

Early Childhood Learning Continuum Indicators

**The Continuum of Skills that an Early Childhood
Learner Needs in order to Achieve the
Pennsylvania Academic Standards by Grade Three.**

Continuum of Learning Indicators for
Reading, Writing, Speaking and Listening
and
Mathematics

This resource was developed through the Partnership for Educational Excellence Network: A Partnership between the Pennsylvania Department of Education and Pennsylvania Association of Intermediate Units: promoting educational excellence for the Commonwealth.

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Early Childhood Learning Continuum Indicators

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Early Childhood Learning Continuum Indicators

The Early Childhood Learning Continuum Indicators are the developmental steps that a learner performs to demonstrate knowledge stated in the Academic Standards. They are not academic standards, but reflect a continuum of skills that are needed for all learners to be successful. The Early Childhood Learning Continuum Indicators focus on preschool through Grade 2 in Reading, Writing, Speaking and Listening, and Mathematics. The indicators are based on child development theory and authentic observations of the steps young children move through to eventually reach the Pennsylvania Academic Standards. These measurable indicators provide educators with information concerning what the learners should know and be able to do across a continuum of age or grade ranges. Included are suggestions for the use of the Early Childhood Learning Continuum Indicators as well as suggestions for implementation.

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What Are The Early Childhood Learning Continuum Indicators?

“...The continuum of skills that an early childhood learner needs in order to achieve the Pennsylvania Academic Standards by grade three.”

The Commonwealth of Pennsylvania has established academic standards for grades three, five, eight and eleven, that clearly indicate what learners should know and be able to do by the time they complete each of those grade levels. Although learners are assessed by the Pennsylvania System of School Assessment (PSSA) in reading and mathematics during grades five, eight and eleven, and in writing during grades six, nine and eleven, every year’s curriculum contributes to the learners’ total education. After reviewing the academic standards, educators must know what is expected of learners in pre- kindergarten, kindergarten, first and second grade to develop a plan for achieving the academic standards by grade three. This education of early childhood learners is part of life long learning that is significantly influenced by preschool and early childhood experiences.

The Early Childhood Learning Continuum Indicators are designed as a continuum from the early stages of development through third grade. The indicators developed across this continuum are organized by age ranges of programs for young including: through pre-kindergarten, pre-kindergarten through kindergarten, kindergarten through grade one, and grade one through grade two. These stated ranges serve as a basic guide for educators, as not all learners will attain the stated skills at the same rate and time. As with any group of young learners, some will attain skills prior to the designated range and some will attain them after the stated range. The key for educators is to become familiar with connections of the base skills that are necessary along the continuum.

The intent of the Learning Continuum Indicators is to provide educators with a map of the skills that are necessary for young children to work toward the achievement of the Academic Standards for Reading, Writing, Speaking and Listening and the Academic Standards for Mathematics by grade three. As a continuum, the indicators are intended to be a guide for educators to design curriculum, instruction and assessments that focus on learners achieving specific skills that are needed to achieve academic standards.

How Were The Early Childhood Learning Continuum Indicators Developed?

The Early Childhood Learning Continuum Indicators are developed using the Academic Standards for Reading, Writing, Speaking and Listening, and the Academic Standards for Mathematics as the basis. The process utilized to accomplish this involved considering learners' individual needs and developmentally appropriate practices as an integral part of the process. The Early Childhood Learning Continuum Indicators are designed to be measurable in order to monitor and assess student progress toward the grade three Academic Standards.

The committees who developed the indicators were comprised of educators from various preschool providers, early elementary and higher education. The various committees reviewed the Academic Standards for Reading, Writing, Speaking and Listening and the Academic Standards for Mathematics for all grade levels to develop a clear understanding of what is expected of the learners. The indicators are designed with the end in mind, using a design process with a systematic schema of building conceptual understandings over time.

Suggestions For The Use Of The Early Childhood Learning Continuum Indicators

The Early Childhood Learning Continuum Indicators provide a guide for preschools, school districts and school buildings to link curriculum, instruction and assessments with the Pennsylvania Academic Standards for Reading, Writing, Speaking and Listening and the Pennsylvania Academic Standards for Mathematics. These indicators can be used to:

- Build partnerships between preschool and school-age facilities;
- Promote continuity between preschool and school-age curriculums;
- Write curriculum;
- Determine how the present curriculum aligns with the Academic Standards;
- Use as a basis for local decisions on curriculum;
- Establish age and grade level expectations;
- Identify basic skills that a learner needs to know and be able to do, in order to accomplish specific Academic Standards;
- Align instruction with expectations based on the Academic Standards;
- Design instruction that is based on the skills that learners need to be successful;
- Align program, building and classroom assessments with Academic Standards;
- Monitor learner progress toward the achievement of the Academic Standards;
- Identify the skills needed by those learners who are not progressing toward achievement of academic standards; and
- Devise a plan for improving learners' achievement and additional instructional opportunities as provided in Chapter 4, Strategic Plans, Items 6 & 11.

Suggestions For Implementing Early Childhood Indicators

The following implementation suggestions for using the Early Childhood Indicators were developed by the Cleona Elementary School Early Childhood Assessment System Model Site in the Annville-Cleona School District.

- 1. Become familiar with the grade three Pennsylvania Academic Standards.**
- 2. Review the content and progression of the indicators developed for preschool through grade two.**
- 3. Compare the content of the indicators to the content of the current curriculum document.** *(Management suggestion: Use a yellow highlighter to mark the indicators that are written in the current curriculum document.)*
- 4. Bring grade level representatives together to review what is currently taught in the areas of Reading, Writing, Speaking, Listening and Mathematics. In reality, this may not match what is in the current curriculum document.** *(Use a blue highlighter to mark those indicators currently taught in the classroom.)*
- 5. Review the results.**
 - All indicators that are both in the current curriculum document AND are being taught are green *(marked with both yellow and blue highlighter)*.
 - All grade level indicators in the current curriculum document but *not* taught consistently are yellow.
 - All grade level indicators *not* in the current curriculum document but taught are blue.
- 6. Evaluate the results.**
 - Determine which indicators are not taught AND are not in the current curriculum document.
 - Discuss the implications at each grade level.
 - Determine local expectations. Consider what students need to know and be able to do in Reading, Writing, Speaking, Listening and Mathematics at each grade level.
 - Ask the following questions:
 - How should the current curriculum document be revised to include all of the missing indicators?

- Should staff be encouraged or required to provide instruction in the areas not currently covered?
- Determine which indicators are not taught OR are not in the current curriculum document.
- Discuss the implications and make changes as needed.

7. Align expectations. Bring grade level representatives together to align expectations from preschool through grade three.

- Although there can be no adjustments to the grade three Pennsylvania Academic Standards, the Indicators from preschool through grade two can be changed and should serve as a guide. The Indicators are intended to be suggestions and not necessarily followed exactly. Local decisions need to be made with regard to appropriate grade level expectations. Make adjustments as needed.
- Be cautious about allowing textbooks, materials, and programs to drive expectations and/or curriculum.
- Include representation from Preschool settings. Discuss the expectations in Preschool programs so that alignment can be made beginning with Pre-Kindergarten and/ or Kindergarten programs.

8. Establish assessments.

- List current assessments to evaluate grade level expectations.
- Determine developmentally appropriate assessments for pre-kindergarten.
- Locate or develop assessments for indicators that are not presently evaluated.
- Align assessments from preschool through grade three.
- Establish levels of performance.
- Design rubrics to clarify the performance levels.

9. List and describe grade level instructional strategies that provide instruction for students to reach the established indicators. Alternate instructional strategies provide additional instructional opportunities for students not achieving established indicators.

10. Review and assess the process and continue to revise and refine.

EARLY CHILDHOOD LEARNING CONTINUUM INDICATORS

FOR READING, WRITING, SPEAKING and LISTENING

Pre-K through Grade 2 Indicators

Grade 3 Pennsylvania Academic Standards (**BOLD**)

Early Childhood Learning Continuum Indicators

1.1 Learning to Read Independently

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Demonstrate an understanding that different forms of text have different purposes (e.g., book, list, menu, signs).</p> <p>B. Preview cover and illustrations prior to story being read. Recall some favorite book titles and authors.</p> <ul style="list-style-type: none"> • Identify correct book handling skills (e.g., look at the correct page, book is right-side-up and pages turn in correct direction). 	<p>A. Identify the purpose of a specific text (e.g., tell a story, get information).</p> <p>B. Preview text to locate the title and author parts of the book.</p> <ul style="list-style-type: none"> • Use correct book handling skills (e.g., left to right, top to bottom progression and turn pages in correct direction). 	<p>A. Identify the purpose of text using, illustrations and text format clues.</p> <p>B. Preview text to identify title, author and parts of a book.</p> <ul style="list-style-type: none"> • Use correct book handling skills (e.g., left to right, top to bottom, front to back, and turn pages appropriately). 	<p>A. Identify the types of various texts (e.g., literary, informational).</p> <p>B. Preview text formats to identify title, author, chapters, and table of contents.</p>	<p>A. Identify the purposes and types of text (e.g., literary, informational) before reading.</p> <p>B. Preview the text formats (e.g., title, headings, chapters, and table of contents).</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>C. Demonstrate an understanding that symbols represent objects, events or people.</p> <ul style="list-style-type: none"> • Recognize environmental print including logos and signs, and identify a few familiar words in print. • Identify words with common beginning sounds. • Repeat and manipulate sequences of words and phonemes using phonological memory. 	<p>C. Apply knowledge of the structural features of spoken and written language and the use of picture and context clues to derive meaning from text.</p> <ul style="list-style-type: none"> • Recognize simple one-syllable and high frequency sight words. • Identify words with common beginning and ending sounds. • Repeat sentences and novel multi-syllable words using phonological memory. 	<p>C. Manipulate the structural features of spoken and written language to read simple sentences and stories.</p> <ul style="list-style-type: none"> • Read one-syllable and high frequency sight words. • Identify initial, medial and final sounds, including blends and digraphs. • Use knowledge of speech and print to read regular one-syllable words. 	<p>C. Use knowledge of structural features of spoken and written language and use word analysis, picture and context clues to decode and understand words.</p> <ul style="list-style-type: none"> • Read multi-syllable words and high frequency sight words. • Use initial, medial, and final sounds to decode unknown words. • Use knowledge of letter-to-sound correspondence and familiar spelling patterns to read unknown words. 	<p>C. Use knowledge of phonics, word analysis (e.g., root words, prefixes and suffixes), syllabication, picture and context clues to decode and understand new words during reading.</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Recognize that the sound structure of a word is different from its meaning. • Categorize sounds. • Recognize that words can share individual sounds. • Orally segment words by speech sounds. 	<ul style="list-style-type: none"> • Recognize that sentences in print are composed of individual words that represent speech. • Categorize words, pictures or objects based on sound features. • Demonstrate understanding that written words represent a sequence of speech sounds. • Segment and blend sequences of isolated speech sounds. 	<ul style="list-style-type: none"> • Use voice marks at the end of sentences to guide fluent oral reading and as a clue to meaning. • Categorize common words into basic categories based on sound features and sound/symbol representations. • Demonstrate correspondence between consonant and short-vowel sounds to letter symbols. • Segment and blend sequences of sounds to decode words (e.g., blends, digraphs and r control vowels). 	<ul style="list-style-type: none"> • Read compound words, contractions, possessives, and words with inflectional endings. • Categorize words based on sound/symbol representations and syllable configuration. • Use the knowledge of advanced letter/sound correspondence and word structure to decode words. • Segment and blend phonetic elements to decode unknown words (e.g., special vowel spellings, word endings, diphthongs). 	

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Orally discriminate between same and different phonemes. • Identify rhyming words. • Demonstrate understanding that speech sounds are represented in print by letter symbols. • Recognize that words have parts. • Orally segment and blend words from two and three phonemes. 	<ul style="list-style-type: none"> • Orally produce similar phonemes • Orally blend words using onset-rime. • Demonstrate correspondence between most consonant and short vowel sounds to letter symbols. • Represent syllables in multi-syllable words. • Use oral segmenting and blending and decode and encode VC and CVC words. 	<ul style="list-style-type: none"> • Produce speech sounds that correspond to written letter symbols and letter combinations (e.g., digraphs, blends, and r control vowels). • Produce a series of rhyming words. • Produce speech sounds associated with all individual letter symbols and letter combinations for digraphs, blends and r control vowels. • Demonstrate understanding of syllables in a word. • Decode and encode words containing digraphs, consonant blends/clusters, short vowels, silent e and r control vowels. 	<ul style="list-style-type: none"> • Produce speech sounds that correspond to written letter combinations for advanced phonetic elements (e.g., vowel combinations and diphthongs). • Produce a series of rhyming words including words with blends. • Produce the sounds that correspond to frequently used vowel diphthongs and digraphs. • Use syllabication to read multi-syllabic words. • Use phonetic elements to decode and encode unfamiliar words. 	

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>D. Connect information and events to real-life experiences, when being read a story.</p> <ul style="list-style-type: none"> • Use illustrations to infer and predict what happens next in a story. • Identify when simple verbal sentences and labels, fail to make sense based on illustrations. 	<p>D. Use self-monitoring comprehension strategies (e.g., assess and revise predictions, make associations, question and clarify meaning).</p> <ul style="list-style-type: none"> • Use illustrations and text to make logical predictions. • Identify when verbal sentences and passages fail to make sense and review illustrations and/or text to correct misinformation. 	<p>D. Read text using self-monitoring comprehension strategies (e.g., predict, revise predictions, use picture and structural clues, question, reread and clarify for meaning)</p> <ul style="list-style-type: none"> • Monitor predictions while reading. • Reread and self-correct word recognition errors while reading. 	<p>D. Read text using self-monitoring comprehension strategies (e.g., predict, revise predictions, self-question, reread and clarify for meaning).</p> <ul style="list-style-type: none"> • Use text to monitor and revise predictions as needed. • Reread and self-correct comprehension errors. 	<p>D. Read text using self-monitoring comprehension strategies (e.g., predict, revise predictions, reread, use headings, use organization of text, graphics, charts, organization of text, adjust reading rate).</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>E. Expand vocabulary and use in context.</p> <ul style="list-style-type: none"> Inquire about unknown words. <p>F. Recognize that new words have meaning.</p> <ul style="list-style-type: none"> Use new vocabulary in own speech. 	<p>E. Acquire a basic reading vocabulary by identifying common words (e.g., environmental print, word families, high-frequency words).</p> <ul style="list-style-type: none"> Discuss new words and word meanings. <p>F. Recall new vocabulary in listening and visual contexts.</p> <ul style="list-style-type: none"> Use new vocabulary and grammatical construction in own speech. 	<p>E. Acquire a reading vocabulary consisting of sight words, high-frequency words and word families. Use a picture dictionary when appropriate.</p> <ul style="list-style-type: none"> Discuss unknown words and word meanings as they are encountered in books. <p>F. Identify new vocabulary learned in various subject areas.</p> <ul style="list-style-type: none"> Develop new vocabulary meaning using sentence structure and word order. 	<p>E. Acquire a reading vocabulary by identifying and correctly using words (e.g., high-frequency words, synonyms, antonyms, categories of words). Use a dictionary when appropriate.</p> <ul style="list-style-type: none"> Determine meaning of unknown words as they are encountered in books and text. <p>F. Understand new vocabulary learned in various subject areas.</p> <ul style="list-style-type: none"> Use new vocabulary and grammatical construction in different context. 	<p>E. Acquire a reading vocabulary by identifying and correctly using words, (e.g., antonyms, synonyms, categories of words). Use a dictionary when appropriate.</p> <p>F. Understand the meaning of and use correctly new vocabulary learned in various subject areas.</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>G. Differentiate between real and make-believe.</p> <ul style="list-style-type: none"> • Use play and/or illustrations to retell a story. • Describe what a picture or illustration is about. • Connect information and events in a story to real life experiences. • Ask questions to clarify the story. 	<p>G. Differentiate between fiction and nonfiction.</p> <ul style="list-style-type: none"> • Retell a known story in sequence. • Describe what a story is about. • Connect information or ideas in a story to real life events using key words in the story. • Ask relevant questions and make thoughtful comments about a story. 	<p>G. Identify the characteristics of fiction and nonfiction text.</p> <ul style="list-style-type: none"> • Retell a story in a logical and sequential order including some detail from text. • Identify the major ideas in a story. • Connect the new information or ideas in a story to real life events. • Answer and construct questions using keywords and discussion. 	<p>G. Explain the differences between fiction and nonfiction text.</p> <ul style="list-style-type: none"> • Retell or summarize major ideas, sequence and themes of text. • Describe the major ideas and theme of a story. • Connect the new information in text to known information. • Answer and construct text-based questions to clarify understanding through discussion. 	<p>G. Demonstrate after reading understanding and interpretation of both fiction and nonfiction text.</p> <ul style="list-style-type: none"> • Retell or summarize the major ideas, themes or procedures of the text. • Connect the new information or ideas in the text to known information. • Clarify ideas and understandings through rereading and discussion.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Revisit illustrations to clarify meaning. • Support answers and conclusions by locating key concepts in the illustrations of the story. <p>H. Use knowledge from prior experiences to make sense of and talk about text (e.g., stories, selected passages, nursery rhymes).</p> <ul style="list-style-type: none"> • Recognize letters of the alphabet. • Identify incorrect or missing words in story being read. 	<ul style="list-style-type: none"> • Revisit text and/or illustrations to clarify meaning. • Support answers and conclusions by locating key concepts from the text illustrations. <p>H. Demonstrate reading of key words and selected sentences (e.g., choral reading, chants, rereading familiar text, patterned sentences) and recall key concepts of the text.</p> <ul style="list-style-type: none"> • Read familiar words aloud, such as name, address, and identifying information. • Recognize mistakes and attempt to identify correction. 	<ul style="list-style-type: none"> • Reread sentences to clarify meaning. • Support answers and conclusions by locating key words from the text and evidence from the illustrations. <p>H. Demonstrate fluency in reading and answer questions based on material read.</p> <ul style="list-style-type: none"> • Read familiar sentences aloud. • Recognize own mistakes and identify correction. 	<ul style="list-style-type: none"> • Reread passages to clarify ideas. • Support answers and conclusions by citing key words from the text as evidence. <p>H. Demonstrate fluency in reading and answer comprehension questions based on material read.</p> <ul style="list-style-type: none"> • Read familiar passages aloud. • Self-correct mistakes from selected text. 	<ul style="list-style-type: none"> • Make responsible assertions about the text by citing evidence from the text. <p>H. Demonstrate fluency and comprehension in reading.</p> <ul style="list-style-type: none"> • Read familiar materials aloud with accuracy. • Self-correct mistakes.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Use appropriate rate when participating in songs, nursery rhymes and choral reading. • Identify different types of books (e.g., real, make believe). • Demonstrate an understanding that illustrations and print convey meaning. • Demonstrate understanding of story being read or told. 	<ul style="list-style-type: none"> • Use appropriate rate, inflection and flow for songs, nursery rhymes and choral reading. • Identify different types of books (e.g., real, make-believe, fiction/non-fiction, nursery rhymes, poetry, fairy tales). • Answer questions about stories read aloud. • Demonstrate connections with story being read or told. 	<ul style="list-style-type: none"> • Use appropriate rate and pronunciation when reading familiar text. • Read a variety of books. • Answer simple comprehension questions based on the material read. • Demonstrate connections with information while reading. 	<ul style="list-style-type: none"> • Use appropriate rhythm and pronunciation when reading. • Read a variety of genres. • Demonstrate comprehension through paraphrasing, answering, and forming questions. • Apply information and connections from reading. 	<ul style="list-style-type: none"> • Use appropriate rhythm, flow, meter and pronunciation. • Read a variety of genres and types of text. • Demonstrate comprehension (Standards 1.1.3G.). (Recommend: 25 books/ year)

Early Childhood Learning Continuum Indicators

1.2 Reading Critically in All Content Areas

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Demonstrate understanding that some text contains information.</p> <ul style="list-style-type: none"> • Identify facts in a story. • Identify information from illustrations or story being read. • Use illustration clues to infer and predict what happens next in a story. 	<p>A. Recall content of informational texts.</p> <ul style="list-style-type: none"> • Distinguish between facts and other information. • Identify essential information from illustrations or text read. • Use illustrations and portions of story to infer and predict what happens next in a story. 	<p>A. Discuss content of informational items in text.</p> <ul style="list-style-type: none"> • Identify the difference between facts and opinions. • Identify essential information such as facts, main idea, and supporting information from illustrations and text. • Make predictions about what happens next in a story or process and justify. 	<p>A. Read and understand essential content of informational texts.</p> <ul style="list-style-type: none"> • Identify facts and opinions within text. • Identify essential and non-essential information in a text. • Make inferences and draw conclusions from a variety of reading materials. 	<p>A. Read and understand essential content of informational texts and documents in all academic areas.</p> <ul style="list-style-type: none"> • Differentiate fact from opinion within text. • Distinguish between essential and nonessential information within a text. • Make inferences from text when studying a topic (e.g., science, social studies) and draw conclusions based on text.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Recognize the books are organized in different ways. B. Use a variety of media to experience stories. (e.g., books on tape, software or videos) • Use electronic media. • Identify different types of electronic media. 	<ul style="list-style-type: none"> • Recognize the organizational patterns and structures of a story or text. B. Use a variety of media to gain information (e.g., video, audio, computer-generated structured learning experiences). • Use electronic media for a particular purpose. • Identify various purposes for different types of electronic media. 	<ul style="list-style-type: none"> • Identify the organizational structures of text and indicate connection to the information. B. Identify and use a variety of media to gain information. (e.g., computer, tape recorder, television, videos, filmstrips, films). • Use electronic media to develop a project consisting of illustrations, words, and sentences. • Identify type of media to be used for a specific task. 	<ul style="list-style-type: none"> • Describe the organizational structures of text and indicate significance to information. B. Identify and use a variety of media to gain information and evaluate quality of information gained. • Use electronic media to develop illustrations and text-based stories based on subject content. • Access appropriate type of media for specific task. 	<ul style="list-style-type: none"> • Analyze text organization and content to derive meaning from text using established criteria. B. Use and understand a variety of media and evaluate the quality of material produced. • Use electronic media for research.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Identify different types of television programs (e.g., entertainment, informational, advertisement). • Identify different types of media projects. <p>C. Recognize different types of genre (e.g., nursery rhymes, poems, tales).</p>	<ul style="list-style-type: none"> • Identify and discuss differences between types of television programs. • Describe different types of media projects. <p>C. Identify different types of genre.</p>	<ul style="list-style-type: none"> • Identify and discuss different techniques used in television programs and distinguish facts from make believe. • Differentiate between different types of media projects and identify characteristics of each. <p>C. Identify the conventions of a variety of genre.</p>	<ul style="list-style-type: none"> • Identify and discuss different techniques in television programs and discuss and evaluate facts and misleading information. • Assess the quality of different types of media projects. <p>C. Produce work in one form of genre (e.g., biographies, poems, tales, mysteries, fables) and use identified conventions of the genre.</p>	<ul style="list-style-type: none"> • Identify techniques used in television and use the knowledge to distinguish between facts and misleading information. • Assess the quality of media projects (e.g., script, play, audiotape) that have been developed for a targeted audience. <p>C. Produce work in at least one literary genre that follows the conventions of the genre.</p>

Early Childhood Learning Continuum Indicators

1.3 Reading, Analyzing and Interpreting Literature

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Respond to a variety of literature. (e.g., fairy tales, rhymes, poems, fiction and non-fiction).	A. Respond to and discuss a variety of literature through read-alouds and shared reading.	A. Read a variety of works of literature and participate in guided discussion.	A. Read and discuss similarities and differences in a variety of works of literature.	A. Read and understand works of literature.
B. Identify the characters and setting in a story.	B. Describe the characters, setting and main idea of a story.	B. Describe the characters and setting indicating impact on the main idea of the story.	B. Identify literary elements in stories including characters, setting, and plot.	B. Identify literary elements in stories describing characters, setting and plot.
C. Participate in stories with rhythm, rhyme, patterns and repetition.	C. Identify the literary devices in rhyme and repetition.	C. Identify the literary devices in rhyme, repetition, rhythm and patterns.	C. Identify literary devices in stories (e.g., rhyme, rhythm, repetition and patterns).	C. Identify literary devices in stories (e.g., rhyme, rhythm, personification).

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
D. Recognize language patterns (e.g., choral reciting, poetry, nursery rhymes).	D. Identify language patterns, (e.g., choral reading, reading aloud, predictable books, pattern books, nursery rhymes).	D. Identify and complete predictable language patterns (e.g., pattern books, predictable books, nursery rhymes).	D. Recognize the structures in poetry (e.g., pattern books, predictable books, nursery rhymes).	D. Identify the structures in poetry (e.g., pattern books, predictable books, nursery rhymes).
E. Re-enact or dramatize stories or parts of stories.	E. Identify dialogue in simple text being read.	E. Identify dialogue and story action in plays and stories.	E. Recognize the structures in drama including story, acts, scenes.	E. Identify the structures in drama (e.g., dialogue, story enactment, acts, scenes).
F. Respond to a variety of types of literature.	F. Respond to and discuss a variety of types of literature.	F. Read both fiction and nonfiction.	F. Read and comprehend both nonfiction and fiction.	F. Read and respond to nonfiction and fiction including poetry and drama.

Early Childhood Learning Continuum Indicators

1.4 Types of Writing

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Use illustrations or pictures as a representation for oral language.</p> <ul style="list-style-type: none"> • Describe people, places and things in a story. • Identify purpose of illustrations in a story. • Include main idea in oral descriptions and drawings. 	<p>A. Use early forms of writing, dictation, or illustrations (e.g., story, personal experience, poem) to express ideas.</p> <ul style="list-style-type: none"> • Describe role of people, places and things in a story. • Identify illustrations that depict story content. • Include main idea and details in oral descriptions and drawings. 	<p>A. Dictate and/or write narrative pieces from personal experience.</p> <ul style="list-style-type: none"> • Include people, places and things in dictation, story boards and writing. • Select appropriate illustrations to accompany story. • Include simple plot when sharing information. 	<p>A. Write narrative pieces including stories and poems.</p> <ul style="list-style-type: none"> • Include basic descriptions of people, places and things in writing. • Use illustrations to accompany writing. • Include plot elements in writing. 	<p>A. Write narrative pieces (e.g., stories, poems and plays).</p> <ul style="list-style-type: none"> • Include detailed descriptions of people, places, things. • Use relevant illustrations • Include literary elements (Standard 1.3.3.B.).

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>B. Use early forms of writing, dictation, or illustrations to inform (e.g., lists, letters, labels).</p> <p>C. Develop vocabulary to express preferences.</p>	<p>B. Draw or write to inform (e.g., lists, letters, descriptions, definitions, collections of facts, simple instructions).</p> <p>C. Use illustrations to state an opinion.</p>	<p>B. Write informational sentences (e.g., letters, descriptions, definitions, collections of facts, simple instructions) using illustrations when relevant.</p> <p>C. Differentiate between fact and opinion.</p>	<p>B. Write an informational paragraph about a specified topic (e.g., letters, reports, descriptions, instructions) using illustrations when relevant.</p> <p>C. State an opinion and support it with facts.</p>	<p>B. Write informational pieces (e.g., descriptions, letters, reports, and instructions) using illustrations when relevant.</p> <p>C. Write an opinion and support it with facts.</p>

Early Childhood Learning Continuum Indicators

1.5 Quality of Writing

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Follow basic writing progression (e.g., pictures and scribbles, letter-like forms, letters from common words in the environment, strings of letters).</p> <p>B. Collect and share information about a topic.</p> <ul style="list-style-type: none"> • Identify relevant information in a story. • Dictate a sentence. 	<p>A. Write, draw or use pictures to depict specific experiences, stories, people, objects or events.</p> <p>B. Write words appropriate for a specified topic.</p> <ul style="list-style-type: none"> • Identify information related to a topic. • Write a sentence. 	<p>A. Write with a selected focus.</p> <p>B. Write content sentences using content appropriate for the topic.</p> <ul style="list-style-type: none"> • Identify possible organizational structures for information. • Write a series of sentences. 	<p>A. Group related ideas to write with a consistent focus.</p> <p>B. Expand ideas to write paragraphs using content appropriate for the topic.</p> <ul style="list-style-type: none"> • Gather information and determine organizational format. • Write a series of related sentences with one central idea. 	<p>A. Write with a sharp, distinct focus identifying topic, task and audience.</p> <p>B. Write using well-developed content appropriate for the topic.</p> <ul style="list-style-type: none"> • Gather and organize information. • Write a series of related sentences or paragraphs with one central idea.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Distinguish between details and the main idea in a story. <p data-bbox="176 462 520 609">C. Recognize the organization of words linked to form a complete thought.</p> <ul style="list-style-type: none"> • Recount experiences or present stories in a logical sequence. <ul style="list-style-type: none"> • Recognize the beginning, middle and end of a story. <p data-bbox="176 1177 520 1291">D. Recognize there are a variety of ways to express a thought.</p>	<ul style="list-style-type: none"> • Identify and incorporate details when dictating or writing a story. <p data-bbox="527 462 871 527">C. Organize words into a complete sentence.</p> <ul style="list-style-type: none"> • Arrange words in a logical sentence structure. <ul style="list-style-type: none"> • Include the beginning, middle and end when telling a story. <p data-bbox="527 1177 871 1396">D. Use a variety of words in early forms of writing, dictation or illustrations to express complete thoughts.</p>	<ul style="list-style-type: none"> • Incorporate details relevant to the topic using short sentences. <p data-bbox="877 462 1222 527">C. Write organized sentences.</p> <ul style="list-style-type: none"> • Recognize and use the correct word order in written sentences. <ul style="list-style-type: none"> • Include a beginning, middle and end when writing a story. <p data-bbox="877 1177 1222 1323">D. Use a variety of words to create consistent writer's voice.</p>	<ul style="list-style-type: none"> • Refine and expand details appropriate to the topic using short paragraphs. <p data-bbox="1228 462 1572 568">C. Use transition words to write an organized paragraph.</p> <ul style="list-style-type: none"> • Write a sequence of events in logical order using key words (e.g., first, next, then, finally, cause-effect, if-then). <ul style="list-style-type: none"> • Include a beginning, middle, and end when writing paragraphs. <p data-bbox="1228 1177 1572 1356">D. Use a variety of words and sentence structures to create consistent writer's voice and tone.</p>	<ul style="list-style-type: none"> • Incorporate details relevant and appropriate to the topic. <p data-bbox="1579 462 1917 568">C. Write with controlled and/or subtle organization.</p> <ul style="list-style-type: none"> • Sustain a logical order. <ul style="list-style-type: none"> • Include a recognizable beginning, middle, and end. <p data-bbox="1579 1177 1917 1323">D. Write with an awareness of the stylistic aspects of composition.</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Use pictures to represent a complete thought. • Describe people, places, things, locations and actions. E. Revise story to supply missing information. F. Recognize punctuation and grammar in written work. 	<ul style="list-style-type: none"> • Write words in sentences that follow a complete thought. • Use descriptive words and verbs when writing. E. Revise early forms of writing or illustration to order story elements or add detail. F. Identify the correct conventions of language in a sentence or sentences (grammar, punctuation). 	<ul style="list-style-type: none"> • Write complete simple sentences. • Write sentences containing descriptive words and verbs in context. E. Revise writing to add or eliminate details and correct ideas so a logical order is present. F. Edit writing for grammar and punctuation. 	<ul style="list-style-type: none"> • Use sentences of differing length and type. • Write short paragraphs containing descriptive words and verbs in context. E. Revise writing to improve detail and sequential order. F. Edit writing using grammar, punctuation, spelling and sentence formation. 	<ul style="list-style-type: none"> • Use sentences of differing lengths and complexities. • Use descriptive words and action verbs. E. Revise writing to improve detail and order by identifying missing information and determining whether ideas follow logically. F. Edit writing using the conventions of language.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Associate sounds with the written letter. • Identify upper and lower case letters in books. • Use correct oral language emphasis for period and exclamation. • Use nouns, pronouns, verbs, adjectives and adverbs in oral language. 	<ul style="list-style-type: none"> • Spell phonetically. • Differentiate between upper and lower case letters in books. • Use correct oral language emphasis for period, questions, exclamation and commas. • Use nouns, pronouns, verbs, adjectives, adverbs, and conjunctions properly in oral language. 	<ul style="list-style-type: none"> • Spell high-frequency sight words correctly. • Capitalize the first word of a sentence, names of people, and the pronoun I. • Use proper end punctuation (period, exclamation and question mark). • Use nouns, pronouns and verbs in writing. 	<ul style="list-style-type: none"> • Spell most common, frequently used words correctly. • Capitalize proper nouns. • Use proper end punctuation and commas. • Use nouns, pronouns, verbs and adjectives in writing. 	<ul style="list-style-type: none"> • Spell common, frequently used words correctly. • Use capital letters correctly (first word in sentences, proper nouns, pronoun “I”). • Punctuate correctly (period, exclamation point, question mark, commas in a series). • Use nouns, pronouns, verbs, adjectives, adverbs and conjunctions properly.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Use complete sentences in oral language. <p>G. Share drawings with classmates and teachers.</p>	<ul style="list-style-type: none"> • Use complete, simple and compound sentences in oral language. <p>G. Present written work to small groups.</p>	<ul style="list-style-type: none"> • Use complete, simple, declarative, interrogative and exclamatory sentences in writing. <p>G. Present written work to large groups.</p>	<ul style="list-style-type: none"> • Use complete, simple, declarative, interrogative, exclamatory and imperative sentences in writing. <p>G. Present and defend written work.</p>	<ul style="list-style-type: none"> • Use complete sentences (simple, compound, declarative, interrogative, exclamatory and imperative). <p>G. Present and/or defend written work for publication when appropriate.</p>

Early Childhood Learning Continuum Indicators

1.6 Speaking and Listening

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Listen in order to understand and follow directions.</p> <ul style="list-style-type: none"> • Ask questions in conversation and in structured settings. • Identify facts in an oral selection. 	<p>A. Listen in order to give, restate and follow simple two-step directions.</p> <ul style="list-style-type: none"> • Ask relevant questions. • Distinguish between facts and other information. 	<p>A. Listens to others when they are speaking and demonstrate understanding of the message.</p> <ul style="list-style-type: none"> • Ask questions to obtain clarifying information. • Identify the difference between facts and opinions. 	<p>A. Listen to others in order to respond appropriately to questions, directions, and situations.</p> <ul style="list-style-type: none"> • Ask questions to obtain clarifying information and check understanding. • Identify and differentiate between facts and opinions. 	<p>A. Listen to others.</p> <ul style="list-style-type: none"> • Ask questions as an aid to understanding. • Distinguish fact from opinion.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>B. Listen attentively to a story.</p> <ul style="list-style-type: none"> • Compare and contrast differences in experiences. • Predict what will happen next with prompts. • Identify components of order in a story. 	<p>B. Listen to a selection and share information and ideas.</p> <ul style="list-style-type: none"> • Identify the characteristics of a similar experience. • Make predictions about what will happen next. • Identify the events that happen first, next and last in a story. 	<p>B. Listen to selection of literature (fiction and/or nonfiction).</p> <ul style="list-style-type: none"> • Listen to a selection and connect similar experiences to real life events. • Make realistic predictions about the outcomes of simple events and recognize different outcomes are possible • Identify chronological order within a story. 	<p>B. Listen to a selection of literature (fiction and/or nonfiction).</p> <ul style="list-style-type: none"> • Listen to a selection and classify similar experiences. • Make reasonable predictions about what will happen next. • State the chronological order of a story. 	<p>B. Listen to a selection of literature (fiction and/or nonfiction).</p> <ul style="list-style-type: none"> • Relate it to similar experiences. • Predict what will happen next. • Retell a story in chronological order.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Recognize different tones of stories. (e.g., happy, sad, excitement) • Identify word meanings through listening. <p data-bbox="191 732 491 802">C. Stay on topic when speaking.</p> <ul style="list-style-type: none"> • Differentiate between levels of volume when speaking. 	<ul style="list-style-type: none"> • Identify different types of tone in a story. • Identify and use new words from a listening selection. <p data-bbox="539 732 840 873">C. Relate a story or experience using simple speaking skills.</p> <ul style="list-style-type: none"> • Use appropriate volume in response to modeling. 	<ul style="list-style-type: none"> • Identify character and tone in spoken information. • Listen in order to identify and use new words and concepts. <p data-bbox="888 732 1209 873">C. Use correct vocabulary and word usage when speaking.</p> <ul style="list-style-type: none"> • Use appropriate volume while initiating answers and conversation. 	<ul style="list-style-type: none"> • Distinguish between character and tone in spoken information. • Listen in order to apply new words and concepts. <p data-bbox="1236 732 1558 837">C. Present ideas using appropriate speaking skills.</p> <ul style="list-style-type: none"> • Use volume appropriate for setting. 	<ul style="list-style-type: none"> • Recognize character and tone. • Identify and define new words and concepts. <p data-bbox="1585 732 1906 873">C. Speak using skills appropriate to formal speech situations.</p> <ul style="list-style-type: none"> • Use appropriate volume.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Pronounce words understandably by approximating and including syllables and sounds. • Use pauses between words, phrases and sentences. • Recognize expressions, gestures and body language cues from others. <p data-bbox="191 964 485 1068">D. Share information on a specified type of experience.</p> <ul style="list-style-type: none"> • Ask questions. 	<ul style="list-style-type: none"> • Pronounce words understandably by including syllables and sounds. • Use appropriate pauses when speaking. • Identify expressions, gestures and body language cues from others. <p data-bbox="539 964 833 1101">D. Share information and ideas on a specified type of experience.</p> <ul style="list-style-type: none"> • Ask questions in response to stories. 	<ul style="list-style-type: none"> • Pronounce single and multiple syllable words correctly. • Use appropriate pace in sentences, rhymes, poetry and questions. • Interpret expressions, gestures and body language cues from audience. <p data-bbox="888 964 1182 1068">D. Relate a real-life experience to a specified topic.</p> <ul style="list-style-type: none"> • Ask related questions to gain information. 	<ul style="list-style-type: none"> • Pronounce two and three syllable words correctly. • Use appropriate pace. • Interpret and respond appropriately to expressions, gestures and body language cues from audience. <p data-bbox="1236 964 1530 1068">D. Recount experiences or present stories on a specified topic.</p> <ul style="list-style-type: none"> • Ask related questions for clarification and understanding. 	<ul style="list-style-type: none"> • Pronounce most words accurately. • Pace speech so it is understandable. • Demonstrate an awareness of audience. <p data-bbox="1585 964 1879 1036">D. Contribute to discussions.</p> <ul style="list-style-type: none"> • Ask relevant questions.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Differentiates between question words and statement words. • Listen attentively to others. • Demonstrate understanding of conversational turn-taking. 	<ul style="list-style-type: none"> • Respond to questions asked. • Recognize the importance of contributions of others. • Demonstrate and participate in conversational turn-taking. 	<ul style="list-style-type: none"> • Respond with related information to questions asked. • Listen to the contributions of others. • Display conversational turn-taking behaviors 	<ul style="list-style-type: none"> • Respond with related information or opinions to questions asked. • Listen critically and respond appropriately to the contributions of others. • Display appropriate turning-taking behaviors by adding information to discussions following another person's input. 	<ul style="list-style-type: none"> • Respond with appropriate information or opinions to questions asked. • Listen to and acknowledge the contributions of others. • Display appropriate turn-taking behaviors.
E. Participate in discussions.	E. Participate in small group discussions with assigned roles.	E. Participate in small and large group discussions with assigned roles.	E. Participate in small and large group discussions.	E. Participate in small and large group discussions and presentations.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Initiate follow-up responses to others' responses. • Recite rhymes and songs. • Describe an experience or object. • Ask questions. • Understand and follow directions. • Differentiate between an emergency and a regular situation and report to adults. 	<ul style="list-style-type: none"> • Participate in every-day conversation by turn taking and initiating sentences. • Recite short poems, rhymes and songs. • Give simple presentations (e.g., Show and Tell). • Use questions to obtain information from other persons. • Identify sequence of steps in an activity, event or situation. • Report an emergency to adults. 	<ul style="list-style-type: none"> • Participate in every-day conversation by turn-taking, initiating sentences and asking questions. • Recite poems, rhymes, songs and stories. • Present a short report (e.g., Show and Tell, summary of an activity). • Record information obtained from other persons. • Sequence steps in an activity, event or situation. • Report an emergency to appropriate adults. 	<ul style="list-style-type: none"> • Participate in every-day conversation in different subjects by asking appropriate questions and initiating sentences. • Deliver brief recitations and oral presentations. • Deliver a short report on a topic with supportive facts and detail. • Record information obtained from other persons in question and answer sequence. • Give simple directions in correct sequence and provide rationale. • Report an emergency to appropriate adults or agency and give identifying information. 	<ul style="list-style-type: none"> • Participate in every-day conversation. • Present oral readings. • Deliver short reports (e.g., Show-and-Tell, field trip summary). • Conduct short interviews. • Give simple directions and explanations. • Report an emergency.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>F. Attend to electronic media in an instructional situation.</p> <ul style="list-style-type: none"> • View, listen to and use a variety of media (e.g., TV, radio, film, computer). • Identify advertisements. • Retell key words from media presentation. 	<p>F. Respond to electronic media according to teacher questions.</p> <ul style="list-style-type: none"> • Recognize and use different forms of media (e.g., television, radio, film, and Internet). • Recognize that advertising sells products. • Show print-out from media use, such as word wall, journal, story generation. 	<p>F. Use electronic media for learning purposes, such as generating a journal or story.</p> <ul style="list-style-type: none"> • Identify the role of different forms of media (e.g., television, radio, film, and Internet). • Recognize advertisements and explain their purpose. • Explain content from media use, such as word processed document, compact disc presentation. 	<p>F. Use media for learning purposes, such as word processing, editing, searching internet.</p> <ul style="list-style-type: none"> • Recognize the role and importance of television, radio, film, and Internet in the lives of people. • Distinguish between advertisements and informational pieces. • Identify what was learned through media in specific subjects. 	<p>F. Use media for learning purposes.</p> <ul style="list-style-type: none"> • Explain the importance of television, radio, film, and Internet in the lives of people. • Explain how advertising sells products. • Show or explain what was learned (e.g., audiotape, computer download).

Early Childhood Learning Continuum Indicators

1.7 Characteristics and Functions of the English Language

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Recognize that there are languages other than English.	A. Recognize words from other languages as encountered.	A. Distinguish commonly use words from other languages.	A. Recognize that some words from other languages are commonly used English words.	A. Identify words from other languages that are commonly used English words.
B. Recognize variations in dialogue (e.g., commercials, literature, cartoons, role-play).	B. Identify variations in dialogues.	B. Identify variations in the dialogues of literary characters.	B. Identify variations in the dialogues of literary characters and relate them to various settings.	B. Identify variations in the dialogues of literary characters and relate them to differences in occupation or geographical location.

Early Childhood Learning Continuum Indicators

1.8 Research

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Tell about ideas or topics to explore.</p> <p>B. Locate information using picture and object cues.</p> <ul style="list-style-type: none"> • Identify ways to locate information. 	<p>A. Choose a topic to learn more about.</p> <p>B. Locate information using visual representations and key words.</p> <ul style="list-style-type: none"> • Identify general sources of information. 	<p>A. Discuss reasons for choosing a topic.</p> <p>B. Locate information using topical words and sentences.</p> <ul style="list-style-type: none"> • Differentiate between various sources of information (e.g., dictionary, newspapers, magazines, electronic media). 	<p>A. Differentiate between topics that can and cannot be researched.</p> <p>B. Locate information using table of contents and headers.</p> <ul style="list-style-type: none"> • Understand the purposes of various resources (e.g., dictionary, newspapers, magazines, encyclopedias, electronic media). 	<p>A. Select a topic for research.</p> <p>B. Locate information using appropriate sources and strategies.</p> <ul style="list-style-type: none"> • Locate resources for a particular task (e.g., newspapers, dictionary).

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Identify sources for gathering information (e.g., family, pictures, familiar books). • Use pictures to locate information. • Use pictures and television media to obtain information. <p>C. Identify the main idea.</p>	<ul style="list-style-type: none"> • Select sources for gathering information (e.g., observation, family, pictures, familiar books, electronic media). • Use picture clues and key words to locate information. • Use word wall, books and electronic media to obtain information. <p>C. Identify important concepts related to the main idea.</p>	<ul style="list-style-type: none"> • Select sources for gathering information (e.g., dictionaries, encyclopedias, observations and electronic media). • Use picture clues, key words and headings to locate information. • Search word wall, lists, books and teacher-categorized databases to obtain information. <p>C. Gather important information related to the main idea.</p>	<ul style="list-style-type: none"> • Select sources to gather and organize information around an outline (e.g., dictionaries, encyclopedias, observations and electronic media). • Use key words, guide words and headings to locate information. • Use card catalog, teacher-categorized databases and closed electronic searches to obtain information. <p>C. Gather and organize information related to the main idea.</p>	<ul style="list-style-type: none"> • Select sources (e.g., dictionaries, encyclopedias, interviews to write a family history, observations and electronic media). • Use table of contents, key words and guide words. • Use traditional and electronic search tools. <p>C. Organize and present the main ideas from the research.</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<ul style="list-style-type: none"> • Retell and draw pictures to represent information from text. • Retell key ideas. 	<ul style="list-style-type: none"> • Take notes by sequencing pictures to represent information. • Orally identify key concepts. 	<ul style="list-style-type: none"> • Take notes using key words and pictures from structured information. • Summarize main ideas orally from key facts and concepts. 	<ul style="list-style-type: none"> • Take notes using a graphic organizer to represent important information. • Summarize main ideas in writing from key facts and concepts. 	<ul style="list-style-type: none"> • Take notes from sources using a structured format. • Summarize, orally or in writing, the main ideas.

EARLY CHILDHOOD LEARNING CONTINUUM INDICATORS

MATHEMATICS

Pre-K through Grade 2 Indicators

Grade 3 Pennsylvania Academic Standards (**BOLD**)

Early Childhood Learning Continuum Indicators

2.1 Numbers, Number Systems and Number Relationships

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Count using whole numbers (to 20) by ones. (Rote counting).</p> <p>B. Use concrete objects to represent quantities up to and including 5.</p> <ul style="list-style-type: none"> • Divide a set of concrete objects into two equal parts. Use terms part and whole. 	<p>A. Count using whole numbers (to 100) by ones and tens (Rote counting).</p> <p>B. Use concrete objects to represent quantities up to and including 20.</p> <ul style="list-style-type: none"> • Divide a set of objects into equal parts using terms whole, part and one-half. 	<p>A. Count using whole numbers (to 100) by 1's, 2's, 5's and 10's.</p> <p>B. Use whole numbers to represent quantities up to 100.</p> <ul style="list-style-type: none"> • Divide a set of concrete objects into equal parts using terms whole, half, third and quarter. 	<p>A. Count using whole numbers (to 1,000) by 1's, 2's, 3's, 5's, 10's, 25's and 100's.</p> <p>B. Use concrete objects to identify a mixed number as a whole and parts.</p> <ul style="list-style-type: none"> • Use concrete objects to represent whole, one-half, one-third and one-fourth. 	<p>A. Count using whole numbers (to 10,000) and by 2's, 3's, 5's, 10's, 25's and 100's.</p> <p>B. Use whole numbers and fractions to represent quantities.</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
C. Represent equivalent forms of the same number through the use of concrete objects and drawings up to and including 5.	C. Represent equivalent forms of the same number through the use of concrete objects and drawings up to and including 20.	C. Represent equivalent forms of the same number using concrete objects, drawings, word names and symbols up to and including 100.	C. Represent equivalent forms of the same number using concrete objects, drawings, word names and symbols up to and including 1000.	C. Represent equivalent forms of the same number through the use of concrete objects, drawings, word names and symbols.
D. Use concrete objects to separate a set into two equal parts using the term's part and whole.	D. Use drawings, diagrams or models to show the concept of one-half as part of a whole.	D. Use drawings, diagrams or models to show the concept of one-half, one-third and one-fourth as part of a whole.	D. Use drawings, diagrams or models to show the concept of fraction as part of a whole (1/6, 1/8).	D. Use drawings diagrams or models to show the concept of fraction as part of a whole.
E. Recognize that different coins have different value.	E. Identify and name penny, nickel and dime.	E. Identify and know the value of coins and show different combinations of coins that equal the same value.	E. Count, compare and make change using a collection of coins up to one dollar.	E. Count, compare and make change using a collection of coins and one-dollar bills.
F. Reproduce patterns using concrete objects.	F. Identify, describe and extend simple patterns by shape, size or color using concrete objects.	F. Identify describe and extend simple patterns using symbols.	F. Identify, describe and extend patterns using the hundred board.	F. Apply number patterns (even and odd) and compare values of numbers on the hundred board.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
G. Use concrete objects to group into sets.	G. Group and compare concrete objects in sets of 10.	G. Count and group objects by ones and tens.	G. Count and group objects by ones, tens and hundreds.	G. Use concrete objects to count, order and group.
H. Use concrete objects to demonstrate understanding of one-to-one correspondence up to and including 5.	H. Use concrete objects to demonstrate understanding of one-to-one correspondence up to and including 20.	H. Demonstrate understanding of one-to-one correspondence up to and including 100.	H. Group and compare and equal number of items in different sets.	H. Demonstrate understanding of one-to-one correspondence.
I. Identify the numbers 0 to 5.	I. Count, read and write whole numbers 0 to 10.	I. Count, read and write whole numbers to 100 and identify the place value for each digit.	I. Count, read and write whole numbers in standard and expanded form to 1000 with the place value for each digit.	I. Apply place-value concepts and numeration to counting, ordering and grouping.
J. Compare groups of concrete objects to build vocabulary of more and less.	J. Estimate using concrete objects up to 20.	J. Estimate using concrete objects up to 100.	J. Use estimation strategies that involve numbers up to 1,000.	J. Estimate, approximate, round or use exact numbers as appropriate.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>K. Identify addition and subtraction operations using concrete objects.</p> <p>L. Demonstrate the concept of joining and separating sets, using concrete objects.</p>	<p>K. Identify the inverse relationship between addition and subtraction using concrete objects.</p> <p>L. Determine the answers to addition and subtraction problems for two numbers that are each less than ten.</p>	<p>K. Use the inverse relationship between addition and subtraction to solve problems with concrete objects.</p> <p>L. Know the addition facts (sums to 20) and the corresponding subtraction facts.</p>	<p>K. Understand and use the inverse relationship between addition and subtraction to solve problems and check solutions.</p> <p>L. Demonstrate knowledge of multiplication facts of 2's, 5's, and 10's.</p>	<p>K. Describe the inverse relationship between addition and subtraction.</p> <p>L. Demonstrate knowledge of basic facts in four basic operations.</p>

Early Childhood Learning Continuum Indicators

2.2 Computation and Estimation

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Use concrete objects to represent joining and separating up to 5 objects in everyday situations.	A. Use concrete objects to represent joining and separating up to 10 objects in everyday situations.	A. Solve addition and subtraction problems in everyday situations with one and two digit numbers.	A. Solve addition and subtraction problems in everyday situations with two and three digit numbers.	A. Apply addition and subtraction in everyday situations using concrete objects.
B. Use concrete objects to show joining of groups and separating a group in quantities up to and including 5.	B. Use concrete objects to show joining of groups and separating a group in quantities up to and including 10.	B. Solve addition problems with one, two and three one-digit numbers and subtraction problems with one and two digit numbers without regrouping.	B. Solve addition problems with 3, two-digit numbers and subtraction problems with double-digit numbers with regrouping.	B. Solve single- and double- digit addition and subtraction problems with regrouping in vertical form.
C. Group concrete objects into equal sets.	C. Determine the sum of the same two one-digit numbers using concrete objects (e.g., $3 + 3 = 6$).	C. Determine the sum of the same three one-digit numbers (e.g., $3+3+3=9$).	C. Use repeated addition, arrays and counting by multiples to demonstrate the concept of multiplication.	C. Demonstrate concept of multiplication as repeated addition and arrays.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
D. Separate concrete objects into equal groups.	D. Describe separating concrete objects into equal groups.	D. Determine the difference by forming equal groups.	D. Use repeated subtraction and equal sharing to form equal groups.	D. Demonstrate concept of division as repeated subtraction and as sharing.
E. Make estimates of objects in a set up to and including 10 and verify.	E. Make estimates of objects in a set up to and including 20 and verify.	E. Make estimates of objects in a set up to and including 50 and verify.	E. Make estimates of objects in a set up to and including 100 and verify.	E. Use estimation skills to arrive at conclusions.
F. Make an estimation and verify.	F. Make an estimation and explain.	F. Recognize when an estimation is or is not a reasonable answer.	F. Compare estimation with calculated answer.	F. Determine the reasonableness of calculated answers.
G. Explain the results of joining and separating sets.	G. Explain and describe the process of adding and subtracting	G. Explain and describe the computation process in addition and subtraction.	G. Explain and describe the computation process in regrouping.	G. Explain addition and subtraction algorithms with regrouping.

Early Childhood Learning Continuum Indicators

2.3 Measurement and Estimation

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Identify how items can be measured.</p> <p>B. Use non-standard items to measure objects (e.g., hands, shoe lengths).</p>	<p>A. Compare two objects, using direct comparison of nonstandard units of measure.</p> <p>B. Determine the length and height of objects with non-standard units. (e.g., hands, shoe lengths, jelly beans).</p>	<p>A. Compare measurable characteristics of different objects on the same dimensions (time, temperature, length, weight).</p> <p>B. Determine the length and height and width of objects using standard units of measurement.</p>	<p>A. Compare measurable characteristics of different objects on the same dimensions (time, temperature, area, length, weight, perimeter).</p> <p>B. Explore, discuss and use non-standard and standard systems of measurement.</p>	<p>A. Compare measurable characteristics of different objects on the same dimensions (time, temperature, area, length, weight, capacity, perimeter).</p> <p>B. Determine the measurement of objects with non-standard and standard units (e.g., US customary and metric).</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>C. Order time events using terms morning, afternoon and night.</p>	<p>C. Name and order the 4 seasons and days of the week.</p>	<p>C. Name and order the months of the year, locate and report the date (including month, day, and year) on a calendar, and identify yesterday's, today's and tomorrow's date.</p>	<p>C. Project the date(s) for the following week.</p>	<p>C. Determine and compare elapsed times.</p>
<p>D. Identify clocks as instruments for telling time.</p>	<p>D. Tell time to the nearest hour using analog and digital clocks.</p>	<p>D. Tell time to the nearest hour and half-hour using analog and digital clocks.</p>	<p>D. Read and represent time to the nearest half-hour and in 5-minute intervals.</p>	<p>D. Tell time (analog and digital) to the minute.</p>
<p>E. Identify non-standard units of measurement.</p>	<p>E. Identify different units of measurement.</p>	<p>E. Describe the units for measuring time, length, weight, capacity and temperature.</p>	<p>E. Explain why different units of measurement should be used.</p>	<p>E. Determine appropriate unit of measure.</p>

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
F. Understand the spatial concepts of over, under, beside, in and next to.	F. Understand the spatial concepts of over, under, beside, in, next to, out, around, on, and between.	F. Explore the concepts of area and perimeter.	F. Differentiate between area and perimeter.	F. Use concrete objects to determine area and perimeter.
G. Using concrete objects, to represent non-standard units, estimate the measurements up to 5 units.	G. Using concrete objects, to represent non-standard units, estimate the measurements up to 10 units.	G. Estimate and measure objects using non-standard units.	G. Estimate and measure objects.	G. Estimate and verify measurements.
H. Identify different attributes of objects (e.g., smaller, larger, size, shape).	H. Identify and describe different attributes of objects (e.g., color, shape, size).	H. Describe the various attributes of an object and identify how it can be measured (e.g., temperature, length, weight).	H. Describe the different attributes of an object and how it can be measured (e.g., time, temperature, area, length, weight, perimeter).	H. Demonstrate that a single object has different attributes that can be measured in different ways (e.g., length, mass/weight, time, area, temperature, capacity and perimeter).

Early Childhood Learning Continuum Indicators

2.4 Mathematical Reasoning and Connections

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>A. Use terms relating to quantity (more/less), and size (smaller/larger/ shorter/ longer) to describe basic shapes (square/circle/rectangle/ triangle).</p> <p>B. Explore measurement in everyday situations.</p>	<p>A. Make predictions regarding quantity, size and shape of objects.</p> <p>B. Identify the use of measurement in everyday situations.</p>	<p>A. Verify predictions about quantity, size, and shape of objects.</p> <p>B. Explain the use of measurement to solve problems in everyday situations.</p>	<p>A. Verify and explain predictions about quantity, size and shape of objects.</p> <p>B. Use measurement to solve problems in everyday situations.</p>	<p>A. Make, check and verify predictions about the quantity, size and shape of objects and groups of objects.</p> <p>B. Use measurements in everyday situations (e.g., determine the geography of the school building).</p>

Early Childhood Learning Continuum Indicators

2.5 Mathematical Problem Solving and Communication

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Identify a problem and possible solutions.	A. Identify a problem and implement possible solutions to determine the most appropriate.	A. Describe appropriate problem solving strategies (e.g., pictures, guess and check).	A. Select appropriate problem solving strategy (e.g., guess and check, working backwards) to solve problem.	A. Use appropriate problem solving strategies (e.g., guess and check, working backwards).
B. Tell others how to solve a problem.	B. Identify what information is needed to solve a problem.	B. Describe what information is needed to solve a problem.	B. Choose and explain the correct strategy to solve a problem.	B. Determine when sufficient information is present to solve a problem and explain how to solve a problem.
C. Recognize there is more than one way to solve a problem.	C. Demonstrate various strategies to solve a problem.	C. Select and use an appropriate method, materials, and strategy to solve problems.	C. Select and use an appropriate method, materials, and strategy to solve equations.	C. Select and use an appropriate method, materials and strategy to solve problems, including mental mathematics, paper and pencil, and concrete objects.

Early Childhood Learning Continuum Indicators

2.6 Statistics and Data Analysis

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Organize and display objects on a graph.	A. Gather, organize, sort, count and display data.	A. Gather, organize and display data on a bar graph and/or pictograph.	A. Gather, organize and display data using pictures, bar graphs and pictographs.	A. Gather, organize, and display data using pictures, tallies, charts, bar graphs and pictographs.
B. Tell about the data presented in a pictograph.	B. Describe the data presented in bar graph or pictograph.	B. Interpret information displayed on a graph.	B. Answer questions based on data shown on graphs.	B. Formulate and answer questions based on data shown on graphs.
C. Discuss data from an everyday event and predict what will happen next (e.g., birthdays, weather, holidays, weekends).	C. Review a chart that displays data and predict what will occur (e.g., milk count, temperature).	C. Collect and display data over time and discuss observable patterns.	C. Collect and display data over time and predict what conditions will change the data.	C. Predict the likely number of times a condition will occur based on the analyzed data.
D. Tell about the data presented in a pictograph.	D. State an opinion on whether a given statement is reasonable based on data.	D. State and justify an opinion on whether a given statement is reasonable based on a comparison of data.	D. Answer questions and justify an opinion about data from graphs.	D. Form and justify an opinion on whether a given statement is reasonable based on a comparison to data.

Early Childhood Learning Continuum Indicators

2.7 Probability and Predictions

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Predict the likelihood of common, everyday events (e.g., What is the likelihood that it will rain in our classroom today?).	A. Gather and discuss data about recurring and quantifiable events (e.g. daily temperature, attendance).	A. State and explain the likelihood of a chance event using the terms: likely, unlikely, or certain.	A. Predict the likelihood of an event and verify the prediction.	A. Predict and measure the likelihood of events and recognize that the results of an experiment may not match predicted outcomes.
B. Identify if an event is fair or unfair (e.g. game).	B. Explain if an event was fair or unfair.	B. Identify a spinner that is fair or unfair.	B. Identify a spinner that is fair or unfair and explain why.	B. Design a fair and an unfair spinner.
C. Tell some possible results from an experiment.	C. Discuss possible results of an experiment.	C. List and explain the possible results of an experiment.	C. List and represent the possible results of an experiment.	C. List or graph the possible results of an experiment.
D. Identify sets of objects using smaller and larger.	D. Compare data using the concepts of largest, smallest, most and least.	D. Collect and describe data using concepts of largest, smallest, most often, least often.	D. Collect and describe data using concepts of largest, smallest, most often, least often, and middle.	D. Analyze data using the concepts of largest, smallest, most often, least often and middle.

Early Childhood Learning Continuum Indicators

2.8 Algebra and Functions

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Recognize attributes of likeness and difference in a group of everyday objects.	A. Identify a pattern based on shape, size, color and/or sound.	A. Identify, describe and extend patterns based on shape, size, color, sound or number.	A. Identify, describe, extend and replicate patterns based on shape, size, color, sound or number.	A. Recognize, describe, extend, create and replicate a variety of patterns including attribute, activity, number and geometric patterns.
B. Use concrete objects to model the events in a number story.	B. Use concrete objects and trial and error to represent a number story.	B. Use concrete objects and symbols (+, -, =) to create number sentences.	B. Solve number sentences using concrete objects and symbols (+, -, =).	B. Use concrete objects and trial and error to solve number sentences and check if solutions are sensible and accurate.
C. Use concrete objects or pictures to identify what is missing.	C. Use concrete objects to represent a number story that involves a missing addend.	C. Use concrete objects to show a missing addend in a number sentence in which the sum is 20 or less.	C. Use concrete objects to determine a missing addend in a number sentence.	C. Substitute a missing addend in a number sentence

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
D. Explore a simple story problem.	D. Re-create a simple story problem using concrete objects or pictures.	D. Create and solve story problems using number sentences and pictures.	D. Demonstrate, solve, and describe story problems using addition or subtraction equations.	D. Create a story to match a given combination of symbols and numbers.
E. Identify sets of concrete objects as equal or not equal.	E. Use concrete objects to show equal and not equal.	E. Use concrete objects to show the concepts of variable and inequalities.	E. Use concrete objects to show the concepts of variables, equations, and inequalities.	E. Use concrete objects and symbols to model the concepts of variables, expressions, equations, and inequalities.
F. Demonstrate an understanding that symbols have different purposes.	F. Identify the purpose of the symbols for plus, minus and equal.	F. Use the appropriate symbol for plus, minus and equal to solve equations.	F. Use the appropriate symbol for plus, minus, equal, greater than, less than, multiplication to solve equations.	F. Explain the meaning of solutions and symbols.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
G. Gather and display objects on a pictograph.	G. Gather, sort, count and display data to create a pictograph.	G. Gather, organize and display data on a bar graph and pictograph.	G. Gather, organize, display and compare data using bar graphs, tallies, and pictographs.	G. Use a table or a chart to display information.
H. Display simple picture and real object graphs.	H. Display and explain simple picture and real object graphs.	H. Display and explain data from a bar graph.	H. Identify and interpret data shown in tables and charts.	H. Describe and interpret the data shown in tables and charts.
I. Identify the terms in and out.	I. Identify + and – signs.	I. Use + and – signs in problems.	I. Use concrete objects to demonstrate function rule (e.g., input—output).	I. Demonstrate simple function rules.
J. Identify terms up and down.	J. Give and follow directions about locations.	J. Describe objects in space by position and direction (e.g. up, down, left, right, above and below).	J. Locate points on a simple grid.	J. Analyze simple functions and relationships and locate points on a simple grid.

Early Childhood Learning Continuum Indicators

2.9 Geometry

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Recognize common two-dimensional geometric shapes (e.g. circle, square, triangle and rectangle).	A. Identify two-dimensional geometric shapes.	A. Identify and label two-dimensional shapes.	A. Identify three-dimensional shapes.	A. Name and label geometric shapes in two and three dimensions (e.g., circle/ sphere, square/cube, triangle/pyramid, rectangle/prism).
B. Build with geometric shaped concrete objects in play.	B. Reproduce simple designs using geometric shaped concrete objects.	B. Create and reproduce geometric designs using concrete objects.	B. Reproduce three-dimensional geometric shapes using concrete objects.	B. Building geometric shapes using concrete objects (e.g., manipulatives).
C. Make shapes using concrete objects.	C. Draw a circle, triangle and square.	C. Draw two-dimensional geometric shapes.	C. Draw and construct two-dimensional geometric shapes.	C. Draw two and three dimensional geometric shapes and construct rectangles, squares and triangles on the geoboard and on graph paper satisfying specific criteria.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
D. Recognize common geometric figures in real life.	D. Find and name two-dimensional geometric figures in real life.	D. Name and describe two-dimensional geometric figures in real life.	D. Name and describe three-dimensional geometric figures in real life.	D. Find and describe geometric figures in real life.
E. Informally explore symmetry.	E. Identify symmetry.	E. Identify and create lines of symmetry.	E. Identify and draw lines of symmetry for squares and rectangles.	E. Identify and draw lines of symmetry in geometric figures.
F. Informally explore symmetry in real life.	F. Explore symmetry in nature (e.g., leaves and butterflies).	F. Identify incidence of symmetry in nature.	F. Identify characteristics of symmetry in nature.	F. Identify symmetry in nature.
G. Explore reflections.	G. Identify a reflection.	G. Discuss the idea of reflection and its relationship to symmetry.	G. Identify reflections about a line.	G. Fold paper to demonstrate the reflections about a line.

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
<p>H. Explore shapes in a reflection.</p>	<p>H. Identify shapes in a reflection.</p>	<p>H. Identify and discuss the characteristics of shapes in a reflection.</p>	<p>H. Create a reflection.</p>	<p>H. Show relationships between and among figures using reflections.</p>
<p>I. Explore shapes using concrete objects and pictures.</p>	<p>I. Identify geometric shapes turned in different ways.</p>	<p>I. Identify smaller shapes within given shapes.</p>	<p>I. Investigate and predict the results of combining geometric shapes.</p>	<p>I. Predict how shapes can be changed by combining or dividing them.</p>

Early Childhood Learning Continuum Indicators

2.10 Trigonometry

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Explore angles (corners) and lines in the environment.	A. Identify angles and lines in the environment.	A. Identify the number of sides and angles in a square, triangle, and rectangle.	A. Identify and give examples of right angles in real life objects.	A. Identify right angles in the environment.
B. Explore triangles in the environment.	B. Identify triangles in the environment and discuss how they are alike and different.	B. Sort different triangles.	B. Identify a right triangle and right angle.	B. Model right angles and right triangles using concrete objects.

Early Childhood Learning Continuum Indicators

2.11 Concepts of Calculus

Through Pre-K	Pre-K - K	K - 1	1 - 2	3
A. Identify least and greatest quantities using up to 5 concrete objects.	A. Order whole numbers from least to greatest value 0 to 20.	A. Order whole numbers from least to greatest between 0 and 100.	A. Order whole numbers from least to greatest to 1,000.	A. Identify whole number quantities and measurements from least to most and greatest value.
B. Explore concepts of less and more.	B. Identify least and greatest values in pictographs.	B. Use more or fewer/same or fewest to describe sets of pictures or graphs.	B. Explain least and greatest values represented in bar graphs and pictographs.	B. Identify least and greatest values represented in bar graphs and pictographs.
C. Differentiate between the concepts of faster and slower in real life situations.	C. Identify faster and slower situations that occur in real life.	C. Describe faster and slower situations that occur in real life.	C. Describe rates of change as faster and slower using real life situations.	C. Categorize rates of change as faster and slower.
D. Recognize likenesses and differences in a group of everyday objects.	D. Identify a pattern based on shape, size color or sound.	D. Identify, describe and extend patterns based on size, shape, color, sound or numbers.	D. Identify, describe, extend and replicate patterns based on shape, size, color, sound or numbers.	D. Continue a pattern of numbers or objects that could be extended infinitely.

