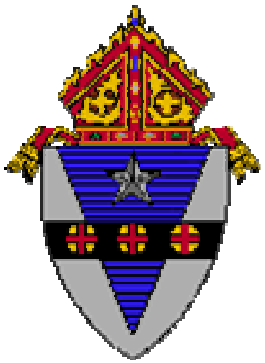
Archdiocese of Philadelphia



Curriculum Standards

English Language Arts and Mathematics

Kindergarten

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**	
Mary Tremper, Chairperson	Kate Reardon, Chairperson	
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Early Childhood Committee	**Assessment** – Debbie Jaster	

We are also grateful to the **Elementary Technology Committee** for preparing web links to these guidelines.

CONTENTS

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 are not eliminated and so that instruction on skills at higher levels are not anticipated at the current instructional level.

English Language Arts

Kindergarten

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

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---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 writtenand 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.

Kindergarten

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.

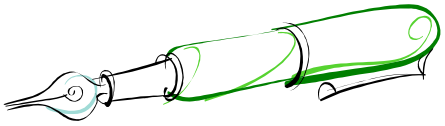
- Demonstrate basic knowledge of letter-sound correspondences by producing the primary or most frequent sound for each consonant.
- Associate the long and short sounds with the common spellings (graphemes) for the five major vowels.
- Read common high-frequency words by sight (e.g., *the*, *of*, *to*, *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

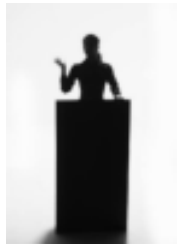
SL.K.4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.

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 defning 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*).

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

	Literature: Stories, Drama, Poetry	Informational Texts: Literary Nonfiction and Historical, Scientific, and Technical Texts
K[1]	*Over in the Meadow* by John Langstaff (traditional) (c1800)* *A Boy, a Dog, and a Frog* by Mercer Mayer (1967) *A Story, A Story* by Gail E. Haley (1970)* *Pancakes for Breakfast* by Tomie DePaola (1978) *Kitten's First Full Moon* by Kevin Henkes (2004)*	*My Five Senses* by Aliki (1962)** *Truck* by Donald Crews (1980) *I Read Signs* by Tana Hoban (1987) *What Do You Do With a Tail Like This?* by Steve Jenkins and Robin Page (2003)* *Amazing Whales!* by Sarah L. Thomson (2005)*
1[1]	"Mix a Pancake" by Christina G. Rossetti (1893)** *Mr. Popper's Penguins* by Richard Atwater (1938)* *Little Bear* by Else Holmelund Minarik, illustrated by Maurice Sendak (1957)** *Frog and Toad Together* by Arnold Lobel (1971)** *Hi! Fly Guy* by Tedd Arnold (2006)	*A Tree Is a Plant* by Clyde Robert Bulla, illustrated by Stacey Schuett (1960)** *Starfish* by Edith Thacher Hurd (1962) *Follow the Water from Brook to Ocean* by Arthur Dorros (1991)** *From Seed to Pumpkin* by Wendy Pfeffer, illustrated by James Graham Hale (2004)* *How People Learned to Fly* by Fran Hodgkins and True Kelley (2007)*

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
The Human Body Students can begin learning about the human body starting in kindergarten and then review and extend their learning during each subsequent grade.	**The five senses and associated body parts** *My Five Senses* by Aliki (1989) *Hearing* by Maria Rius (1985) *Sight* by Maria Rius (1985) *Smell* by Maria Rius (1985) *Taste* by Maria Rius (1985) *Touch* by Maria Rius (1985) **Taking care of your body: Overview (hygiene, diet, exercise, rest)** *My Amazing Body*: A First Look at Health & Fitness by Pat Thomas (2001) *Get Up and Go!* by Nancy Carlson (2008) *Go Wash Up* by Doering Tourville (2008) *Sleep* by Paul Showers (1997)	**Introduction to the systems of the human body and associated body parts** *Under Your Skin:* Your Amazing Body by Mick Manning (2007) *Me and My Amazing Body* by Joan Sweeney (1999) *The Human Body* by Gallimard Jeunesse (2007) *The Busy Body Book* by Lizzy Rockwell (2008) *First Encyclopedia of the Human Body* by Fiona Chandler (2004) **Taking care of your body: Germs, diseases, and preventing illness** *Germs Make Me Sick* by Marilyn Berger (1995)

Implementation Guide – Kindergarten ELA

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

	Writing Standards: ELA.K. M. Text Types and Purposes	**Reading Standards: ELA.K. A. Key Ideas and Details Literature**
Essential Questions *What should I be able to answer?* *What guides my thinking?*	What is the purpose for this specific piece of my drawing, dictation, and/or writing? How will my drawing, dictation, and/or writing conform to conventions that are readily understood by readers and/or listeners? What resources will provide ideas and background for my drawing dictation, and/or writing? Where can I find correct forms of specific letters, phonemes, and words to aid in processing my thoughts into words? How can I blend the sounds of letters, phonemes, rimes into words and then sentences to convey my thoughts onto paper?	Can I identify a key detail in a story? Can I tell the characters in the story? Can I identify the setting? Can I tell what happens in the story? Can I tell how details affect the story?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	Identify and verbalize the central topic or idea in the drawing, dictation, and/or writing. Summarize the theme, putting the processed information into appropriate sequence. Explain why certain nouns, adjectives, or verbs were chosen to describe the activity or event. Share the theme in a shared reading environment with a classmate. Answer classmates' questions about the drawing, dictation, and/or writing.	Recall details that identify the characters and the setting. State the major events in the story. Retell a familiar story using key details.

Skills *What skills do I need to have in order to answer the essential questions?*	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or 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….). 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. 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.	With prompting and support, ask and answer questions about key details in a text. With prompting and support, retell familiar stories, including key details. With prompting and support, identify characters, settings, and major events in a story.
Content *What content do I need to know in order to answer the essential questions?*	Draw, dictate, or write after listening to an appropriately chosen story. Draw, dictate, or write after participating in rich discussion related to a class unit, theme, or project Draw, dictate, or write about ongoing events in school, such as gym or music classes, field trips, classroom visitors (people or animal) Draw, dictate, or write in response to common curriculum	Understanding of literary terms: setting, characters, major events and key details

Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Draw some of the animals in the science museum presentation Dictate the reaction of the five senses during a field trip or activity in school Listen for familiar words and sentences in classmates shared writings Draw or write about specific events or activities in school Draw, dictate, and/or write about basic classroom learning	Use various genre of literature to enhance and supplement other academic areas
Tools for Learning *Which tools will I use that will assist me in my learning?*	Word Walls Computer Programs Tape Players Video/Digital Cameras Trade Books (Various types of texts)	Big books, trade books, favorite books, classroom library, Guided reading books, reading series

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)

	Writing Standards: ELA K. N. Production and Distribution of Writing	Reading Standards: ELA K. B. Craft and Structure Literature
Essential Questions *What should I be able to answer?* *What guides my thinking?*	How will I write an answer to the question? What questions should I ask my teacher and peers about what I should write? How can I give more details to my writing? What words will I use to make my story more interesting? How will my teachers and peers ideas help me?	How will I find out about a word that I do not understand? What do I know about Nursery Rhymes, songs, storybooks and poems? Do I know who and what the author is and what he/she does? Do I know who and what the illustrator is and what he/she does?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	Write sentence/s to answer a prompt or question. Reread/edit sentence/s and use teacher and peer ideas to strengthen the idea/s written. Add vocabulary to better describe the noun or verb that has been written. Write an individual or class book on writings. Write the book on the computer to be saved and printed or sent to a parent/guardian.	Use new vocabulary in oral and written language Compare and contrast different genres using specific vocabulary Point out the author and illustrator on the cover of the book
Skills *What skills do I need to have in order to answer the essential questions?*	With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. .With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.	Ask and answer questions about unknown words in a text. .Recognize common types of texts (e.g. storybooks, poems) .With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.

Content *What content do I need to know in order to answer the essential questions?*	Know how to write a sentence. Know that the sounds in words should be represented with letters. Know how to reread the words that I wrote Know how to edit any information that is not clear when reread. Know how to accept suggestions from teacher. Know that my peers may give good suggestions to make my writing stronger.	Identify various genres (Trade and Informational tests) Identify the cover page of a book to find the author and illustrator
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Use knowledge of answering prompts to write about any area of learning. Use content area word wall as prompts Transfer writings to the computer	Use new vocabulary in oral language and writing Read "Rhyming" books that have math/science, etc. concepts in texts
Tools for Learning *Which tools will I use that will assist me in my learning?*	Activate prior knowledge to strengthen writing Use of the word wall Work in small groups (Writer's Workshop)	Answer questions about text and its vocabulary Use strategies such as activating prior knowledge, using context clues to unlock vocabulary meaning Expand oral language through the use of robust vocabulary/use newly learned vocabulary to reinforce meaning Publishers On-Line Programs/ Starfall

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)

	Writing Standards: ELA.K. O. Research to Build and Present Knowledge	Reading Standards: ELA K. C. Integration of Knowledge and Ideas Literature
Essential Questions *What should I be able to answer?* *What guides my thinking?*	Can I identify the important facts of an experience? How do I analyze and evaluate the quality of information I obtain to answer research questions? Is my opinion based on knowledge?	What do the illustrations tell me about the story? Do the illustrations help me understand or predict story events? Can I tell the events that happen in the story? Are the story characters or events similar to other stories I have read?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	Ask appropriate questions on a specific topic. Identify and respond to essential information. Create a research-based project with assistance and explain it. Compare and contrast books by a favorite author and express opinions about them.	Recall details in the text such as characters, setting, story problem and solution Find words in the story that relate to illustrations Compare and contrast characters and events in this story with other stories I have read
Skills *What skills do I need to have in order to answer the essential questions?*	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). With guidance and support from adults, recall information from experience or gather information from provided sources to answer a question.	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) With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

Content *What content do I need to know in order to answer the essential questions?*	How to identify content appropriate for the topic How to present ideas in individual and class writing How to dictate or write simple sentences in logical order	Demonstrate understanding of story events, characters, plot, setting using both text and illustrations Understand concept of same and different
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Gather information on varied topics from provided sources. Recall information after a field trip or presentation to write a group experience story.	Use texts and illustrations of literature to supplement, expand, and enhance concepts and ideas presented in other academic areas.
Tools for Learning *Which tools will I use that will assist me in my learning?*	Informational Texts, Author Study, Technology Interviews Writing Notebooks Chart Paper Smart Board	Classroom library/literature Big Books Trade Books Guided Reading materials Reading series

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)

	Writing Standards: ELA.	Reading Standards: ELA. K. D. Range of Reading and Level of Text Complexity Literature
Essential Questions *What should I be able to answer?* *What guides my thinking?*	(No writing skills are taught at this level in correlation to this reading Standard.)	Why do I need to be able to read my own work? Why do I need to be able to read the work of others? How can I use pictures to add more meaning to what I am reading?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Read or attempt to read dictated class stories Read or attempt to read simple patterned texts, decodable texts, and predictable texts Follow texts from right to left and from top to bottom
Skills *What skills do I need to have in order to answer the essential questions?*		Actively engage in group reading activities with purpose and understanding.
Content *What content do I need to know in order to answer the essential questions?*		Know the difference between letters and words Know some sight words Know the meaning of picture clues Know that picture clues help tell the story

Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Reading Daily Schedules on Circle Time Board Reading classroom charts Reading/writing computer stories Reading Morning Message
Tools for Learning *Which tools will I use that will assist me in my learning?*		Big Books Rhyming Charts Leveled Books Technology Smart Boards

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)

	Writing Standards: ELA.	Reading Standards: ELA.K.E. Key Ideas and Details
Essential Questions *What should I be able to answer?* *What guides my thinking?*	(No writing skills are taught at this level in correlation to this reading Standard.)	Can I identify a key detail or important fact in the informational text? Can I how this key detail or important fact affect the whole text? What information is this book giving me? Can I identify/tell the main idea? Can I identify/tell the setting?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Recall key facts of informational text Retell key details of informational text. Compare or contrast pieces of information concerning animals, events, places, etc.
Skills *What skills do I need to have in order to answer the essential questions?*		With prompting and support, ask and answer questions about key details in a text. With prompting and support, identify the main topic and retell key details of a text. . With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

Content *What content do I need to know in order to answer the essential questions?*		Understanding of literary terms: key details, important facts. Main idea, setting, sequence order, compare(same), contrast (different)
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Trade books across the curriculum, e.g. Science, Social Studies, Cooking, Art, Music
Tools for Learning *Which tools will I use that will assist me in my learning?*		Informational texts, big books, trade books, classroom library, guided reading books, reading series, technology sites, books on CD's and tapes, Weekly Reader, Posters

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)

	Writing Standards: ELA.	Reading Standards: ELA K. F. Text Craft and Structure Informational Text
Essential Questions *What should I be able to answer?* *What guides my thinking?*	(No writing skills are taught at this level in correlation to this reading Standard.)	How can I learn about a word I don't know? What clues can I find to help me understand all the words? What is the right way I can handle a book and read it from beginning to end? Can I identify the front and back cover and the title page? Do I know who writes the words in a story? Do I know who creates the illustrations in a story?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Identify unfamiliar words in a story Share new word meanings using context and picture clues Take turns introducing books to classmates, identifying front and back cover and title pages Identify the author and illustrator of a book reading the names either alone or with help Include "author" and "illustrator" on original books penned by the students
Skills *What skills do I need to have in order to answer the essential questions?*		With prompting and support, ask and answer questions about unknown words in a text. Identify the front cover, back cover, and title page of a book. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

Content *What content do I need to know in order to answer the essential questions?*		Use everyday books that are read to build own vocabulary and familiar word bank Recognize informational books, including storybooks, textbooks, workbooks Transfer knowledge about informational texts to everyday individual and class writings
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Identifying new words in stories being read to me in class Using the new words learned in science, music, art classes in daily writings Writing a title page for an individual/class book
Tools for Learning *Which tools will I use that will assist me in my learning?*		Trade books, workbooks, textbooks Stories on Technology Sites, Books on CD's Tapes Morning Message

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)

	Writing Standards: ELA.	Reading Standards: ELA K. G. Integration of Knowledge and Ideas Informational Text
Essential Questions *What should I be able to answer?* *What guides my thinking?*	(No writing skills are taught at this level in correlation to this reading Standard.)	Can I relate the illustration to the text? Does the text describe what I see in the picture? What information does the author give me on the topic? Can I identify the reasons the author gives to support his points?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Find words in the text that tell what the illustration is about. Recall details that establish the setting or define the characters or ideas. Compare books on similar topics.
Skills *What skills do I need to have in order to answer the essential questions?*		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). .With prompting and support, identify the reason an author gives to support points in a text. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).

Content *What content do I need to know in order to answer the essential questions?*		Identify informational texts. Understanding of characters, main idea, and details in both texts and illustrations. Understand the concept of same and different.
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Illustrations in math, science, or social studies texts bring clarity and understanding to the written word.
Tools for Learning *Which tools will I use that will assist me in my learning?*		Informational texts, textbooks, magazines, newspapers, posters, technology, smart boards

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)

	Writing Standards: ELA.	Reading Standards: ELA K. H. Range of Reading and Level of Text Complexity Informational Text
Essential Questions *What should I be able to answer?* *What guides my thinking?*		Where can I find information about a topic or idea that interests me? What do pictures and words tell me that I did not already know about this concept? How can I find additional information about this topic? What can I include in a display or project about this specific topic? What means of oral expression (poetry, role play, report) can I or my class or group use to show our new-found knowledge about this topic? How can I learn the information in harder to read texts?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Cooperatively develop drawings, oral responses, or original writing to enlarge on previously known information about a specific topic. Compare findings within the group re. informational pictures, text, or original writings that show the accumulation of new technical knowledge about the topic. Create a performance within the group to display accurate knowledge of a specific topic. Develop a culminating activity that displays summary understanding of new knowledge of the topic.
Skills *What skills do I need to have in order to answer the essential questions?*		. Actively engage in group reading activities with purpose and understanding.

Content *What content do I need to know in order to answer the essential questions?*		Identify sources of information from everyday reading sources or from computer generated informational sources Contribute newly gathered knowledge of the other Members of the group Listen and respond to information shared by other group members or the teacher Join in a performance (poem, song, role play) that shows the results of their reading and research
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Ability to add to my general knowledge through my reading activities Ability to learn from the teacher and other in the group Incorporating my new knowledge into other areas of learning in class Telling the difference between recreational (fantasy) reading and informational text
Tools for Learning *Which tools will I use that will assist me in my learning?*		Informational texts, textbooks, magazines, posters Computer Programs Learning Centers/Groups

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)

	Writing Standards: ELA.	Reading Standards: ELA.K.I. Print Concepts Foundation Skills
Essential Questions *What should I be able to answer?* *What guides my thinking?*	(No writing skills are taught at this level in correlation to this reading Standard.)	Why do I need the different parts of a book and what is the purpose of each? How do I track print? Where do I go at the end of each line? Where do I go at the end of a page? How do I know the likenesses and differences between a letter, a word, and a sentence? What is the alphabet? How do I know the difference between upper and lower case letters?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Locate front cover, back cover and title page of a book. Folllow text from left to right and top to bottom on a printed page. Recognize that printed materials provide information. Know that sentences in print are made up of separate words. Differentiate letters from words. Know and name all upper and lower case letters of the alphabet.
Skills *What skills do I need to have in order to answer the essential questions?*		. Demonstrate understanding of the organization and basic of print. a. Follow words from left to right, top to bottom and page by page. b. Recognize that spoken words are represented in written language by specific sequences of letters. c. Understand that words are separated by spaces in print. d. Recognize and name all upper-and lowercase letters of the alphabet.

Content *What content do I need to know in order to answer the essential questions?*		Understand the concept of right and left, top and bottom. Distinguish between letters and words. Identify letters of the alphabet Name parts of a book Identify author and illustrator of a book
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Trade books across the curriculum Music Math (Counting words, letters) Environmental Print Computer Class (Keyboard skills)
Tools for Learning *Which tools will I use that will assist me in my learning?*		Pointer ABC Chart Word "Spacers" Counters Magnetic Letters Alphabet Games (BINGO) Trade Books Smart Boards

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)

	Writing Standards: ELA.K.	Reading Standards: ELA K. J. Phonological Awareness Foundation Skills
.Essential Questions *What should I be able to answer?* *What guides my thinking?*	(No writing skills are taught at this level in correlation to this reading Standard.)	What are the beginning, middle, and ending sounds I hear when you break down a word? Why do I need to recognize syllables? How do I know when a word rhymes? How do I recognize onsets? How do I blend sounds into words? Why does a word change when I substitute individual letters?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Identify whether a word is the same or different? Identify words with common beginning, middle, or ending sounds. Tell whether words rhyme Produce rhyming words Blend syllables orally and blend onset-rimes into whole words Blend two-three separate phonemes into one syllable words. Separate words into syllables
Skills *What skills do I need to have in order to answer the essential questions?*		Demonstrate understanding of spoken words, syllables, sounds (phonemes). a. Recognize and produce rhyming words. b. Count, pronounce, blend and segment syllable in spoken words. c. Blend and segment onsets and rimes of single-syllable spoken words. d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words,*(This does not include CVCs ending with /l/,r/, or /x/.) e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

Content *What content do I need to know in order to answer the essential questions?*		Understand the concept of same and different Understand the concept of beginning, middle, end Distinguish between words that are the same and different Identify the differences between single speech sounds Distinguish rhyming words Count word parts (syllables) Blend sounds and word parts into words
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Morning Message Music and Movement Poetry Computers Environmental Reading
Tools for Learning *Which tools will I use that will assist me in my learning?*		Nursery Rhymes Trade Books Center Activities Puppets Audio CD's ABC songs Counters for syllable and sound naming Poetry Smart Board

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)

	Writing Standards: ELA.	Reading Standards: ELA K.K. Phonics and Word Recognition Foundation Skills
Essential Questions *What should I be able to answer?* *What guides my thinking?*		Can I identify the names of the letters? Can I tell the difference between a consonant and a vowel? How can I know what sounds the different letters make? Why is it important for me to recognize sight words?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Recognize and name upper and lower case letters of the Alphabet Know the consonant sounds Know the long and short vowel sounds Recognize some sight words
Skills *What skills do I need to have in order to answer the essential questions?*		Know and apply grade-level phonics and word analysis skills in decoding words. a. Demonstrate basic knowledge of one-to one-letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant. b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels. c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does). d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

Content *What content do I need to know in order to answer the essential questions?*		Notice that when letters and words change, the sound changes Knowledge of word families (at, am, ing)
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Recognize words in context using pre-decodable and Decodable informational texts
Tools for Learning *Which tools will I use that will assist me in my learning?*		Literacy Manipulatives (Letter cards, word cards) Learning Centers Word Wall CD's

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)

	Writing Standards: ELA.	Reading Standards: ELA K.L. Fluency Foundation Skills
Essential Questions *What should I be able to answer? What guides my thinking?*	(No writing skills are taught at this level in correlation to this reading Standard.)	What level books should I pick? How many words do I need to know to read the text with understanding? What is the key point or idea I need to find in the text? Did I understand what I read?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Ability to read the words with understanding Ability to read the words with fluency Can read with 90%-95% accuracy (instructional level) Understanding the purpose of the text Ability to answer questions about the text
Skills *What skills do I need to have in order to answer the essential questions?*		Read emergent-reader texts with purpose and understanding.

Content *What content do I need to know in order to answer the essential questions?*		Understanding that print carries a message Using prior knowledge before reading to help with understanding of the text Displaying directional movement: left to right, top to bottom, return sweep Matching voice to print with one to one matching by finger pointing Locating some known and unknown words Using picture clues to help tell the story and to help decode unknown words Reading with accuracy and expression Using knowledge of end punctuation to signal expression in reading
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Read texts across the content area
Tools for Learning *Which tools will I use that will assist me in my learning?*		With support and prompt, answer questions about the text and its vocabulary Use strategies such as activating prior knowledge, using context clues to unlock vocabulary meaning

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)

	Speaking and Listening Standards: ELA K. P. Comprehension and Collaboration Speaking and Listening	**Language Standards: ELA. K. R. Conventions of Standard English Language**
Essential Questions *What should I be able to answer? What guides my thinking?*	Why is it important to that I listen to other's ideas? Why is it important for me to share my ideas? Why is it important that I use complete sentences? Why is it important for me to use "amazing" words in speech and writing?	Why is it important for me to be able to print upper and lower case letters? Why is it important for me to use nouns, verbs, and prepositions in speaking and writing? How do I form plural nouns? How will knowing question words help me express what I want to say/write?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	Converses in coherent sentences Attends to oral presentations Takes turns expressing ideas and asking questions Uses a variety of sentence patterns such as interrogative requests and sentence fragments that convey emotion Uses new vocabulary in speech and writing	Orally describe personal interests or tell/write stories to classmates. Model appropriate and correct language. Use regular plurals during conversations with teachers/peers. Formulate questions using question words…distinguishing between questions and statements. Use appropriate prepositions when telling a story.

Skills *What skills do I need to have in order to answer the essential questions?*	Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion). b. Continue a conversation through multiple exchanges. . 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. Ask and answer questions in order to seek help, get Information, or clarify something that is not understood.	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper and lower case letters. b.Use frequently occurring nouns and verbs. c.Form regular plural nouns orally by adding/s/ or /es/ (e.g., dog, dogs; wish, wishes d. Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how). e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with). f. Produce and expand complete sentences in shared language activities.
Content *What content do I need to know in order to answer the essential questions?*	Understands the concept of complete sentences Understands what listening carefully means Identify meaning of new vocabulary words Distinguish between asking and telling sentences Respond to questions in complete sentences Converse with peers and adults	Identify upper and lower case letters Speak in complete coherent sentences Know the difference between one and more than one Begin to write simple sentences

Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Morning Message Music and Movement Oral Book Reports Oral "News" Reporting Greeting visitors to the classroom	Use knowledge of standard English to write stories/class books Effectively ask questions about informational texts Ongoing dialog during daily activities
Tools for Learning *Which tools will I use that will assist me in my learning?*	Center Activities Puppets Trade books Tape Players Turn taking objects, e.g., microphones, "your turn" wooden/plastic spoons	Alphabet cards Word Wall Variety of written materials Circle Time Questions..What day…Who is absent..What kind of weather… United Streaming Smart Boards

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)

	Speaking and Listening Standards: ELA.K.Q.Presentation of Knowledge and Ideas Speaking and Listening	Language Standards
Essential Questions *What should I be able to answer?* *What guides my thinking?*	Can I identify the main idea of a story? How can I find the important details? Can I name the details of the story? How can I find the main idea of the story? What pictures/illustrations can I draw that relate to the story? What does the author tell me about the characters' feelings and actions? What tone of voice can I use so others can understand my thoughts, feelings, and ideas?	
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	Recall and state details of the story. Produce illustrations, story reenactments, or visual displays that relate to the story. Use appropriate voice and tone when relaying story information. Able to identify thoughts, feelings, and ideas elated to the story.	
Skills *What skills do I need to have in order to answer the essential questions?*	Describe familiar people, places, things, events, and with prompting and support, provide additional detail. Add drawings or other visual displays to descriptions as desired to provide additional detail. Speak audibly and express thoughts, feelings, and ideas clearly.	

Content *What content do I need to know in order to answer the essential questions?*	Differentiate between illustrations and text Understand concept of details and how they relate to the story Understand and recognize different types of voices	
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Various voices will be used in all subject areas to relay content and ideas Understanding of thoughts, ideas, feelings, and content related to all academic areas	
Tools for Learning *Which tools will I use that will assist me in my learning?*	Big Books Trade Books Art Supplies Reading Series Guided Reading Books Classroom Library Audio Books on Tape/CD's Puppets	

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)

		Language Standards: ELA.K.S.5 . a,b,c,d Vocabulary Acquisition and Use Language

Essential Questions *What should I be able to answer?* *What guides my thinking?*		Why did I put these objects in this category? Can I identify an antonym? What verbs and adjectives do I find frequently in literature? Why did I choose this verb to describe this action?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*		Sort common objects into categories. Identify verbs and adjectives. Relate them to their antonyms. Act out the meanings of verbs describing the same general action.
Skills *What skills do I need to have in order to answer the essential questions?*		With guidance and support from adults, explore word relationships and nuances in word meanings. a. Sort common objects into categories (e.g., knowing duck is a bird and learning the verb to duck). b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). c. Identify real-life connections between words and their use (e.g., note places at school that are colorful). d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march strut, prance) by acting out the meanings.

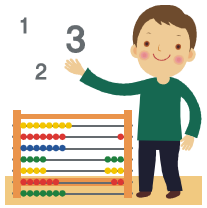
Content *What content do I need to know in order to answer the essential questions?*		Knowing that objects can be sorted into categories. Knowing the most frequently occurring verbs and adjectives. Familiarity with antonyms. Knowing real-life connections between words and their use. Awareness of the meaning among verbs describing the same general action.
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*		Using acquisition of new vocabulary in all subject areas.
Tools for Learning *Which tools will I use that will assist me in my learning?*		Big Books Trade Books Classroom Library Easy Readers Reading Series

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

Kindergarten



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

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 × 5 + 7 × 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 andthe 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, whilemattending 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,nassessment, 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;

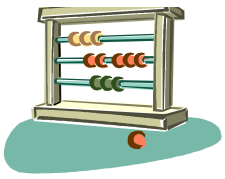
(2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

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, drawings[1], 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.

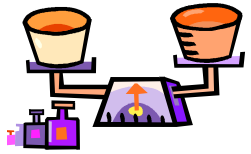
[1] Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)

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

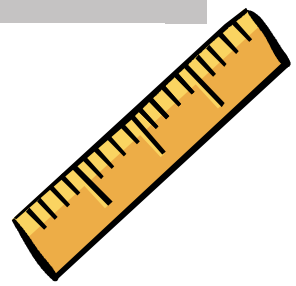
In Grade 1, instructional time should focus on four critical areas:

(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 <.

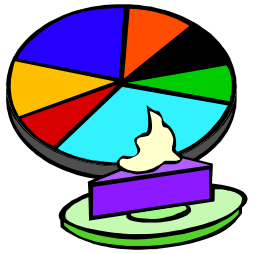
Use place value understanding and properties of operations to add and subtract.

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**.**

Implementation Guide – Kindergarten Mathematics

Code: M.K.A.1 refers to Mathematics – Kindergarten level – Topic A – Skill 1

CATEGORY: Standard: Counting and Cardinality: M.K.A. Know number names and the count sequence.

Essential Questions *What should I be able to answer? What guides my thinking?*	Why is counting important? How do I count forward? How do I count by ones? How do I count by tens? How do I write numbers? Do I know the difference between a number and a letter?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Students will count objects in a collection and know counting words. Students will count out objects for a given number. Students will write numbers to 20. Draw pictures to represent a given number. **Summative** Individual assessment of counting skills presented
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.A.1. Count to 100 by ones and by tens. M.K.A.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1). M.K.A.3. Write the numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
Content *What content do I need to know in order to answer the essential questions?*	Understanding of numbers How to represent numbers Counting begins with 0

Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	ELA- Children's Literature using counting words and symbols in titles..The Three Bears….5 Little Monkeys Music- Songs with numbers in lyrics This Old Man….One Little,Two Little, Three Little…The Ants Go Marching Circle Time-Calendar Look Whose Here Today
Tools for Learning *Which tools will I use that will assist me in my learning?*	Manipulatives (Counting Bears, Links, Cubes, Buttons) Counting Board Games and/or Computer Games 10 Frames Number Puzzles

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: Standard: Counting and Cardinality M.K.B. Count to tell the number of objects.

Essential Questions *What should I be able to answer? What guides my thinking?*	Do I know the value of a number? Can I count how many objects are in a set? Do I know which numeral goes with a specific set? (1-20) Can I count by ones to 20?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Count the objects in a collection and say how many using number names. Know that the last counting word tells how many items are in the collection. That the arrangement of objects does not change the number counted. **Summative** Individual assessment of skills presented drawing/showing counting/ordering/one more.
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.B.1. Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects, say the number names in standard order, pairing each object with one and only one number name and each number name with one and only one object. b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c. Understand that each successive number name refers to a quantity that is one larger. M.K.B.2. 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.
Content *What content do I need to know in order to answer the essential questions?*	Rote counting numbers 1-20 Identifying numbers 1-20 Using manipulatives to represent a given number

Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Draw pictures or symbols to represent how many in a collection Read counting books..”5 Chinese Brothers” Songs “5 Little Monkeys” “Four Little Freckled Frogs” Count Classmates… chairs…tables Calendar Counting
Tools for Learning *Which tools will I use that will assist me in my learning?*	Manipulatives (Counting Bears, Links, Cubes, Buttons) Counting Board Games and/or Computer Games Big Books Number Cards Number Puzzles Smart Boards

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: Standard: Counting and Cardinality M.K.C. Compare numbers

Essential Questions *What should I be able to answer? What guides my thinking?*	What are some ways I can express relationships between 2 numbers? How can I identify groups with more or less objects than a given set? Do I know which numbers/objects are less, more, equal? Do I know how graphing helps me identify less/more/equal?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Students will determine how many more, less, or equal by verbally counting number sequence. Students will compare, match, and count objects in a group. **Summative** Teacher observation of students engaged in individual and group graphing activities.
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.C.1. Identify whether the numbers 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. (Include groups with up to ten objects.) M.K.C.2. Compare two numbers between 1 and 10 presented as written numerals.
Content *What content do I need to know in order to answer the essential questions?*	Counting from 0 to 10 Demonstrate meaning of more, less, equal One to one correspondence
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Circle Time: Grouping of boys and girls, birthday months graphing Art: Draw pictures of objects showing more/less Sorting materials for a craft Counting out paper, crayons, markers needed Sorting by color Counting beanbags for games
Tools for Learning *Which tools will I use that will assist me in my learning?*	Math symbol cards > < = Vocabulary cards Number cards Graphs for pictographs Trade books Smart Boards Technology

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: Standard:Operations and Algebraic Thinking: M.K.D. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from

Essential Questions *What should I be able to answer? What guides my thinking?*	Do I know what is more? What is less? How do I draw an equation? What objects can I draw/show/clap to show I can make a set more/less than 10? How can I put different manipulatives together to show "how many I have? What happens when I remove objects from my set or cross out drawings from my set? Can I orally explain my equation/word problem?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Use manipulatives/drawings to demonstrate, read, and explain addition and subtraction sentences involving numbers 0-10. Orally solve simple addition and subtraction word problems 0-5. **Summative** Demonstrate problem solving strategies using manipulatives/drawings/number cards.
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.D.1. Represent addition and subtraction with objects, fingers, mental images, drawings {Drawings need not show details but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)}, sounds (e.g., claps). Acting out situations, verbal explanations, expressions, or equations. M.D.K.2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. M.D.K.3. Decompose numbers less than oor equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5=2+3 and 5=4+1). M.D.K.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. M.K.D.5. Fluently add and subtract within 5.

Content *What content do I need to know in order to answer the essential questions?*	Understanding of number…more/less Understanding that addition is putting together/adding to Understanding that subtraction is taking apart/taking from Understanding of "combine"/"decompose" Understanding of the commutative property of addition
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Classroom materials…Do we need more/less? Books/papers/crayons/pencils Oral word problems We have ____plates and Jeff brought in ____plates. How many plates do we have? Hooks for clothing Chairs at a table
Tools for Learning *Which tools will I use that will assist me in my learning?*	Counting cubes/Math manipulatives (Bears, links, cubes) Pencils/crayons/paper Counting Books Computer Games Smart Boards

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: Standard : Numbers and Operations in Base Ten M.K.E. Work with numbers 11-19 to gain foundations for place value.

Essential Questions *What should I be able to answer? What guides my thinking?*	How can I make a group of 10? How does making groups of tens and ones help me create two-digit numbers? What strategies (drawings or equations) can I use to learn how to add or subtract two-digit numbers?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Count out and/or draw a group of ten. Using groups of ten, add a specific number to the group by counting/drawing. **Summative** Student work samples…Worksheets, drawings and manipulatives showing tens and ones (grouping)
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.E.1. Compose and decompose numbers from 11-19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by drawing or equation (e.g., 18=10+8); Understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
Content *What content do I need to know in order to answer the essential questions?*	Understanding of the base ten system Know that composing is putting together or adding to Know that decomposing is taking apart or taking from
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Learning to count numbers/objects/people quickly…skip counting Estimating number of materials needed Calendar counting of the days of the week
Tools for Learning *Which tools will I use that will assist me in my learning?*	Manipulatives Calendars Tens/Ones Chart Popsicle sticks, rubber bands, labeled cups (tens, ones) Computer programs Smart Boards Bean sticks

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: Standard: Measurement and Data M.K.F. Describe and compare measurable attributes.

Essential Questions *What should I be able to answer? What guides my thinking?*	Why is measurement important in my everyday life? What tools can I use to measure more/less, taller/shorter? Why is it necessary for me to have a standard and/or non-standard unit to measure length or weight, etc. of an object?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Use standard and non-standard units to measure both vertical and horizontal lengths. Recognize the attributes of length and weight using everyday language. Use comparative words to describe the relationship of objects to one another. Sort, categorize, or classify objects by more than one attribute. **Summative** Student work samples showing attributes of objects. (Drawings comparing the heights of two children. Comparing different containers to show holding more/less)
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.F.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. M.K.F.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.
Content *What content do I need to know in order to answer the essential questions?*	Meaning of height, weight, length, width The difference between standard and non-standard units of measurement Name standard and non-standard units of measurement
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Organization and classification of science activities/materials Graphing Understanding vocabulary in Fiction and Non-fiction trade books Lining up in height order

Tools for Learning *Which tools will I use that will assist me in my learning?*	Unifix cubes Blocks Links Balance Scale Weight Scale Fingers, feet Paper clips, measuring cups, etc. Rulers, Measuring tapes, String Sand/Water table Smart Board Technology

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: Standard: Measurement and Data. M.K.G. Classify objects and count the number of objects in each category.

Essential Questions *What should I be able to answer? What guides my thinking?*	How do I sort/group objects? How do sorting/grouping objects help me count? Can I tell if objects are the same or different?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Objects can be organized into groups with similar characteristics. Grouping helps people find things and understand relationships. Graphing helps organize and display relevant data. **Summative** Teacher observation of students participating in graphing activities of different categories. (Eye color/hair color ,height, favorite candy/color)
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.G.1. Classify objects into given categories; count the number of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.)
Content *What content do I need to know in order to answer the essential questions?*	Objects can be grouped according to various categories…number, shape, size, color. Tell why objects are grouped the same or different. Counting 10 of a specified objects Number Sense
Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Classroom Centers: Kitchen dishes, cups, utensils Art: Sort crayons/markers by color Science: Sink or Float Grouping Graphing of favorite_____(Colors, toys, video games)

Tools for Learning *Which tools will I use that will assist me in my learning?*	Sorting mats/trays Picture Cards Manipulatives: Bears, buttons, shapes, links Graphs Trade Books "Caps For Sale" Smart Boards Technology

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: Standard: Geometry. M.K.H. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

Essential Questions *What should I be able to answer? What guides my thinking?*	Can I identify a geometric shape? Where do I find geometric shapes in the real world? What words do I use to describe a geometric shape? What are the ways I can move a geometric shape? Do I know the difference between "flat" and "solid" in a shape? What words do I use to describe the position of an object (above, below, next to, etc.)?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Recognize and name geometric shapes using correct vocabulary. Experiment with slides, flips, and turns of two-dimensional shapes. Build/draw/compare shapes using various materials. Use objects to show relative positions in space (above, behind, next to, etc.) **Summative** Student work samples and activities using various shapes found in the environment. (Buildings, maps, toys, signs)
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.H.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. M.K.H.2. Correctly name shapes regardless of their orientations or overall size. M.K.H.3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
Content *What content do I need to know in order to answer the essential questions?*	Recognize and name basic shapes Know the difference between flat and solid Know that shapes can be two or three dimensional

Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Science: Go on a shape walk…indoors or outdoors Gross Motor: Use bean bags to show positions e.g., above your head, below your chin Art: Use various art materials to draw pictures using shapes Literature: Trade Books "The Three Billy Goats Gruff" Informational Books "Tall Buildings" "Under the Sea"
Tools for Learning *Which tools will I use that will assist me in my learning?*	Attribute Blocks Puzzles Informational Trade Books..buildings, bridges Geoboards Building Blocks, Legos Songs "Teddy Bear, Teddy Bear" Smart Boards Technology

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: Standard: Geometry M.K.I. Analyze, compare, create, and compose shapes.

Essential Questions *What should I be able to answer? What guides my thinking?*	How do I match similar shapes? Does the size of a shape change its name? Can I combine simple shapes to make other shapes? Can the shapes I know have similar characteristics?
Assessment *What will I be expected to know, understand, and be able to do in order to demonstrate my learning?*	**Formative** Compare and contrast a sphere and a circle, a square and a cube. Know vocabulary and show sides, corners, round, straight, curved. Be able to describe objects in the environment using shape names. Match shapes and parts of shapes. **Summative** Demonstrate knowledge of shapes by finding two and three dimensional shapes in the classroom. Bring in shapes from home to share with classmates.
Skills *What skills do I need to have in order to answer the essential questions?*	M.K.I.1. 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). M.K.I.2. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. M.K.I.3. Compose simple shapes to form larger shapes. For example, "Can you join two triangles with full sides touching to make a rectangle?"
Content *What content do I need to know in order to answer the essential questions?*	Know what shapes have four sides (square, rectangle, rhombus) Know the difference between a square and a cube, a circle and a sphere Know that shapes can be matched to make other shapes

Integration of Learning *How does this learning connect to my other areas (subjects) of learning?*	Use shapes to build buildings and bridges…draw the finished project Find examples of geometry in nature, art, and architecture Cut folded paper to make objects…butterflies, snowflakes
Tools for Learning *Which tools will I use that will assist me in my learning?*	Clay Play Dough Pipe Cleaners Pattern Blocks Legos, Blocks Tinker Toys Building Logs Popsicle Sticks Smart Boards

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,

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**