic_t_1.html www.primarygames.com/curriculum/math.htm coolmath.com/ See the recommended websites from the Technology Committee; textbook |

Which 21st Century Skills are woven into this standard? ___Critical Thinking/Problem Solving ___Collaboration
 ___Communications ___Creativity/Innovation
 What level of rigor will I be using? (A, C)_____ What level of relevance will I be using?_____ (B,D)

CATEGORY: Measurement and Data M.1.H. Represent and interpret data.

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| <p>Essential Questions <i>What should I be able to answer? What guides my thinking?</i></p> | <p>Who needs to gather, record and to organize information? Why do I and other people need to gather, record and to organize information? How can I gather, record, and organize information?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative observe, listen to, and interact with students as they work to gather and use data, generate representations and descriptions, create posters, graphs, Think aloud; collaborative pairs; Show Me What You Know/Hold Up the Answer; Agree or Disagree; Show Me/Tell Me; I Learned Statements; exit card; Rubric Novice/Apprentice/Practitioner; create object graphs, tally charts with up to three categories;</p> <p>Summative Construct a graph, label the information, and make up questions about the graph. Ask another student to answer the questions. Given a collection of items (e.g. buttons, bread bag tabs, stickers, coins), student will group, display and interpret information by sorting and arranging data to construct a real graph</p> |
| <p>Skills <i>What skills do I need to have in order to answer the essential questions?</i></p> | <p>M.1.H.1. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.</p> |

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| Content <i>What content do I need to know in order to answer the essential questions?</i> | Identify and describe attributes of various materials (e.g. size, color shape, similar, alike, different, most, least, order of days and months); tally; tally chart; pictograph; make a plan for gathering and recording data; create survey questions; sort and categorize data; explain results of surveys; present data to others in a way that communicates information; |
| Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i> | Keeping track of student attendance, weather, student birthdays, lunch orders; Science e.g. weather tracking, leaf identification, seed sorting, floating and sinking Social Studies e.g. voting in response to a specific question Gold Seal Lessons e.g. Math The Button Shop #4; In My Estimation #13; Science Earth-Friendly Lunch #9; Mayday, Mayday, I'm Sinking! #17; Pizza Graphs #29; Vital Signs #38; |
| Tools for Learning <i>Which tools will I use that will assist me in my learning?</i> | Random generators; stick-on notes; drawing paper; items to sort and classify e.g. attribute blocks, buttons, stickers, bread bag tabs, lids, coins; |

Which 21st Century Skills are woven into this standard?

___Critical Thinking/Problem Solving

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CATEGORY: Geometry M.1.I. Reason with shapes and their attributes.

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| <p>Essential Questions <i>What should I be able to answer? What guides my thinking?</i></p> | <p>How do we use geometry in our lives? How do we use geometry to solve problems? What jobs use geometry?</p> |
| <p>Assessment <i>What will I be expected to know, understand, and be able to do in order to demonstrate my learning?</i></p> | <p>Formative Journal entries; develop and label displays of materials illustrating various two and three dimensional shapes Observe students e.g. using pattern blocks and geo-blocks to manipulate basic geometric figures; to build new shapes from other shapes; using fraction manipulatives such as fraction bars and playing fraction games e.g. Pizza Party; partitioning groups to show fractions of a set or fair shares;</p> <p>Summative Using paper models of two dimensional shapes students will build new shapes Students will create a shape design according to specific directions e.g. use three squares, two triangles, four circles and three rectangles. Have a square overlap a triangle, have two triangles under a circle... (have plenty of extra paper for those who will use trial and error) Students will create a poster or flip books illustrating fractions of a shape or fractions of a set; students will use pre-cut 2 dimensional shapes to create the scene of a story e.g. rectangles and circles will form a wagon on a road</p> |

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| <p>Skills <i>What skills do I need to have in order to answer the essential questions?</i></p> | <p>M.1.I. 1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p> <p>M.1.I. 2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. <i>[Students do not need to learn formal names such as “right rectangular prism.”]</i></p> <p>M.1.I. 3. Partition circles and rectangles into two and four equal shares, describe the shares using the words <i>halves</i>, <i>fourths</i>, and <i>quarters</i>, and use the phrases <i>half of</i>, <i>fourth of</i>, and <i>quarter of</i>. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.</p> |
| <p>Content <i>What content do I need to know in order to answer the essential questions?</i></p> | <p>Name, identify and compare two dimensional and three dimensional shapes; Recognize two dimensional and three dimensional shapes in the environment; compare size, shape, attributes; identify open and closed shapes; know and apply position words, faces, flat surface, fraction, halves, fourths, quarter,</p> |

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| <p>Integration of Learning <i>How does this learning connect to my other areas (subjects) of learning?</i></p> | <p>Art make geometric designs; use three dimensional shapes to build a building or a community; use yarn to make open and closed shapes</p> <p>ELA Dictate or write a class letter to another class to tell how it is possible to make new shapes from other shapes e.g. using Writing clear instructions and describing how one folds and cuts to make given shapes</p> <p>Social Studies compare the use of geometric shapes in architecture around the world; relate to Japan and the art of Origami and Kiragami; relate to quilting blocks</p> <p>Gold Seal Lessons Math From Rhombuses to Riddles # 9; Quilt Design #26; Sizes and Shapes #31</p> |
| <p>Tools for Learning <i>Which tools will I use that will assist me in my learning?</i></p> | <p>Building blocks, geo-blocks, pattern blocks, Lego®, tangrams, geoboards, fraction bars, string, toothpicks, boxes, photos and magazine pictures which illustrate two and three dimensional shapes</p> <p>See the recommended websites from the Technology Committee; textbook</p> |

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Assessment and Grading

Grading and Assessment



Report Cards

The change in curriculum has prompted a change in our reporting document.

- **Report cards** will not be grade specific.
 - **Kindergarten** students will receive reports aligned to the skills appropriate to that level.
 - Students in **grades 1 – 3** will receive the primary form of the report card.
 - The grading system will continue as letter grades.
 - **No** numerical equivalents are attached to these grades.
 - The children in grades 4 – 8 will receive the elementary form of the report card
 - The grading system will continue as number grades for major content areas: Religion, Math and English Language Arts, Science and Social Studies. The general average is calculated from these grades.
 - A number scale is used for other content areas: Art, Music, Physical Education, Technology and World Language.
- **Grading Practices:**
 - The students will receive **one grade** for ELA and **one grade** for Math
 - The overall grade for each of these content areas will be an average of the progress shown in all of the “sub-set” categories for that content area.
 - **ELA** -- Care must be taken to ensure that the assessments reflect the entirety of ELA
 - At a minimum 2 assessments must be planned to assess progress in each of the sub-categories.
 - In each “sub-category”:
 - a “+” will indicate that the student meets or exceeds expectations in that area.
 - a “√” will indicate that the student continues to work towards meeting expectations.
 - In **Math**, the students will again receive one overall grade.
 - Progress in sub-categories” will be noted with a “+” or a “√” as indicated above.
 - Progress should be able to documented by at least two different assessments in each area.

Portfolios:

- Portfolio assessment is a “*perfect fit*” with the Core Curriculum State Standards
- Portfolios should be used to gather relevant samples of student work over time
- Students are involved in the selection of artifacts
 - Students do self-reflection of their work
 - Teachers and students periodically discuss the work contained in the portfolio
- **Minimum Requirements for Student Portfolios:**
 - Baseline writing samples – start and end of school year
 - 2 ELA Performance assessments (all stages with rubric attached.)
 - 2 Math Performance assessments
 - Standardized test scores
 - Social Studies, Science, Art, Technology, Music, World Language samples
 - Student Choices with entry slip attached
 - Other items deemed necessary by the local school
 - Writing pieces
 - Science experiments
 - Mathematics problems and solutions
 - Applied Mathematics
 - Book reviews
 - Research projects
 - Physical Fitness Summary
 - Interdisciplinary projects/assignments



Resources

Web site for Common Core Standards:

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

- Resources aligned to the Common Core Standards can be found at :
<http://teacherweb.com/PA/AOP/ETCC/apt1.aspx>

You will find a wealth of resources related to curriculum on the following Curriculum Committee web sites.

- Curriculum web site:
<http://www.teacherweb.com/PA/AOP/ElementaryCurriculumandInstruction/h1.aspx> English
- Language Arts web site:
<http://www.teacherweb.com/PA/AOP/ElementaryIntegratedLanguageArts%28ILA%29/ap2.aspx>
- Mathematics web site:
<http://www.teacherweb.com/PA/AOP/ElementaryMathematicsCurriculumCommittee/apt1.aspx>
- Library Media web site:
<http://www.teacherweb.com/PA/AOP/ElementaryLibraryMediaCommittee/h0.stm>
- Early Childhood web site: <http://www.teacherweb.com/PA/AOP/EarlyChildhood/>
- Assessment: <http://www.teacherweb.com/PA/AOP/ElementaryAssessmentCommittee/ap1.aspx>