



Alaska

Extended Grade Level Expectations



For Students with Significant Cognitive Disabilities

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Department of Education & Early Development
State of Alaska



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Introduction to Extended Grade Level Expectations

The purpose of this document is to provide additional background information regarding the test development process for the new Alternate Assessment.

The Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB) require that students with disabilities must be provided access to the general education content standards and curriculum. The Extended Grade Level Expectations (ExGLEs) consist of foundational skills that are clearly linked to the general education content. The content is reduced in complexity to provide entry points to the Grade Level Expectations (GLEs) while still providing challenging academic expectations for students with significant cognitive disabilities. The ExGLEs also provide a blueprint for the development of alternate assessment test items.

The ExGLEs also provide guidance to teachers in developing and aligning curriculum and instruction. Grade level materials and content may be adapted in an age and grade- appropriate manner for students with cognitive disabilities.

Response Methods

There are a wide variety of communication methods used by students who are eligible to take the alternate assessment. The ExGLEs use the terms read and write, but it is understood that IEP teams determine the response methods, and may include, but are not limited to the following: speech, large print, Braille, augmentative communications, sign language, touch and/object cues, computer access, pictures, vocal responses (cries, utterances, etc.), written responses (handwritten, computer generated, etc.), eye gaze, body movements, tactile symbols, calculators, keyboards and adapted keyboards.

Variety of Presentation Modes

A variety of presentation modes are allowed. Presentation modes may include, but are not limited to: speech, print, large print, sign language, touch and object cues, tactile symbols, Braille, computer with voice output, individualized phrases to elicit eye gaze or other body responses, and pictures.

Reading Performance Standards (Extended Grade Level Expectations) For Grades 3-10

Each Extended GLE includes a bolded statement called the “stem.” Each stem is the same or similar across the grades for a given Extended GLE and is meant to communicate the main curriculum and instructional focus of the Extended GLE across the grades.

The first row of each table includes a heading that refers to the content standard, and the second row includes a heading that refers to the performance standard. (The content standard is a broad statement of what students should know; the performance standards state what students should know and be able to do at ages 5-7, 8-10, 11-14, and 15-18.) The second box includes the complete performance standards.

Some Extended GLEs repeated with no changes across grade levels are marked with asterisks. This indicates the Extended GLE assumes a variety of text and increasing complexity to indicate the growth in the Extended GLE.

The number indicates the Performance Standard and the Extended Grade Level Expectation number. Thus [9/10] 4.1-1 represents Performance Standard 4.1, and the first Extended GLE for that Performance Standard for grades 9 and 10.

The student uses strategies to decode or comprehend meaning of words in text.			
RI.1 a. Distinguish, reproduce, and manipulate the sounds in words; b. Use a combination of the following to read and comprehend text: knowledge of phonics , alphabet, and alphabetic principle, e.g., recognition of letter shapes, letter names, letter/sound relationships, initial/final consonants, vowels, letter patterns; pictures and visual cues ; sight recognition of high frequency vocabulary words; word structure , e.g., root words, prefixes, suffixes, rhyming words; language structure , e.g., word order, grammar; meaning structure , e.g., prior knowledge and context; text structure , e.g., read left to right. E.B.1			
Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
The student uses strategies to decode or comprehend meaning of words in text by [3/4] 1.1, 2.1-1 Identifying signs and symbols [3/4] 1.1, 2.1-2 Identifying at least 10 letter-sound relationships [3/4] 1.1, 2.1-3 Blending at least 5 sounds to make words [3/4] 1.1, 2.1-4 Identifying own name in print [3/4] 1.1, 2.1-5 Displaying an understanding of print directionality (L)	The student uses strategies to decode or comprehend meaning of words in text by [5/6] 2.1-1 Identifying or reading simple sight words [5/6] 2.1-2 Reading simple sentences of 2-3 words	The student uses strategies to decode or comprehend meaning of words in text by [7/8] 3.1-1 Reading a simple sentence of 4-5, or more, words [7/8] 3.1-2 Obtaining information using text features including pictures, (illustrations for text), visual cues (e.g., chapter headings, bolded or italicized text) [7/8] 3.1-3 Identifying or reads words of increasing complexity (e.g., 5 or more letters, or 2 or more syllables)	The student uses strategies to decode or comprehend meaning of words in text by [9/10] 4.1-1 Decodes unfamiliar words using knowledge of letter-sound relationships, phonemic awareness, and word structure (base word, prefix, suffix)
Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning Associating symbols, pictures, and letters with a word or idea Looking through reading materials in a purposeful manner Identifying that letters, pictures, symbols are different from objects	Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning Associating symbols, pictures, and letters with a word or idea Looking through reading materials in a purposeful manner Identifying that letters, pictures, symbols are different from objects	Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning Associating symbols, pictures, and letters with a word or idea Looking through reading materials in a purposeful manner Identifying that letters, pictures, symbols are different from objects	Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning Associating symbols, pictures, and letters with a word or idea Looking through reading materials in a purposeful manner Identifying that letters, pictures, symbols are different from objects

Some Extended GLEs have been identified as Local. They are for local assessment and will not be on a state assessment.

Some Extended GLEs have been labeled ID for Item Development. They will not be assessed in the 2008-2009 school year, but items may be developed later to assess these Extended GLEs.

Early Entry Points describe the least complex skills and are prerequisites to the skills being assessed. They provide a range of options at which a student with a disability can access the learning standard.

The Performance Standards for reading have been organized into the following content strands.

For Grade 3

Fluency	Word Identification Skills	Forming a General Understanding	Analysis of Content and Structure
P.S. 1.3 Read text aloud	P.S. 1.1 Use structural analysis; read words	P.S. 1.2 Comprehend literal meaning	P.S. 1.7 Identify forms of text
		P.S. 1.4 Retell or restate information	P.S. 1.8 Identify story elements
		P.S. 1.5 Identify main idea	P.S. 1.9 Express own opinions about text
		P.S. 1.6 Follow simple directions	P.S. 1.10 Make connections
			P.S. 1.11 Identify cultural influences

For Grades 4-6

Fluency	Word Identification Skills	Forming a General Understanding	Analysis of Content and Structure
P.S. 2.3 Read text aloud	P.S.2.1 Use structural analysis; determine meaning of unfamiliar words	P.S. 2.2 Infer meaning	P.S. 2.7 Identify forms of text
		P.S. 2.4 Retell or restate information	P.S. 2.8 Define story elements
		P.S. 2.5 Support main idea	P.S. 2.9 Differentiate fact from opinion
		P.S. 2.6 Follow multi-step directions	P.S. 2.10 Identify theme; make connections
			P.S. 2.11 Connect cultural influences

For Grades 7-8

Fluency	Word Identification Skills	Forming a General Understanding	Analysis of Content and Structure
P.S. 3.2 Read text aloud	P.S. 3.1 Read unfamiliar words	P.S. 3.3 Restate or summarize	P.S. 3.6 Identify conventions of forms of text
		P.S. 3.4 Assess support of main idea	P.S. 3.7 Analyze story elements
		P.S. 3.5 Follow multi-step directions	P.S. 3.8 Analyze author's purpose
			P.S. 3.9 Support understanding of theme
			P.S. 3.10 Compare historical/cultural influences

For Grades 9-10

Fluency	Word Identification Skills	Forming a General Understanding	Analysis of Content and Structure
P.S. 3.2 Read text aloud	P.S.4.1 Read unfamiliar words	P.S. 4.2 Summarize information	P.S. 4.5 Analyze conventions of genres
		P.S. 4.3 Support main idea/critique arguments	P.S. 4.6 Analyze story elements
		P.S. 4.4 Follow multi-step directions	P.S. 4.7 Make assertions
			P.S. 4.8 Analyze themes
			P.S. 4.9 Analyze historical/cultural influences

Reading Performance Standards (Extended Grade Level Expectations)

The student uses strategies to decode or comprehend meaning of words in text.

- R1.1** a. Distinguish, reproduce, and manipulate the sounds in words;
 b. Use a combination of the following to read and comprehend text: knowledge of phonics, alphabet, and alphabetic principle, e.g., recognition of letter shapes, letter names, letter/sound relationships, initial/final consonants, vowels, letter patterns; pictures and visual cues; sight recognition of high frequency vocabulary words; word structure, e.g., root words, prefixes, suffixes, rhyming words; language structure, e.g., word order, grammar; meaning structure, e.g., prior knowledge and context; text structure, e.g., read left to right. E.B.1
- R2.1** a. Use a combination of the following to read and comprehend text: knowledge of phonetics, language structure, and semantics; text structures such as illustrations, graphs, and headers; self-monitoring and self-correcting strategies; adjusting reading pace or style based on purpose, task, and type of text.
 b. Use knowledge of word families, phonetics, context clues, visual cues, and structural elements to determine meaning of unfamiliar words. E.B.1
- R3.1** Apply knowledge of word origins, structure and context clues, and root words, and use dictionaries and glossaries, to determine the meaning of new words and to comprehend text. E.B.1
- R4.1** Apply knowledge of syntax, roots, and word origins, and use context clues and reference materials, to determine the meaning of new words and to comprehend text. E.B.1

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student uses strategies to decode or comprehend meaning of words in text by</p> <p>[3/4] 1.1, 2.1-1 Identifying signs and symbols</p> <p>[3/4] 1.1, 2.1-2 Identifying at least 10 letter-sound relationships</p> <p>[3/4] 1.1, 2.1-3 Blending at least 5 sounds to make words</p> <p>[3/4] 1.1, 2.1-4 Identifying own name in print</p> <p>[3/4] 1.1, 2.1-5 Displaying an understanding of print directionality (L)</p>	<p>The student uses strategies to decode or comprehend meaning of words in text by</p> <p>[5/6] 2.1-1 Identifying or reading simple sight words</p> <p>[5/6] 2.1-2 Reading simple sentences of 2-3 words</p>	<p>The student uses strategies to decode or comprehend meaning of words in text by</p> <p>[7/8] 3.1-1 Reading a simple sentence of 4-5, or more, words</p> <p>[7/8] 3.1-2 Obtaining information using text features including pictures, (illustrations for text), visual cues (e.g., chapter headings, bolded or italicized text)</p> <p>[7/8] 3.1-3 Identifying or reading words of increasing complexity (e.g., 5 or more letters, or 2 or more syllables)</p>	<p>The student uses strategies to decode or comprehend meaning of words in text by</p> <p>[9/10] 4.1-1 Decoding unfamiliar words using knowledge of letter-sound relationships, phonemic awareness, and word structure (base word, prefix, suffix)</p>
<p>Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning</p> <p>Associating symbols, pictures, and letters with a word or idea</p> <p>Looking through reading materials in a purposeful manner</p> <p>Identifying that letters, pictures, symbols are different from objects</p>	<p>Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning</p> <p>Associating symbols, pictures, and letters with a word or idea</p> <p>Looking through reading materials in a purposeful manner</p> <p>Identifying that letters, pictures, symbols are different from objects</p>	<p>Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning</p> <p>Associating symbols, pictures, and letters with a word or idea</p> <p>Looking through reading materials in a purposeful manner</p> <p>Identifying that letters, pictures, symbols are different from objects</p>	<p>Early Entry Points Demonstrating understanding that pictures/symbols/letters hold meaning</p> <p>Associating symbols, pictures, and letters with a word or idea</p> <p>Looking through reading materials in a purposeful manner</p> <p>Identifying that letters, pictures, symbols are different from objects</p>

**Reading Performance Standards
(Extended Grade Level Expectations)**

The student comprehends literal or inferred meaning from text.

- R1.2** a. Comprehend literal meaning from text.
 b. Use a variety of strategies to support comprehension; including predicting, questioning, rereading, and monitoring own comprehension. E.B.1
- R2.2** Infer meaning from text. E.B.1

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student comprehends literal or inferred meaning from text by</p> <p>[3/4] 1.2, 2.2-1 Identifying a detail from a story read aloud using pictures, symbols, or words</p> <p>[3/4] 1.2, 2.2-2 Communicating awareness of need to “reread,” “go back,” listen, or touch again (L)</p>	<p>The student comprehends literal or inferred meaning from text by</p> <p>[5/6] 2.2-1 Identifying details from a story read aloud using pictures, symbols, or words</p> <p>[5/6] 2.2-2 Communicating awareness of need to reread to clarify, confirm, or correct (L)</p> <p>[5/6] 2.2-3 Organizing information while reading (e.g., graphic organizers, sequencing pictures) (L)</p>	<p>The student comprehends literal or inferred meaning from text by</p> <p><i>This GLE not continued in grades 7-10.</i></p>	<p>The student comprehends literal or inferred meaning from text by</p> <p><i>This GLE not continued in grades 7-10.</i></p>
<p>Early Entry Points</p> <p>Demonstrating necessary reading behavior (e.g., prepare for headphones, turn to listen, look at screen or reader)</p> <p>Manipulating materials to preview/skim</p> <p>Demonstrating ability to attend to a story from beginning to end</p>	<p>Early Entry Points</p> <p>Demonstrating necessary reading behavior (e.g., prepare for headphones, turn to listen, look at screen or reader)</p> <p>Manipulating materials to preview/skim</p> <p>Demonstrating ability to attend to a story from beginning to end</p>	<p>Early Entry Points</p> <p>Demonstrating necessary reading behavior (e.g., prepare for headphones, turn to listen, look at screen or reader)</p> <p>Manipulating materials to preview/skim</p> <p>Demonstrating ability to attend to a story from beginning to end</p>	<p>Early Entry Points</p> <p>Demonstrating necessary reading behavior (e.g., prepare for headphones, turn to listen, look at screen or reader)</p> <p>Manipulating materials to preview/skim</p> <p>Demonstrating ability to attend to a story from beginning to end</p>

**Reading Performance Standards
(Extended Grade Level Expectations)**

The student reads text aloud.

R1.3 Read texts aloud with expression, demonstrating knowledge of punctuation and other conventions of print. E.B.1

R2.3 Read texts aloud with rhythm, flow, and expression, demonstrating knowledge of punctuation and other conventions of print. E.B.1

R3.2 Rehearse and read texts aloud to an audience, in performances such as readers' theater, reading to younger students or peers, or as part of formal presentations including research reports and literature responses. E.B.1

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student reads text aloud by</p> <p>[3/4] 1.3, 2.3-1 Recognizing that print moves left to right across the page and from top to bottom (L)</p> <p>[3/4] 1.3, 2.3-2 Naming and identifying letters (L)</p>	<p>The student reads text aloud by</p> <p>[5/6] 2.3-1 Blending sounds to make words (L)</p> <p>[5/6] 2.3-2 Identifying the initial, medial, and final sounds of a word (L)</p> <p>[5/6] 2.3-3 Identifying that sentences are made up of words separated by spaces (L)</p>	<p>The student reads text aloud by</p> <p>[7/8] 3.2-1 Decoding a series of words/picture symbols/tactile symbols in sequence left to right or top to bottom if appropriate (L)</p> <p>[7/8] 3.2-2 Reading with a steady rhythm (L)</p>	<p>The student reads text aloud by</p> <p>[9/10] 3.2-1 Reading with a rhythm, flow, and expression (L)</p> <p>[9/10] 3.2-2 Giving an oral presentation (L)</p>
<p>Early Entry Points</p> <p>Manipulating text (e.g., correct orientation, turning pages, etc.)</p>	<p>Early Entry Points</p> <p>Manipulating text (e.g., correct orientation, turning pages, etc.)</p>	<p>Early Entry Points</p> <p>Manipulating text (e.g., correct orientation, turning pages, etc.)</p>	<p>Early Entry Points</p> <p>Manipulating text (e.g., correct orientation, turning pages, etc.)</p>

**Reading Performance Standards
(Extended Grade Level Expectations)**

The Student Restates/Summarizes Information.

R1.4 a. Retell or dramatize a story after reading it. b. Restate information after reading a text. E.B.1

R2.4 a. Retell stories in correct sequence. b. Restate and summarize information or ideas from a text. E.B.2

R3.3 Restate and summarize information or ideas from a text and connect new information or ideas to prior knowledge and experience. E.B.3

R4.2 Summarize information or ideas from a text and make connections between summarized information or sets of ideas and related topics or information. E.B.3

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student restates/summarizes information by</p> <p>[3/4] 1.4, 2.4-1 Identifying beginning of a sequence of events using pictures, symbols, or words (L)</p>	<p>The student restates/summarizes information by</p> <p>[5/6] 2.4-1 Identifying beginning and end of a sequence of events using pictures, symbols, or words</p>	<p>The student restates/summarizes information by</p> <p>[7/8] 3.3-1 Identifies beginning, middle, and end of the sequence of events in the text using pictures, symbols, or words</p>	<p>The student restates/summarizes information by</p> <p>[9/10] 4.2-1 Summarizing text accurately in correct sequence</p>
<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>	<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>	<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>	<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>

**Reading Performance Standards
(Extended Grade Level Expectations)**

The Student Demonstrates an Understanding of Main Idea.

R1.5 Identify the main idea of a passage. E.B.1

R2.5 Locate evidence in the text and from related experiences to support understanding of a main idea. E.D.2

R3.4 Clarify and connect main ideas and concepts, identify their relationship to other sources and related topics, and provide supporting details. E.B.2

R4.3 a. Identify and assess the validity, accuracy, and adequacy of evidence that supports an author’s main ideas.

b. Critique the power, logic, reasonableness, and audience appeal of arguments advanced in public documents. E.D.2

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student demonstrates an understanding of main idea by</p> <p>[3/4] 1.5, 2.5-1 Identifying the general topic of a text (L)</p>	<p>The student demonstrates an understanding of main idea by</p> <p>[5/6] 2.5-1 Identifying the main idea of a passage read aloud</p> <p>[5/6] 2.5-2 Identifying personal experiences to support understanding of main idea (L)</p>	<p>The student demonstrates an understanding of main idea by</p> <p>[7/8] 3.4-1 Identifying the main idea of a passage</p> <p>[7/8] 3.4-2 Identifying personal experiences to support understanding of main idea* (L)</p>	<p>The student demonstrates an understanding of main idea by</p> <p>[9/10] 4.3-1 Identifying the main idea of a passage*</p> <p>[9/10] 4.3-2 Explaining or describing related experiences and events to support understanding of main idea* (L)</p>
<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>	<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>	<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>	<p>Early Entry Points</p> <p>Looking at pictures and other visual cues in text for information</p>

*Assumes a variety of text and increasing complexity.

**Reading Performance Standards
(Extended Grade Level Expectations)**

The Student Follows Written Directions.

R1.6 Read and follow simple directions to complete a simple task. E.C.2

R2.6 Read and follow multi-step directions to complete a simple task. E.C.2

R3.5 Read and follow multi-step directions to complete a task, and identify the sequence prescribed. E.C.2

R4.4 Read and follow multi-step directions to complete complex tasks. E.C.2

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student follows written directions by</p> <p>[3/4] 1.6, 2.6-1 Following an object cue to go to an activity (L)</p>	<p>The student follows written directions by</p> <p>[5/6] 2.6-1 Following a one-step word or picture direction</p>	<p>The student follows written directions by</p> <p>[7/8] 3.5-1 Following two-step written directions</p>	<p>The student follows written directions by</p> <p>[9/10] 4.4-1 Following multi-step written directions to complete a task (ID)</p>
<p>Early Entry Points</p> <p>Responding to words or signs</p>	<p>Early Entry Points</p> <p>Responding to words or signs</p>	<p>Early Entry Points</p> <p>Responding to words or signs</p>	<p>Early Entry Points</p> <p>Responding to words or signs</p>

**Reading Performance Standards
(Extended Grade Level Expectations)**

The student analyzes content and structure of genres.

R1.7 Distinguish between common forms of texts (genres): fiction/nonfiction, prose/poetry, short story/drama. E.B.2

R2.7 Explain the characteristics of the following: fiction and non-fiction, prose and poetry, and four major genres of fiction: short story, drama, novel, and poetry. E.B.2

R3.6 Analyze basic rules (conventions) of the four genres of fiction (short story, drama, novel, and poetry) and non-fiction. E.B.2

R4.5 Analyze the rules (conventions) of the four genres of fiction (short story, drama, novel and poetry) and non-fiction and the techniques used in these genres, and evaluate the effects of these conventions and techniques on the audience. E.B.2

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student analyzes content and structure of genres by</p> <p>[3/4] 1.7, 2.7-1 Matching text type to purpose (for fun, to learn something) (L)</p> <p>[3/4] 1.7, 2.7-2 Identifying rhyming words (L)</p>	<p>The student analyzes content and structure of genres by</p> <p>[5/6] 2.7-1 Identifying different types of texts (e.g., fiction/nonfiction) (L)</p> <p>[5/6] 2.7-2 Identifying rhyme and dialogue (L)</p>	<p>The student analyzes content and structure of genres by</p> <p>[7/8] 3.6-1 Distinguishing between fiction/nonfiction (L)</p> <p>[7/8] 3.6-2 Identifying rhyme, dialogue, and simile (L)</p>	<p>The student analyzes content and structure of genres by</p> <p>[9/10] 4.5-1 Identifying different genres of fiction (i.e., short story, drama, novel, poetry) and nonfiction (L)</p> <p>[9/10] 4.5-2 Identifying or using figurative language (e.g., metaphors, similes) and idioms (L)</p>
<p>Early Entry Points</p> <p>Attending to a variety of genres (poetry, fiction, nonfiction, drama) (L)</p>	<p>Early Entry Points</p> <p>Attending to a variety of genres (poetry, fiction, nonfiction, drama) (L)</p>	<p>Early Entry Points</p> <p>Attending to a variety of genres (poetry, fiction, nonfiction, drama) (L)</p>	<p>Early Entry Points</p> <p>Attending to a variety of genres (poetry, fiction, nonfiction, drama) (L)</p>

**Reading Performance Standards
(Extended Grade Level Expectations)**

The Student Analyzes Literary Elements and Devices

R1.8 Identify and describe basic plot, main characters, and setting (time and place) in fiction E.B.2

R2.8 a. Define and identify plots, settings, and characters in fiction. b. Compare and contrast plots, settings and characters in a variety of works by a variety of authors

R3.7 Analyze and evaluate narrative elements including plot, character, setting, and point of view to determine their importance to the story. E.B.2

R4.6 Analyze and evaluate how authors use narrative elements and tone in fiction for specific purposes. E.B.2

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student analyzes literary elements and devices by</p> <p>[3/4] 1.8, 2.8-1 Identifying that stories have characters (L)</p>	<p>The student analyzes literary elements and devices by</p> <p>[5/6] 2.8-1 Identifying main character from a passage read aloud</p> <p>[5/6] 2.8-2 Identifying or describing the setting</p>	<p>The student analyzes literary elements and devices by</p> <p>[7/8] 3.7-1 Identifying or describing characters (e.g., physical traits, personality, motivation, feelings)</p> <p>[7/8] 3.7-2 Identifying or describing the setting</p> <p>[7/8] 3.7-3 Identifying or describing plot (e.g., conflict/problem, sequence of events, resolutions)</p>	<p>The student analyzes literary elements and devices by</p> <p>[9/10] 4.6-1 Identifying or describing characters (e.g., physical traits, personality, motivation, feelings)*</p> <p>[9/10] 4.6-2 Identifying or describing the setting*</p> <p>[9/10] 4.6-3 Identifying or describing plot (e.g., conflict/problem, sequence of events, resolutions, predictions)</p>
<p>Early Entry Points</p> <p>Listening/attending to works of fiction read aloud</p>	<p>Early Entry Points</p> <p>Listening/attending to works of fiction read aloud</p>	<p>Early Entry Points</p> <p>Listening/attending to works of fiction read aloud</p>	<p>Early Entry Points</p> <p>Listening/attending to works of fiction read aloud</p>

* Assumes a variety of text and increasing complexity.

**Reading Performance Standards
(Extended Grade Level Expectations)**

The Student Analyzes Content of Text to Differentiate Fact and Opinion.

R1.9 Express own opinions about texts E.D.1

R2.9 a. Differentiate between fact and opinion. b. Express opinions about a text and support these opinions with textual evidence.E.D.2

R3.8 a. Differentiate between fact and opinion in text.
b. Analyze an author’s purpose and offer a critical opinion of the effectiveness of the text in meeting that purpose. E.D.2

R4.7 Express and support assertions, with evidence from the text or experience, about the effectiveness of a text. E.D.4

Grades3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student analyzes content of text to differentiate fact and opinion by</p> <p>[3/4] 1.9, 2.9-1 Stating if liked or disliked story (L)</p> <p>[3/4] 1.9, 2.9-2 Identifying something specific about story that was liked or disliked (L)</p>	<p>The student analyzes content of text to differentiate fact and opinion by</p> <p>[5/6] 2.9-1 Identifying difference between fact and opinion</p> <p>[5/6] 2.9-2 Expressing opinion about text (L)</p>	<p>The student analyzes content of text to differentiate fact and opinion by</p> <p>[7/8] 3.8-1 Distinguishing fact from opinion in text</p> <p>[7/8] 3.8-2 Expressing opinion about a text with supporting evidence from text (L)</p>	<p>The student analyzes content of text to differentiate fact and opinion by</p> <p>[9/10] 4.7-1 Distinguishing fact from opinion in text*</p> <p>[9/10] 4.7-2 Expressing opinion about a text with supporting evidence from text* (L)</p>
<p>Early Entry Points</p> <p>Communicating preferred mode for accessing literacy materials (e.g., listen on tape, view on screen, listen to reader/peer, touch tactile story)</p> <p>Selecting literary choice</p>	<p>Early Entry Points</p> <p>Communicating preferred mode for accessing literacy materials (e.g., listen on tape, view on screen, listen to reader/peer, touch tactile story)</p> <p>Selecting literary choice</p>	<p>Early Entry Points</p> <p>Communicating preferred mode for accessing literacy materials (e.g., listen on tape, view on screen, listen to reader/peer, touch tactile story)</p> <p>Selecting literary choice</p>	<p>Early Entry Points</p> <p>Communicating preferred mode for accessing literacy materials (e.g., listen on tape, view on screen, listen to reader/peer, touch tactile story)</p> <p>Selecting literary choice</p>

* Assumes a variety of text and increasing complexity.

**Reading Performance Standards
(Extended Grade Level Expectations)**

The Student Connects Themes.

R1.10 Make connections between a text and personal experiences, experiences of others, or other texts, and locate details in the text to illustrate these connections. E.B.3

R2.10 Identify themes in texts and connect them to personal experiences, experiences of others, and other texts. E.B.3

R3.9 Connect themes to personal experiences, experiences of others, and other texts, and locate evidence from texts to support or illustrate these connections. E.B.3

R4.8 Analyze and evaluate themes across a variety of texts, using textual and experiential evidence. E.B.3

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student connects themes by</p> <p>[3/4] 1.10, 2.10-1 Identifying the lesson learned in a story when it is directly stated (L)</p> <p>[3/4] 1.10, 2.10-2 Identifying a personal experience related to topic of text (e.g., matching illustrations with connections to self—family members, school) (L)</p>	<p>The student connects themes by</p> <p>[5/6] 2.10-1 Identifying the lesson learned in a story (L)</p> <p>[5/6] 2.10-2 Relating character’s experiences to own experiences (L)</p>	<p>The student connects themes by</p> <p>[7/8] 3.9-1 Identifying the lesson learned in a story* (L)</p> <p>[7/8] 3.9-2 Identifying connections to personal experiences, experiences of others or other texts* (L)</p>	<p>The student connects themes by</p> <p>[9/10] 4.8-1 Identifying the theme of a passage</p> <p>[9/10] 4.8-2 Identifying connections to personal experiences, experiences of others or other texts* (L)</p>
<p>Early Entry Points</p> <p>Indicating that some stories (e.g., folktales, fables) teach lessons</p> <p>Identifying the feelings related to experiences in text</p>	<p>Early Entry Points</p> <p>Indicating that some stories (e.g., folktales, fables) teach lessons</p> <p>Identifying the feelings related to experiences in text</p>	<p>Early Entry Points</p> <p>Indicating that some stories (e.g., folktales, fables) teach lessons</p> <p>Identifying the feelings related to experiences in text</p>	<p>Early Entry Points</p> <p>Indicating that some stories (e.g., folktales, fables) teach lessons</p> <p>Identifying the feelings related to experiences in text</p>

*Assumes a variety of text and increasing complexity.

**Reading Performance Standards
(Extended Grade Level Expectations)**

The Student Makes Connections between cultural influences/events.

R1.11 Identify basic cultural influences in texts. E.E.1

R2.11 Connect cultural events, ideas, settings, and influences from one text to similar texts from other cultures. E.E.1

R3.10 Compare and contrast how texts reflect historical and cultural influences. E.E.1

R4.9 Analyze the effects of cultural and historical influences on texts. E.E.1

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student makes connections between cultural influences/events by</p> <p>[3/4] 1.11, 2.11-1 Selecting pictures, objects, or text related to culture represented in text (L)</p>	<p>The student makes connections between cultural influences/events by</p> <p>[5/6] 2.11-1 Identifying basic cultural influences in texts (e.g., clothes, customs) (L)</p>	<p>The student makes connections between cultural influences/events by</p> <p>[7/8] 3.10-1 Identifying cultural influences in texts (e.g., similarities and differences between people—clothes, customs, traditions) (L)</p>	<p>The student makes connections between cultural influences/events by</p> <p>[9/10] 4.9-1 Identifying cultural influences in texts (e.g., clothes, customs, traditions, dialects, geography) (L)</p> <p>[9/10] 4.9-2 Identifying common events or situations in multicultural readings (L)</p>
<p>Early Entry Points Recognizing that a story can be about different cultures and traditions</p>	<p>Early Entry Points Recognizing that a story can be about different cultures and traditions</p>	<p>Early Entry Points Recognizing that a story can be about different cultures and traditions</p>	<p>Early Entry Points Recognizing that a story can be about different cultures and traditions</p>

The Performance Standards for writing have been organized into the following content strands.

For Grade 3

Write Using a Variety of Forms	Structures and Conventions of Writing	Revise	Cite Sources	Use Resources
P.S. 1.1 Write about a Topic	P.S. 1.3 Use a Variety of Simple Sentence Structures/Proofread	P.S. 1.4 Revise Writing/Provide Peer Feedback	P.S. 1.5 List sources	
P.S. 1.2 Writes for a Specific Audience				

For Grades 4-6

Write Using a Variety of Forms	Structures and Conventions of Writing	Revise	Cite Sources	Use Resources
P.S. 2.1 Writes Two Paragraphs on a Topic	P.S.2.3 Use a Variety of Sentences/Proofread	P.S. 2.4 Revise Writing/Provide Peer Feedback	P.S. 2.5 Give credit	P.S. 2.6 Use resources
P.S. 2.2 Uses a Variety of Forms				

For Grades 7-8

Write Using a Variety of Forms	Structures and Conventions of Writing	Revise	Cite Sources	Use Resources
P.S. 3.1 Write a Composition	P.S. 3.3 Use Conventions	P.S. 3.4 Revise	P.S. 3.5 Document Sources	P.S. 3.6 Use Word Processing
P.S. 3.2 Use a Variety of Forms				

For Grades 9-10

Write Using a Variety of Forms	Structures and Conventions of Writing	Revise	Cite Sources	Use Resources
P.S. 4.1 Write a composition	P.S.4.3 Use Conventions	P.S. 4.4 Revise	P.S. 4.5 Cite Sources	P.S. 3.6 Use Word Processing
P.S. 4.2 Use a Variety of Forms				

**Writing Performance Standards
(Extended Grade Level Expectations)**

The student writes about a topic.

- W1.1** a. Write complete sentences with a subject and a predicate. E.A.1
 b. Write a paragraph with a topic sentence and supporting details. E.A.2
 c. Write short stories or compositions with a beginning, middle, and end. E.A.4
- W2.1** Write a well organized two-paragraph composition that addresses a single topic. E.A.1
- W3.1** Write a coherent composition that includes a thesis statement, supporting evidence, and a conclusion. E.A.1
- W4.1** Write a coherent composition with a thesis statement that is supported with evidence, well-developed paragraphs, transitions, and a conclusion. E.A.1

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student writes about a topic by</p> <p>[3/4] 1.1, 2.1-1 Writing upper and lower case letters</p> <p>[3/4] 1.1, 2.1-2 Writing own first name</p> <p>[3/4] 1.1, 2.1-3 Orienting graphics in legible format (right-side up, left to right)</p>	<p>The student writes about a topic by</p> <p>[5/6] 2.1-1 Writing simple sight words (using mostly consonants with a few vowels)*</p> <p>[5/6] 2.1-2 Writing own name, first and last</p>	<p>The student writes about a topic by</p> <p>[7/8] 3.1-1 Writing complete sentences</p>	<p>The student writes about a topic by</p> <p>[9/10] 4.1-1 Writing a variety of simple sentences that support a topic</p>
<p>Early Entry Points</p> <p>Using intentional movement to produce graphic representation (e.g., make marks on page, arrange picture/symbols, hit keys)</p> <p>Tracing/copying upper and/or lower case letters</p> <p>Writing simple strokes that form letters or producing letters (e.g., using keyboard)</p>	<p>Early Entry Points</p> <p>Using intentional movement to produce graphic representation (e.g., make marks on page, arrange picture/symbols, hit keys)</p> <p>Tracing/copying upper and/or lower case letters</p> <p>Writing simple strokes that form letters or producing letters (e.g., using keyboard)</p>	<p>Early Entry Points</p> <p>Using intentional movement to produce graphic representation (e.g., make marks on page, arrange picture/symbols, hit keys)</p> <p>Tracing/copying upper and/or lower case letters</p> <p>Writing simple strokes that form letters or producing letters (e.g., using keyboard)</p>	<p>Early Entry Points</p> <p>Using intentional movement to produce graphic representation (e.g., make marks on page, arrange picture/symbols, hit keys)</p> <p>Tracing/copying upper and/or lower case letters</p> <p>Writing simple strokes that form letters or producing letters (e.g., using keyboard)</p>

*This extended GLE has been changed from Version 1 of the Extended GLEs.

Writing Performance Standards

(Extended Grade Level Expectations)

Student writes for a variety of purposes and audiences.

W1.2 Write for a specific audience, including self, other children, parents, and other adults. E.A.4

W2.2 Use a variety of fiction and non-fiction forms when writing for different audiences. E.A.4

W3.2 Select and use appropriate forms of fiction and non-fiction to achieve different purposes when writing for different audiences. E.A.4

W4.2 Demonstrate understanding of elements of discourse (purpose, speaker, audience, form) when completing expressive (creative, narrative, descriptive), persuasive, research-based, informational, or analytic writing assignments. E.A.4

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student writes for a variety of purposes and audiences by</p> <p>[3/4] 1.2, 2.2-1 Matching and sequencing objects, symbols, drawings, or pictures to tell a story or provide information (ID)</p>	<p>The student writes for a variety of purposes and audiences by</p> <p>[5/6] 2.2-1 Communicating ideas to others by producing a graphic product (story/event) using pictures and/or symbols</p>	<p>The student writes for a variety of purposes and audiences by</p> <p>[7/8] 3.2-1 Communicating ideas by producing a graphic product using words</p>	<p>The student writes for a variety of purposes and audiences by</p> <p>[9/10] 4.2-1 Communicating ideas by producing a graphic product in different forms for different audiences for a variety of purposes that clearly communicates a message</p>
<p>Early Entry Points</p> <p>Selecting an object, picture, or drawing associated with an event from personal experience</p> <p>Matching objects, symbols, drawings, or pictures with actions and/or events to tell a story</p>	<p>Early Entry Points</p> <p>Selecting an object, picture, or drawing associated with an event from personal experience</p> <p>Matching objects, symbols, drawings, or pictures with actions and/or events to tell a story</p>	<p>Early Entry Points</p> <p>Selecting an object, picture, or drawing associated with an event from personal experience</p> <p>Matching objects, symbols, drawings, or pictures with actions and/or events to tell a story</p>	<p>Early Entry Points</p> <p>Selecting an object, picture, or drawing associated with an event from personal experience</p> <p>Matching objects, symbols, drawings, or pictures with actions and/or events to tell a story</p>

**Writing Performance Standards
(Extended Grade Level Expectations)**

The student writes and edits using conventions of Standard English.

- W1.3** a. Use a variety of simple sentence structures, and basic rules of punctuation and capitalization in written work. E.A.2
 b. Proofread writing for legibility, spelling, capitalization, and punctuation when producing final drafts. E.A.5
- W2.3** a. Use a variety of simple and complex sentence structures in written work.
 b. Proofread and correct grammar, sentence structure, paragraph structure, punctuation, capitalization, spelling, and usage in finished written work. E.A.5
- W3.3** Use the conventions of standard English including grammar, sentence structure, paragraph structure, punctuation, spelling, and usage in written work. E.A.2
- W4.3** Use the conventions of standard English independently and consistently including grammar, sentence structure, paragraph structure, punctuation, spelling, and usage. E.A.2

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student writes and edits using conventions of Standard English by</p> <p>[3/4] 1.3, 2.3-1 Identifying difference between uppercase and lower case letters (L)</p> <p>[3/4] 1.3, 2.3-2 Using correct capitalization of own name (L)</p>	<p>The student writes and edits using conventions of Standard English by</p> <p>[5/6] 2.3-1 Using some conventions of writing (e.g., consistent use of capitalization and end mark punctuation, spacing/alignment, left to right)</p>	<p>The student writes and edits using conventions of Standard English by</p> <p>[7/8] 3.3-1 Using conventions of writing (e.g., capitalization, appropriate spacing, use of periods, and correct orientation of written letters and/or other graphics)</p>	<p>The student writes and edits using conventions of Standard English by</p> <p>[9/10] 4.3-1 Identifying and/or correcting simple errors in capitalization, punctuation, and spelling</p>
<p>Early Entry Points</p> <p>Identifying materials needed for writing (e.g., pencil, name stamp, etc.)</p>	<p>Early Entry Points</p> <p>Identifying materials needed for writing (e.g., pencil, name stamp, etc.)</p>	<p>Early Entry Points</p> <p>Identifying materials needed for writing (e.g., pencil, name stamp, etc.)</p>	<p>Early Entry Points</p> <p>Identifying materials needed for writing (e.g., pencil, name stamp, etc.)</p>

**Writing Performance Standards
(Extended Grade Level Expectations)**

The student revises writing.

- W1.4** a. Revise writing for detail and clarity. E.A.5
b. Provide appropriate feedback to peers about written work. E.A.8
- W2.4** a. Revise writing to improve the logical progression of ideas and supporting information. E.A.5
b. Revise own and others' work and provide appropriate feedback to peers based upon established criteria, to improve quality and effectiveness of writing. E.A.8
- W3.4** a. Revise writing to improve organization, word choice, paragraph development, and voice appropriate to the purpose. E.A.5
b. Form and explain own standards or judgments of quality writing. E.A.8
- W4.4** Revise writing to improve style, word choice, sentence variety, and subtlety of meaning in relation to the purpose and audience. E.A.5

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
<p>The student revises writing by</p> <p>[3/4] 1.4, 2.4-1 Selecting the best or most appropriate object, picture, or drawing associated with an event from personal experience (L)</p>	<p>The student revises writing by</p> <p>[5/6] 2.4-1 Selecting the best or most appropriate object, picture, or drawing associated with an event from personal experience (L)</p>	<p>The student revises writing by</p> <p>[7/8] 3.4-1 Selecting the best or most appropriate objects, symbols, drawings, or pictures to tell a story (ID)</p> <p>[7/8] 3.4-2 Giving/receiving appropriate feedback about written work (L)</p>	<p>The student revises writing by</p> <p>[9/10] 4.4-1 Choosing appropriate word choice related to the topic</p> <p>[9/10] 4.4-2 Giving/receiving appropriate feedback about written work (L)</p> <p>[9/10] 4.4-3 Communicating personal opinion about product (L)</p> <p>[9/10] 4.4-4 Sequencing sentences to put them in correct order*</p>

*This is a new Extended GLE that has been added to Version 2 of the Extended GLEs.

**Writing Performance Standards
(Extended Grade Level Expectations)**

The student documents sources.

W1.5 List titles and authors of books and other materials when used as references in written work. E.D.3

W2.5 Give credit for others' ideas, images, and information by citing information about sources, including title and author. E.D.3

W3.5 List and document sources using a given format. E.D.3

W4.5 Cite sources of information using a standard method of documentation. E.D.3

The student uses resources.

W2.6 Use resources such as computers, word processing software, dictionaries and thesauruses to make choices when writing. E.A.7

W3.6 Compose and edit a composition with a word processing program. E.A.7

Not assessed at the state level.

N=Numeration

MEA=Measurement

E&C=Estimation and Computation

F&R=Functions and Relationships

G=Geometry

S&P=Statistics and Probability

PS=Process Skills (The Process Skills include Problem-Solving, Communication, Reasoning, and Connections.)

NOTE: All the Extended GLEs for Process Skills are for local assessment.

**Math Performance Standards
(Extended Grade Level Expectations)**

**Content Standard A: Mathematical facts, concepts, principles, and theories
Numeration: Understand and use numeration**

Numeration Performance Standards that apply to grade 3: **M1.1.1** Read, write, order, count, and model one-to-one correspondence with whole numbers to 100. **M1.1.2** Use, model, and identify place value positions of 1's, 10's, and 100's. **M1.1.3** Model and explain the processes of addition and subtraction, describing the relationship between the operations. **M1.1.4** Select and use various representations of ordinal and cardinal numbers. **M1.1.5** Identify, model, and label simple fractions, describing and defining them as equal parts of a whole, a region, or a set. **M1.1.6** Identify, describe, and extend patterns inherent in the number system. Skip count by 2's, 5's, and 10's. Add and subtract by 10. Identify even and odd numbers. **M1.1.7** Demonstrate the commutative and identity properties of addition.

Numeration Performance Standards that apply to grades 4-6: **M1.2.1** Read, write, model, order, and count with positive whole numbers to 1,000,000 and negative whole numbers. **M1.2.2** Use, model, and identify place value positions from 0.001 to 1,000,000. **M1.2.3** Model and explain the processes of multiplication and division. Describe the relationships among the four basic operations. **M1.2.4** Identify and describe different uses for the same numerical representation. **M1.2.5** Model and explain the process of adding and subtracting fractions with common denominators and decimals that represent money. **M1.2.6** Identify and describe factors and multiples including those factors and multiples common to a pair or set of numbers. **M1.2.7** Demonstrate the commutative and identity properties of multiplication.

Numeration Performance Standards that apply to grades 7-8: **M1.3.1** Read, write, model, and order real numbers, explaining scientific notation, exponents, and percents. **M1.3.2** Model counting in a different base system. **M1.3.3** Translate between equivalent representations of the same number. Select a representation that is appropriate for the situation. **M1.3.4** Describe and model the relationship of fractions to decimals, percents, ratios, and proportions. **M1.3.5** Use, explain, and define the rules of divisibility, prime and composite numbers, multiples, and order of operations. **M1.3.6** Use commutative, identity, associative, and distributive properties with variables.

Numeration Performance Standards that apply to grades 9-10: **M1.4.1** Read, write, model, order, and define real numbers and subsets. **M1.4.2** Add in a different base system. **M1.4.3** Compare and contrast the relationship between various applications of the same operation. **M1.4.4** Translate between equivalent representations of the same exponential expression. **M1.4.5** Recognize, describe, and use properties of the real number system.

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Understanding Numbers			
<p>The student demonstrates conceptual understanding</p> <ul style="list-style-type: none"> • Of whole numbers by <p>[3/4] N-1 Rote counting single digit numbers to 5</p> <p>[3/4] N-2 Copying numbers</p> <p>[3/4] N-3 Identifying first and last</p>	<p>The student demonstrates conceptual understanding</p> <ul style="list-style-type: none"> • Of whole numbers by <p>[5/6] N-1 Rote counting single digit numbers to 12 (e.g., counting using a number line)</p> <p>[5/6] N-2 Reading and writing/reproducing single digit numbers</p> <p>[5/6] N-3 Identifying first, second, and last</p> <p>[5/6] N-4 Counting objects to 5</p>	<p>The student demonstrates conceptual understanding</p> <ul style="list-style-type: none"> • Of whole numbers by <p>[7/8] N-1 Counting to 20 or above</p> <p>[7/8] N-2 Reading and writing two digit numbers</p> <p>[7/8] N-3 Identifying place value of ones and tens (ID)</p> <p>[7/8] N-4 Identifying first, second, third, fourth, and last</p> <ul style="list-style-type: none"> • Of simple fractions <p>[7/8] N-5 Identifying whole and $\frac{1}{2}$</p>	<p>The student demonstrates conceptual understanding</p> <ul style="list-style-type: none"> • Of whole numbers by <p>[9/10] N-1 Identifying place value of hundreds.</p> <p>[9/10] N-2 Ordering numbers from smallest to largest</p> <ul style="list-style-type: none"> • Of simple fractions <p>[9/10] N-3 Identifying whole, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$</p>

**Math Performance Standards
(Extended Grade Level Expectations)**

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Understanding Meaning of Operations			
<p>The student demonstrates understanding of mathematical operations by</p> <p>[3/4] N-4 Demonstrating that objects represent a quantity (L)</p>	<p>The student demonstrates understanding of mathematical operations by</p> <p>[5/6] N-5 Demonstrating some and none (L)</p>	<p>The student demonstrates understanding of mathematical operations by</p> <p>[7/8] N-6 Using manipulatives to demonstrate the inverse relationship between subtraction and addition (L)</p>	<p>The student demonstrates understanding of mathematical operations by</p> <p>[9/10] N-4 Using models, explanations, number lines or real-life situations describing or illustrating the processes of multiplication (L)</p>
Number Theory			
<p>No Extended GLEs at this grade level.</p>	<p>The student demonstrates conceptual understanding of number theory by</p> <p>[5/6] N-6 Using manipulatives to demonstrate the commutative property of addition (L)</p> <p>[5/6] N-7 Using manipulatives to demonstrate the identity property of addition (L)</p>	<p>The student demonstrates conceptual understanding of number theory by</p> <p>[7/8] N-7 Identifying or using patterns in the number system by skip counting by 5's and 10's</p>	<p>The student demonstrates conceptual understanding of number theory by</p> <p>[9/10] N-5 Describing or illustrating commutative or identity properties of addition or multiplication using manipulatives (L)</p>
<p>Early Entry Points</p> <ul style="list-style-type: none"> • Of whole numbers by <p>Demonstrating the concept of one (e.g., hit the switch one time, give me one, etc.)</p> <ul style="list-style-type: none"> • Of simple fractions <p>Identifying that whole is the sum of parts (e.g., identifying objects as whole or not whole)</p>	<p>Early Entry Points</p> <ul style="list-style-type: none"> • Of whole numbers by <p>Demonstrating the concept of one (e.g., hit the switch one time, give me one, etc.)</p> <ul style="list-style-type: none"> • Of simple fractions <p>Identifying that whole is the sum of parts (e.g., identifying objects as whole or not whole)</p>	<p>Early Entry Points</p> <ul style="list-style-type: none"> • Of whole numbers by <p>Demonstrating the concept of one (e.g., hit the switch one time, give me one, etc.)</p> <ul style="list-style-type: none"> • Of simple fractions <p>Identifying that whole is the sum of parts (e.g., identifying objects as whole or not whole)</p>	<p>Early Entry Points</p> <ul style="list-style-type: none"> • Of whole numbers by <p>Demonstrating the concept of one (e.g., hit the switch one time, give me one, etc.)</p> <ul style="list-style-type: none"> • Of simple fractions <p>Identifying that whole is the sum of parts (e.g., identifying objects as whole or not whole)</p>

**Math Performance Standards
(Extended Grade Level Expectations)**

**Content Standard A: Mathematical facts, concepts, principles, and theories
Measurement: Select and use systems, units, and tools of measurement**

Measurement Performance Standards that apply to grade 3: **M2.1.1** Compare and order objects by various measurable attributes including calendar, temperature, length, weight, capacity, area, and volume. **M2.1.2** Compare objects to standard and non-standard units to identify objects that are greater than, less than, and equal to, a given unit. **M2.1.3** Choose a unit of measure, estimate the length or weight of objects and then measure to check for reasonableness. **M2.1.4** Tell time to the nearest half hour, distinguishing between morning, afternoon, and evening. **M2.1.5** Identify coins, their value, and the value of given sets of coins.

Measurement Performance Standards that apply to grades 4-6: **M2.2.1** Estimate and measure weights, lengths, and temperatures to the nearest unit using the metric and standard systems. **M2.2.2** Identify and use equivalent measurements (e.g., 60 minutes = 1 hour, 7 days = 1 week). **M2.2.3** Use a variety of measuring tools; describe the attribute(s) they measure. **M2.2.4** Estimate and measure the dimensions of geometric figures. **M2.2.5** Tell time using analog and digital clocks identifying AM and PM; find elapsed time. **M2.2.6** Read, write, and use money notation, determining possible combinations of coins and bills to equal given amounts; count back change for any given situation.

Measurement Performance Standards that apply to grades 7-8: **M2.3.1** Estimate and measure various dimensions to a specified degree of accuracy. **M2.3.2** Estimate and convert measurements within the same system. **M2.3.3** Use a variety of methods and tools to construct and compare plane figures. **M2.3.4** Describe and apply the relationships between dimensions of geometric figures to solve problems using indirect measurement; describe and apply the concepts of rate and scale. **M2.3.5** Apply information about time zones and elapsed time to solve problems.

Measurement Performance Standards that apply to grades 9-10: **M2.4.1** Evaluate measurements for accuracy, precision, and error with respect to the measuring tools, methods, and the computational process. **M2.4.2** Estimate and convert measurements between different systems. **M2.4.3** Apply various measurement systems to describe situations and solve problems. **M2.4.4** Use indirect methods, including the Pythagorean Theorem and right triangle trigonometry, to find missing dimensions.

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Measurable Attributes	Measurable Attributes	Measurable Attributes and Measurement Techniques	Measurable Attributes and Measurement Techniques
<p>The student demonstrates an understanding of measurable attributes by</p> <p>[3/4] MEA-1 Identifying tools associated with measurement of time (e.g., calendars, clocks), temperature (thermometer), length (e.g., ruler), weight (e.g., scale), and capacity (e.g., teaspoon) (L)</p>	<p>The student demonstrates an understanding of measurable attributes by</p> <p>[5/6] MEA-1 Identifying same, bigger/smaller, shorter/taller, and/or more</p> <p>[5/6] MEA-2 Identifying coins (penny, nickel, dime, and quarter)</p>	<p>The student demonstrates an understanding of measurable attributes and ability to use measurement techniques by</p> <p>[7/8] MEA-1 Identifying units of measurement (calendar, money, time (morning, day, night), [linear, or distance)</p> <p>[7/8] MEA-2 Identifying value of a combination of coins</p> <p>[7/8] MEA-3 Identifying paper currency (1, 5, 10, 20)</p>	<p>The student demonstrates an understanding of measurable attributes and ability to use measurement techniques by</p> <p>[9/10] MEA-1 Using and applying basic units of measurement (calendar, money, time, [measurement, temperature, distance, or volume)</p> <p>[9/10] MEA-2 Using different coins or bills to show equivalent amounts</p>
<p>Early Entry Points</p> <p>Distinguish a coin from other objects as something of value</p> <p>Identifying that coins and bills can be exchanged for merchandise/goods/services</p> <p>Begin to gain awareness of concepts of length, volume/capacity, weight, area, and time</p>	<p>Early Entry Points</p> <p>Distinguish a coin from other objects as something of value</p> <p>Identifying that coins and bills can be exchanged for merchandise/goods/services</p> <p>Begin to gain awareness of concepts of length, volume/capacity, weight, area, and time</p>	<p>Early Entry Points</p> <p>Distinguish a coin from other objects as something of value</p> <p>Identifying that coins and bills can be exchanged for merchandise/goods/services</p> <p>Begin to gain awareness of concepts of length, volume/capacity, weight, area, and time</p>	<p>Early Entry Points</p> <p>Distinguish a coin from other objects as something of value</p> <p>Identifying that coins and bills can be exchanged for merchandise/goods/services</p> <p>Begin to gain awareness of concepts of length, volume/capacity, weight, area, and time</p>

Math Performance Standards (Extended Grade Level Expectations)

Content Standard A: Mathematical facts, concepts, principles, and theories.

Estimation and Computation: Perform basic arithmetic functions, make reasoned estimates, and select and use appropriate methods or tools

Estimation and Computation Performance Standards that apply to grade 3: **M3.1.1** Make reasonable estimates of “how many” and “how much”; estimate the results of simple addition and subtraction problems. **M3.1.2** Recall and use basic addition and subtraction facts orally and with paper and pencil without a calculator. **M3.1.3** Add and subtract whole numbers to 100 using a variety of models and algorithms. **M3.1.4** Model multiplication as repeated addition and grouping objects; model division as “sharing equally” and grouping objects.

Estimation and Computation Performance Standards that apply to grades 4-6: **M3.2.1** Describe and use a variety of estimation strategies including rounding to the appropriate place value, multiplying by powers of 10, and using front-end estimation to check the reasonableness of solutions. **M3.2.2** Recall and use basic multiplication and division facts orally, with paper and pencil without a calculator. **M3.2.3** Add and subtract whole numbers and fractions with common denominators to 12 and decimals, including money amounts, using models and algorithms. **M3.2.4** Multiply and divide multi-digit whole numbers by 2-digit numbers, limiting the 2-digit divisors to those that end in 0; multiply and divide decimals that represent money by whole numbers. **M3.2.5** Find equivalent fractions. Convert between fractions and mixed numbers. **M3.2.6** Develop and interpret scales and scale models.

Estimation and Computation Performance Standards that apply to grades 7-8: **M3.3.1** Apply, explain, and assess the appropriateness of a variety of estimation strategies including truncating and rounding to compatible numbers. **M3.3.2** Apply basic operations efficiently and accurately, using estimation to check the reasonableness of results. **M3.3.3** Add and subtract fractions, decimals, and percents. **M3.3.4** Multiply and divide rational numbers in various forms including fractions, decimals, and percents. **M3.3.5** Convert between equivalent fractions, decimals, percents, and proportions. Convert from exact to decimal representations of irrational numbers. **M3.3.6** Solve problems using ratios and proportions.

Estimation and Computation Performance Standards that apply to grades 9-10: **M3.4.1** Use estimation to solve problems and to check the accuracy of solutions; state whether the estimation is greater or less than the exact answer. **M3.4.2** Add and subtract real numbers using scientific notation, powers, and roots. **M3.4.3** Multiply and divide real numbers in various forms including scientific notation, powers, and roots. **M3.4.4** Select, convert, and apply an equivalent representation of a number for a specified situation. **M3.4.5** Use ratios and proportions to model and solve fraction and percent problems with variables.

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Estimation			
<p>The student determines reasonable answers to real-life situations, paper/pencil computations, or calculator results by</p> <p>[3/4] E&C-1 Identifying more or less with two broadly different options (L)</p>	<p>The student determines reasonable answers to real-life situations, paper/pencil computations, or calculator results by</p> <p>[5/6] E&C-1 Comparing groupings of similar objects using quantitative labels (more, less, a lot, a little, same) (L)</p>	<p>The student determines reasonable answers to real-life situations, paper/pencil computations, or calculator results by</p> <p>[7/8] E&C-1 Determining which number is closer to the amount in a given set (L)</p>	<p>The student determines reasonable answers to real-life situations, paper/pencil computations, or calculator results by</p> <p>[9/10] E&C-1 Rounding numbers to the nearest 10</p>
Computation			
<p>The student accurately solves problems (including real-world situations) by</p> <p>[3/4] E&C- 2 Adding and subtracting up to three using manipulatives (L)</p>	<p>The student accurately solves problems (including real-world situations) by</p> <p>[5/6] E&C-2 Performing simple addition (numbers 1-5)</p>	<p>The student accurately solves problems (including real-world situations) by</p> <p>[7/8] E&C-2 Performing double-digit addition and subtraction without regrouping</p>	<p>The student accurately solves problems (including real-world situations) by</p> <p>[9/10] E&C-2 Performs double-digit addition and subtraction with regrouping.</p> <p>[9/10] E&C-3 Multiplies single digit by single digit numbers</p>
<p>Early Entry Points</p> <p>Using manipulatives to demonstrate adding (put together) and subtracting (take away)</p>	<p>Early Entry Points</p> <p>Using manipulatives to demonstrate adding (put together) and subtracting (take away)</p>	<p>Early Entry Points</p> <p>Using manipulatives to demonstrate adding (put together) and subtracting (take away)</p>	<p>Early Entry Points</p> <p>Using manipulatives to demonstrate adding (put together) and subtracting (take away)</p>

Math Performance Standards (Extended Grade Level Expectations)

Content Standard A: Mathematical facts, concepts, principles, and theories

Functions and Relationships: Represent, analyze, and use patterns, relations, and functions

Functions and Relationships Performance Standards that apply to grade 3: **M4.1.1** Recognize, describe, create, and extend repeating and increasing patterns with a variety of materials including symbols, objects, and manipulatives. **M4.1.2** Generate and solve simple functions by identifying and applying addition and subtraction patterns. **M4.1.3** Use a calculator to find and extend patterns in the number system. **M4.1.4** Complete open space sentences with missing numbers; use appropriate vocabulary including greater than, less than, and equal to; and use the correct symbols.

Functions and Relationships Performance Standards that apply to grades 4-6: **M4.2.1** Use patterns and their extensions to make predictions and solve problems; describe patterns found in the number system including those formed by multiples, factors, perfect squares, and powers of 10. **M4.2.2** Generate and solve simple functions by identifying and applying multiplication and division patterns. **M4.2.3** Use a calculator to find a missing item in a number sequence. **M4.2.4** Use words, lists, and tables to represent and analyze patterns. **M4.2.5** Explain the purpose of variables and use them in open sentences to express relationships and describe simple functions.

Functions and Relationships Performance Standards that apply to grades 7-8: **M4.3.1** Identify numeric and geometric patterns to find the next term and predict the nth term. **M4.3.2** Identify and describe how a change in one variable in a function affects the remaining variables (e.g., how changing the length affects the area and volume of a rectangular prism). **M4.3.3** Use a calculator to find a missing item in arithmetic and a geometric sequence; predict the graph of each function. **M4.3.4** Translate among and use tables of ordered pairs, graphs on coordinate planes, and linear equations as tools to represent and analyze patterns. **M4.3.5** Find the value of a variable by evaluating formulas and algebraic expressions for given values.

Functions and Relationships Performance Standards that apply to grades 9-10: **M4.4.1** Identify, graph, and describe the graphs of basic families of functions including linear, absolute value, quadratic, and exponential using a graphing calculator. **M4.4.2** Create and solve linear and quadratic equations and inequalities. **M4.4.3** Create and solve simple systems of equations, algebraically and graphically, using a graphing calculator. **M4.4.4** Use discrete structures, such as networks, matrices, sequences, and iterations as tools to analyze patterns, expressions, and equations. **M4.4.5** Add, subtract, multiply, divide, and simplify rational expressions; add, subtract, and multiply polynomials.

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Describing Patterns and Functions			
<p>The student demonstrates conceptual understanding of functions by</p> <p>[3/4] F&R-1 Identifying the pattern of activities for a familiar schedule (L)</p> <p>[3/4] F&R-2 Identifying attributes of objects as same or different</p>	<p>The student demonstrates conceptual understanding of functions by</p> <p>[5/6] F&R-1 Reproducing simple patterns</p> <p>[5/6] F&R-2 Identifying and labeling collections of items by attribute (e.g., shapes, size, color) (L)</p>	<p>The student demonstrates conceptual understanding of functions by</p> <p>[7/8] F&R-1 Extending an alternating pattern of two or more objects, shapes, designs, or numbers (e.g., square, circle, square, circle)</p>	<p>The student demonstrates conceptual understanding of functions by</p> <p>[9/10] F&R-1 Extending a growing pattern by supplying the next attribute or number (e.g., 2, 4, 6, ____, ____)</p> <p>[9/10] F&R-2 Finding and supplying a missing element in a repeating pattern by attribute and numbers (e.g., circle, square, triangle, circle, ____, triangle)</p>
Modeling and Solving Equations and Inequalities			
<p>The student demonstrates algebraic thinking by</p> <p>[3/4] F&R-3 Identifying that sets contain nothing or one or more items (none and some) (L)</p>	<p>The student demonstrates algebraic thinking by</p> <p>[5/6] F&R-3 Making comparisons between sets (e.g., same, more, less) (L)</p> <p>[5/6] F&R-4 Demonstrating that objects defined by a shared attribute form a set (L)</p>	<p>The student demonstrates algebraic thinking by</p> <p>[7/8] F&R-2 Labeling an empty set as none or zero</p> <p>[7/8] F&R-3 Demonstrating an understanding of symbols =, +, -</p>	<p>The student demonstrates algebraic thinking by</p> <p>[9/10] F&R-3 Demonstrating an understanding of symbols =, +, -, (<, > ID)</p> <p>[9/10] F&R-4 Identifying that a box is used as a place holder (L)</p> <p>[9/10] F&R-5 Supplying the missing number for open sentences (L)</p>

**Math Performance Standards
(Extended Grade Level Expectations)**

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Functions and Relationships			
<p>Early Entry Points</p> <p>Recognizing attributes of objects as a foundation for sorting and classifying, e.g., a green car, a green ball, and a green cup share the attribute of being green; a square block, a square cracker and a square piece of paper share the attribute of being square shaped.</p>	<p>Early Entry Points</p> <p>Recognizing attributes of objects as a foundation for sorting and classifying, e.g., a green car, a green ball, and a green cup share the attribute of being green; a square block, a square cracker and a square piece of paper share the attribute of being square shaped.</p>	<p>Early Entry Points</p> <p>Recognizing attributes of objects as a foundation for sorting and classifying, e.g., a green car, a green ball, and a green cup share the attribute of being green; a square block, a square cracker and a square piece of paper share the attribute of being square shaped.</p>	<p>Early Entry Points</p> <p>Recognizing attributes of objects as a foundation for sorting and classifying, e.g., a green car, a green ball, and a green cup share the attribute of being green; a square block, a square cracker and a square piece of paper share the attribute of being square shaped.</p>

Math Performance Standards (Extended Grade Level Expectations)

Content Standard A: Mathematical facts, concepts, principles, and theories.
Geometry: Construct, transform, and analyze geometric figures.

Geometry Performance Standards that apply to grade 3: **M5.1.1** Identify, sort, describe, model, and compare circles, triangles, and rectangles including squares regardless of orientation. **M5.1.2** Identify, sort, describe, model, and compare solid figures including cubes, cylinders, and spheres. **M5.1.3** Identify and create examples of line symmetry; compare and describe given circles, triangles, and rectangles as larger, smaller, or congruent. **M5.1.4** Demonstrate conservation of area using drawings or manipulatives. **M5.1.5** Describe and identify geometric transformations including slides, flips, and turns. **M5.1.6** Use comparative directional and positional words: above, below, inside, outside, on, in, right and left, horizontal, vertical, and middle. **M5.1.7** Draw and build familiar shapes.

Geometry Performance Standards that apply to grades 4-6: **M5.2.1** Identify and compare various triangles and quadrilaterals according to their sides and/or angles. **M5.2.2** Compare and contrast plane and solid figures (e.g., circle/sphere, square/cube, triangle/pyramid) using relevant attributes, including the number of vertices, edges, and the number and shape of faces. **M5.2.3** Identify and model geometric figures that are congruent, similar, and/or symmetrical. **M5.2.4** Distinguish between area and perimeter; find both using a variety of methods including rulers, grid paper, and tiles. **M5.2.5** Identify and model transformations of geometric figures, describing the motions as slides, flips, or rotations. **M5.2.6** Locate and describe objects in terms of their position with and without compass directions; identify coordinates for a given point or locate points of given coordinates on a grid. **M5.2.7** Sketch and identify line segments, midpoints, intersections, parallel, and perpendicular lines.

Geometry Performance Standards that apply to grades 7-8: **M5.3.1** Identify, classify, compare, and sketch regular and irregular polygons. **M5.3.2** Model, identify, draw, and describe 3-dimensional figures including tetrahedrons, dodecahedrons, triangular prisms, and rectangular prisms. **M5.3.3** Apply the properties of equality and proportionality to solve problems involving congruent or similar shapes. **M5.3.4** Estimate and determine volume and surface areas of solid figures using manipulatives and formulas; estimate and find circumferences and areas of circles. **M5.3.5** Draw and describe the results of transformations including translations (slides), rotations (turns), reflections (flips), and dilations (shrinking or enlarging). **M5.3.6** Use coordinate geometry to represent and interpret relationships defined by equations and formulas including distance and midpoint. **M5.3.7** Draw, measure, and construct geometric figures including perpendicular bisectors, polygons with given dimensions and angles, circles with given dimensions, perpendicular and parallel lines.

Geometry Performance Standards that apply to grades 9-10: **M5.4.1** Identify and use the properties of polygons, including interior and exterior angles, and circles (including angles, arcs, chord, secants, and tangents) to solve problems. **M5.4.2** Create 2-dimensional representations of 3-dimensional objects. **M5.4.3** Identify congruent and similar figures using Euclidean and coordinate geometries; apply this information to solve problems. **M5.4.4** Use transformations to demonstrate geometric properties. **M5.4.5** Use coordinate geometry to graph linear equations, determine slopes of lines, identify parallel and perpendicular lines, and to find possible solutions to sets of equations. **M5.4.6** Construct geometric models, transformations, and scale drawings using a variety of methods including paper folding, compass, straight edge, protractor, and technology.

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Geometric Relationships			
<p>The student demonstrates an understanding of geometric relationships by</p> <p>[3/4] G-1 Identifying basic geometric shapes (triangle, circle, and square)</p>	<p>The student demonstrates an understanding of geometric relationships by</p> <p>[5/6] G-1 Identifying basic geometric shapes (triangle, circle, square, and rectangle)</p>	<p>The student demonstrates an understanding of geometric relationships by</p> <p>[7/8] G-1 Identifying basic geometric shapes (triangle, circle, square, rectangle, diamond, and oval)</p>	<p>The student demonstrates an understanding of geometric relationships by</p> <p>[9/10] G-1 Identifying or describing attributes of shapes (e.g., points, sides, edges, etc.)</p>
Similarity, Congruence, Symmetry, and Transformation of Shapes			
<p>The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformation of shapes by</p> <p>[3/4] G-2 Identifying shapes as same or different</p>	<p>The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformation of shapes by</p> <p>[5/6] G-2 Matching items with similar attributes (match the triangles)</p>	<p>The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformation of shapes by</p> <p>7/8] G-2 Matching a shape to a like shape in different position</p> <p>[7/8] G-3 Forming shapes by putting together other shapes (e.g., two square to form a rectangle) or subdividing shapes to make other shapes (e.g., fold paper in half) (L)</p>	<p>The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformation of shapes by</p> <p>[9/10] G-2 Comparing or describing triangles, rectangles, and circles as “larger than,” “smaller than,” or “congruent to” a given shape (ID)</p> <p>[9/10] G-3 Using manipulatives to turn and flip objects and shapes (L)</p> <p>[9/10] G-4 Forming a line or lines of symmetry in a two-dimensional shape</p>

**Math Performance Standards
(Extended Grade Level Expectations)**

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Perimeter, Area, Volume, and Surface Area			
<p>The student solves problems using perimeter or area by</p> <p>[3/4] G-3 Identifying that the sides of rectangular shapes (perimeter) can be measured (L)</p>	<p>The student solves problems using perimeter or area by</p> <p>[5/6] G-3 Identifying the perimeter of rectangular shapes</p>	<p>The student solves problems using perimeter or area by</p> <p>[7/8] G-4 Measuring perimeter using nonstandard units</p>	<p>The student solves problems using perimeter or area by</p> <p>[9/10] G-5 Measuring perimeter with the appropriate tools (e.g., ruler) and units (e.g., inches and feet) or determining area of rectangular shapes on grids</p> <p>[9/10] G-6 Determining area of shapes by covering them with nonstandard units (L)</p>
Position and Direction			
<p>The student demonstrates understanding of position and direction by</p> <p>[3/4] G-4 Identifying or demonstrating positions of objects such as on, inside, and outside (L)</p>	<p>The student demonstrates understanding of position and direction by</p> <p>[5/6] G-4 Identifying where an object is located relative to another object (in and out)</p>	<p>The student demonstrates understanding of position and direction by</p> <p>[7/8] G-5 Identifying where an object is located relative to another object (in and out, over and under, in front of and beside)</p>	<p>The student demonstrates understanding of position and direction by</p> <p>[9/10] G-7 Using a combination of directional terms (inside, outside, right, left, horizontal, vertical) to describe positions of objects (e.g., upper right-hand corner) (L)</p>
Construction			
<p>The student demonstrates a conceptual understanding of geometric drawings or constructions by</p> <p>[3/4] G-5 Tracing or matching two-dimensional shapes (L)</p>	<p>The student demonstrates a conceptual understanding of geometric drawings or constructions by</p> <p>[5/6] G-5 Tracing, matching, or drawing two-dimensional shapes (L)</p>	<p>The student demonstrates a conceptual understanding of geometric drawings or constructions by</p> <p>[7/8] G-6 Tracing, matching, or drawing two-dimensional shapes (L)</p>	<p>The student demonstrates a conceptual understanding of geometric drawings or constructions by</p> <p>[9/10] G-8 Drawing real-world objects that consist of geometric shapes (L)</p>
<p>Early Entry Points</p> <p>Using manipulatives of geometric shapes to create awareness of squares, triangles, circles</p>	<p>Early Entry Points</p> <p>Using manipulatives of geometric shapes to create awareness of squares, triangles, circles</p>	<p>Early Entry Points</p> <p>Using manipulatives of geometric shapes to create awareness of squares, triangles, circles</p>	<p>Early Entry Points</p> <p>Using manipulatives of geometric shapes to create awareness of squares, triangles, circles</p>

Math Performance Standards (Extended Grade Level Expectations)

Content Standard A: Mathematical facts, concepts, principles, and theories

Statistics and Probability: Formulate questions, gather and interpret data, and make predictions

Statistics and Probability Performance Standards that apply to grade 3: **M6.1.1** Collect, record, organize, display, and explain the classification of data. **M6.1.2** Describe data from a variety of visual displays including tallies, tables, pictographs, bar graphs, and Venn diagrams. **M6.1.3** Use the terms “maximum” and “minimum” when working with a data set. **M6.1.4** Find and record the possibilities of simple probability experiments; explain differences between chance and certainty, giving examples. **M6.1.5** Conduct a survey and tally the results.

Statistics and Probability Performance Standards that apply to grades 4-6: **M6.2.1** Collect, organize, and display data creating a variety of visual displays including tables, charts, and line graphs. **M6.2.2** Present the data using a variety of appropriate representations and explain the meaning of the data. **M6.2.3** Describe and interpret a data set using mean, median, mode, and range. **M6.2.4** Estimate whether a game is mathematically fair or unfair; analyze and present probability data using simple fractions. **M6.2.5** Conduct simple probability experiments using concrete materials and represent the results using fractions and probability.

Statistics and Probability Performance Standards that apply to grades 7-8: **M6.3.1** Collect, analyze, and display data in a variety of visual displays including frequency distributions, circle graphs, box and whisker plots, stem and leaf plots, histograms, and scatter plots with and without technology. **M6.3.2** Interpret and analyze information found in newspapers, magazines, and graphical displays. **M6.3.3** Determine and justify a choice of mean, median, or mode as the best representation of data for a practical situation. **M6.3.4** Make projections based on available data and evaluate whether or not inferences can be made given the parameters of the data. **M6.3.5** Use tree diagrams and sample spaces to make predictions about independent events. **M6.3.6** Design and conduct a simulation to study a problem and communicate the results.

Statistics and Probability Performance Standards that apply to grades 9-10: **M6.4.1** Analyze and draw inferences from a wide variety of data sources that summarize data; constructing graphical displays with and without technology. **M6.4.2** Determine the line of best fit and use it to predict unknown data values. **M6.4.3** Describe data, selecting measures of central tendencies and distribution, to convey information in the data. **M6.4.4** Analyze the validity of statistical conclusions and the use, misuse, and abuse of data caused by a wide variety of factors including choices of scale, inappropriate choices of measures of center, incorrect curve fitting, and inappropriate uses of controls or sample groups. **M6.4.5** Analyze data from multiple events and predict theoretical probability; find and compare experimental and theoretical probability for a simple situation, discussing possible differences between two results. **M6.4.6** Design, conduct, analyze, and communicate the results of multi-stage probability experiments.

Grades 3/4	Grades 5/6	Grades 7/8	Grades 9/10
Data Display			
<p>The student demonstrates an ability to classify and organize data by</p> <p>[3/4] S&P-1 Identifying collections within the environment (e.g., books, toys, etc.) (L)</p>	<p>The student demonstrates an ability to classify and organize data by</p> <p>[5/6] S&P-1 Sorting objects by different characteristics (e.g., height, food groups, etc.) (L)</p>	<p>The student demonstrates an ability to classify and organize data by</p> <p>[7/8] S&P-1 Creating simple tables, charts or graphs</p>	<p>The student demonstrates an ability to classify and organize data by</p> <p>[9/10] S&P-1 Graphing information about a problem</p>
Analysis and Central Tendency			
<p>The student demonstrates an ability to analyze data (comparing, explaining, interpreting, or justifying conclusions) by</p> <p>[3/4] S&P-2 Identifying that symbols may be used to represent objects and events (L)</p>	<p>The student demonstrates an ability to analyze data (comparing, explaining, interpreting, or justifying conclusions) by</p> <p>[5/6] S&P-2 Reading simple graphs or charts</p>	<p>The student demonstrates an ability to analyze data (comparing, explaining, interpreting, or justifying conclusions) by</p> <p>[7/8] S&P-2 Identifying which category in a table, chart, or graph has the most or the least</p>	<p>The student demonstrates an ability to analyze data (comparing, explaining, interpreting, or justifying conclusions) by</p> <p>[9/10] S&P-2 Using information from a table, chart, or graph</p>
Probability			
<p>The student demonstrates a conceptual understanding of probability by</p> <p>[3/4] S&P-3 Performing simple cause-and-effect experiments (e.g., hitting a switch) (L)</p>	<p>The student demonstrates a conceptual understanding of probability by</p> <p>[5/6] S&P-3 Identifying the likely outcome for a simple cause-and-effect relationship (e.g., what will happen when the switch is hit) (L)</p>	<p>The student demonstrates a conceptual understanding of probability by</p> <p>[7/8] S&P-3 Predicting outcome of chance events (e.g., rolling dice, tossing a coin) (L)</p>	<p>The student demonstrates a conceptual understanding of probability by</p> <p>[9/10] S&P-3 Predicting and recording outcomes of chance events (e.g., rolling dice, tossing a coin) (L)</p>

**Math Performance Standards
(Extended Grade Level Expectations)**

Statistics and Probability			
Early Entry Points	Early Entry Points	Early Entry Points	Early Entry Points
Predicting the next event in a given routine.	Predicting the next event in a given routine.	Predicting the next event in a given routine.	Predicting the next event in a given routine.
Identifying events that are likely (the light comes on when a switch is flipped)	Identifying events that are likely (the light comes on when a switch is flipped)	Identifying events that are likely (the light comes on when a switch is flipped)	Identifying events that are likely (the light comes on when a switch is flipped)
Identify events that are unlikely (snowfall in July)	Identify events that are unlikely (snowfall in July)	Identify events that are unlikely (snowfall in July)	Identify events that are unlikely (snowfall in July)

**Math Performance Standards
(Extended Grade Level Expectations)**

Content Standards B, C, D, and E: Process skills and abilities

Applying conceptual knowledge and skills as designated in all strands of Content Standard A by problem solving, communicating, reasoning, and making connections

Problem-Solving Performance Standards that apply to grade 3: **M7.1.1** Formulate problems from practical and mathematical activities. **M7.1.2** Develop and apply strategies including guess and check, modeling and acting out, drawings, and extending patterns to solve a variety of problems. **M7.1.3** Predict an answer before solving a problem and compare results to check for reasonableness.

Problem-Solving Performance Standards that apply to grades 4-6: **M7.2.1** Read and summarize a problem, using mathematical terms and symbols. **M7.2.2** Select and apply a variety of strategies including making a table, chart or list, drawing pictures, making a model, and comparing with previous experience to solve problems. **M7.2.3** Explain and verify results of the original problem and apply what was learned to new situations.

Problem-Solving Performance Standards that apply to grades 7-8: **M7.3.1** Analyze and summarize a problem using the relationships between the known facts and unknown information. **M7.3.2** Select, modify, and apply a variety of problem-solving strategies including graphing, inductive and deductive reasoning, Venn diagrams, and spreadsheets. **M7.3.3** Evaluate, interpret, and justify solutions to problems.

Problem-Solving Performance Standards that apply to grades 9-10: **M7.4.1** Recognize and formulate mathematical problems from within and outside the field of mathematics. **M7.4.2** Apply multi-step, integrated, mathematical problem-solving strategies, persisting until a solution is found or it is clear no solution exists. **M7.4.3** Verify the answer by using an alternative strategy.

Problem Solving: Understand and be able to select and use a variety of problem-solving strategies

Grade 3/4	Grade 5/6	Grade 7/8	Grade 9/10
<p>The student demonstrates an ability to problem solve by</p> <p>[3/4] PS-1 Using concrete representations to solve problem (e.g., manipulatives) (L)</p>	<p>The student demonstrates an ability to problem solve by</p> <p>[5/6] PS-1 Using concrete representations to solve problem (e.g., manipulatives) (L)</p> <p>[5/6] PS-2 Determining/selecting correct operation to solve problem (L)</p> <p>[5/6] PS-3 Identifying tool to solve problem (L)</p>	<p>The student demonstrates an ability to problem solve by</p> <p>[7/8] PS-1 Using concrete representations to solve problem (e.g., manipulatives) (L)</p> <p>[7/8] PS-2 Determining/selecting correct operation to solve problem (L)</p> <p>[7/8] PS-3 Identifying tool to solve problem (L)</p> <p>[7/8] PS-4 Employing strategy to solve problem (L)</p>	<p>The student demonstrates an ability to problem solve by</p> <p>[9/10] PS-1 Using concrete representations to solve problem (e.g., manipulatives) (L)</p> <p>[9/10] PS-2 Determining/selecting correct operation to solve problem (L)</p> <p>[9/10] PS-3 Identifying tool to solve problem (L)</p> <p>[9/10] PS-4 Employing strategy to solve problem (L)</p>

Math Performance Standards (Extended Grade Level Expectations)

Communication Performance Standards that apply to grade 3: **M8.1.1** Translate problems from everyday language into math language and symbols. **M8.1.2** Use manipulatives, models, pictures, and language to represent and communicate mathematical ideas. **M8.1.3** Use everyday language to explain thinking about problem solving strategies and solutions to problems.

Communication Performance Standards that apply to grades 4-6: **M8.2.1** Use the mathematical vocabulary appropriate to the problem. **M8.2.2** Represent mathematical and practical situations using concrete, pictorial, and symbolic representation. **M8.2.3** Organize and communicate mathematical problem solving strategies and solutions to problems.

Communication Performance Standards that apply to grades 7-8: **M8.3.1** Use math vocabulary, symbols, and notation to represent information in the problem. **M8.3.2** Represent a problem numerically, graphically, and symbolically; translate among these alternative representations. **M8.3.3** Use appropriate vocabulary, symbols, and technology to explain, justify, and defend mathematical solutions.]

Communication Performance Standards that apply to grades 9-10: **M8.4.1** Use appropriate technology to represent the information and ideas in a problem. **M8.4.2** Use numerical, graphic, and symbolic representations to support oral and written communication about math ideas. **M8.4.3** Explain, justify, and defend mathematical ideas, solutions, and methods to various audiences.

Communication: Form and use appropriate methods to define and explain mathematical relationships

Grade 3/4	Grade 5/6	Grade 7/8	Grade 9/10
The student communicates his or her mathematical thinking by	The student communicates his or her mathematical thinking by	The student communicates his or her mathematical thinking by	The student communicates his or her mathematical thinking by
[3/4] PS-2 Communicating procedure used to solve problems	[5/6] PS-4 Communicating procedure used to solve problems	[7/8] PS-5 Communicating procedure used to solve problems	[9/10] PS-5 Communicating procedure used to solve problems

Reasoning Performance Standards that apply to grade 3: **M9.1.1** Draw conclusions about mathematical problems. **M9.1.2** Find examples that support or refute mathematical statements. **M9.1.3** Explain why a prediction, estimation, or solution is reasonable.

Reasoning Performance Standards that apply to grades 4-6: **M9.2.1** Draw logical conclusions about mathematical situations. **M9.2.2** Given a rule or generalization, determine whether the example fits. **M9.2.3** Justify answers and mathematical strategies as reasonable.

Reasoning Performance Standards that apply to grades 7-8: **M9.3.1** Use informal deductive and inductive reasoning in both concrete and abstract contexts. **M9.3.2** State counterexamples to disprove statements. **M9.3.3** Justify and defend the validity of mathematical strategies and solutions using examples and counterexamples.

Reasoning Performance Standards that apply to grades 9-10: **M9.4.1** Follow and evaluate an argument, judging its validity using inductive or deductive reasoning and logic. **M9.4.2** Make and test conjectures. **M9.4.3** Use methods of proofs including direct, indirect, and counterexamples, to validate conjectures.

Reasoning: Use logic and reason to solve mathematical problems

Grade 3/4	Grade 5/6	Grade 7/8	Grade 9/10
The student demonstrates an ability to use logic and reason by	The student demonstrates an ability to use logic and reason by	The student demonstrates an ability to use logic and reason by	The student demonstrates an ability to use logic and reason by
[3/4] PS-3 Determining if results make sense	[5/6] PS-5 Determining if results make sense	[7/8] PS-6 Determining if results make sense	[9/10] PS-6 Determining if results make sense

**Math Performance Standards
(Extended Grade Level Expectations)**

Connections Performance Standards that apply to grade 3: **M10.1.1** Apply mathematical skills and processes to literature. **M10.1.2** Apply mathematical skills and processes to situations with self and family.

Connections Performance Standards that apply to grades 4-6: **M10.2.1** Apply mathematical processes to social studies. **M10.2.2** Apply mathematical skills and processes to situations with friends and school.

Connections Performance Standards that apply to grades 7-8: **M10.3.1** Apply mathematical skills and processes to science and humanities. **M10.3.2** Apply mathematical skills and processes to situations with peers and community.

Connections Performance Standards that apply to grades 9-10: **M10.4.1** Apply mathematical skills and processes to global issues. **M10.4.2** Describe how mathematics can be used in knowing how to prepare for careers.

Connections: Apply mathematical concepts and processes to situations within and outside of school.

Grade 3/4	Grade 5/6	Grade 7/8	Grade 9/10
<p>The student understands and applies mathematical skills and processes across the content strands by</p> <p>[3/4] PS-4 Using real-world contexts such as literature, self, and family</p>	<p>The student understands and applies mathematical skills and processes across the content strands by</p> <p>[5/6] PS-6 Using real-world contexts such as literature, self, and family</p>	<p>The student understands and applies mathematical skills and processes across the content strands by</p> <p>[7/8] PS-7 Using real-world contexts such as literature, self, and family</p>	<p>The student understands and applies mathematical skills and processes across the content strands by</p> <p>[9/10] PS-7 Using real-world contexts such as literature, self, and family</p>

Organization of Science Extended Grade Level Expectations

There are 7 science strands with sub-strands which are the same across all grade levels.

The strand notation of SA for example indicates: S for Science, A for Content Standard A. In strand SB, the S stands for Science, the B stands for Content Standard B, and so on through Strand G.

Grades 3-10

Content Standard	Strand	Sub-Strands
A1 Science as Inquiry and Process	SA -Understand the processes and applications of scientific inquiry.	<p>SA1 – Investigate problems, design and conduct repeatable scientific investigations, defend scientific arguments.</p> <p>SA2 – Scientific processes require integrity, logical reasoning, skepticism, openness, communication, peer review.</p> <p>SA3 – Understand culture, local knowledge, history, interaction with the environment, local applications provide opportunity for understanding scientific concepts and global issues.</p>

Grades 3-10

Content Standard	Strand	Sub-Strands
B1 -Concepts of Physical Science	SB -Understand the concepts, models, theories, universal principles, and facts that explain the physical world.	<p>SB1-Understand the concepts, models, theories, universal principles, and facts that explain the physical world.</p> <p>SB2-Understand the characteristic properties of matter and the relationship of these properties to their structure and behavior.</p> <p>SB3-Understand the interactions between matter and energy, including physical, chemical, and nuclear changes, and the effects of these interactions on physical systems.</p> <p>SB4-Understand motions, forces, their characteristics, and relationships, and natural forces and their effects.</p>

Grades 3-10

Content Standard	Strand	Sub-Strands
C1 -Concepts of Physical Science	SC -Understand the concepts, models, theories, facts, evidence, systems, and processes of life science.	<p>SC1-Understand how science explains changes in life forms over time, including genetics, heredity, the process of natural selections, and biological evolution.</p> <p>SC2-Understand the structure, function, behavior, development, life, cycles, and diversity of living organisms.</p> <p>SC3-Understand that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy.</p>

Grades 3-10

Content Standard	Strand	Sub-Strands
D1 -Concepts of Earth Science	SD - Understand the concepts, processes, theories, models, theories, evidence, and systems of earth and space sciences.	<p>SD1- Understand Earth’s geochemical cycles.</p> <p>SD2-Understand the origins, ongoing processes, and forces that shape the structure, composition, and physical history of the Earth.</p> <p>SD3-Understand the cyclical changes controlled by energy from the sun and by Earth’s position and motion in our solar system.</p> <p>SD4-Understand the theories regarding the evolution of the universe.</p>

Grades 3-10

Content Standard	Strand	Sub-Strands
E1 -Science and Technology	SE -Understand the relationships among science, technology, and science.	<p>SE1-Understand how scientific knowledge and technology are used in making decisions about issues, innovations, and responses to problems and everyday events.</p> <p>SE2-Understand that solving problems involves different ways of thinking, perspectives, and curiosity that lead to the exploration of multiple paths that are analyzed using scientific, technological, and social merits.</p> <p>SE3-Understand how scientific discoveries and technological innovations affect and are affected by our lives and cultures.</p>

Grades 3-10

Content Standard	Strand	Sub-Strands
F1 -Cultural, Social, Personal Perspectives, and Science	SF -Understand the dynamic relationships among scientific, cultural, social, and personal perspectives.	<p>SF1-Understand interrelationships among individuals, cultures, societies, science, and technology.</p> <p>SF2-Understand that some individuals, cultures, and societies use other beliefs and methods in addition to scientific methods to describe and understand the world.</p> <p>SF3-Understand the importance of recording and validating cultural knowledge.</p>

Grades 3-10

Content Standard	Strand	Sub-Strands
G1 -History and Nature of Science	SG -Understand the history and nature of science.	<p>SG1-Understand historical perspectives of scientific explanations demonstrate that scientific knowledge changes over time, building on prior knowledge.</p> <p>SG2-Understand that the advancement of scientific knowledge embraces innovation and requires empirical evidence, repeatable investigations, logical arguments, and critical review in striving for the best possible explanations of the natural world.</p> <p>SG3-Understand that scientific knowledge is ongoing and subject to change as new evidence becomes available through experimental and/or observational confirmation(s).</p> <p>SG4-Understand that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base.</p>

SCIENCE Extended Grade Level Expectations (Assessed in grades 4, 8, and 10)

A1-Science as Inquiry and Process			
<p>SA Students develop an understanding of the processes and applications of scientific inquiry.</p> <p>SA1 Students develop an understanding of the processes of science used to investigate problems, design and conduct repeatable scientific investigations, and defend scientific arguments.</p> <p>SA2 Students develop an understanding that the processes of science require integrity, logical reasoning, skepticism, openness, communication, and peer review.</p> <p>SA3 Students develop an understanding that culture, local knowledge, history, and interaction with the environment contribute to the development of scientific knowledge, and local applications provide opportunity for understanding scientific concepts and global issues.</p>			
Gr. 3/4	Gr. 5/6	Gr. 7/8	Gr. 9/10
<p>The student demonstrates understanding of the processes of science by</p> <ul style="list-style-type: none"> [3/4] SA1.1 Attending to a task in order to make an observation (L) <p>The student demonstrates an understanding of the attitudes and approaches to scientific inquiry by</p> <ul style="list-style-type: none"> [3/4] SA2.1 Asking questions about what can be observed (e.g., are days shorter in winter) (L) <p>The student demonstrates an understanding that interactions with the environment provide an opportunity for understanding scientific concepts by</p> <ul style="list-style-type: none"> [3/4] SA31.1 Indicating differences in local environmental conditions (e.g., hot/cold, wet/dry, light/dark, large/small, loud/quiet) (L) 	<p>The student demonstrates understanding of the processes of science by</p> <ul style="list-style-type: none"> [5/6] SA1.1 Providing descriptive information about what is seen/heard/felt (L) <p>The student demonstrates an understanding of the attitudes and approaches to scientific inquiry by</p> <ul style="list-style-type: none"> [5/6] SA2.1 Asking questions to gain information (e.g., are leaves on a tree all the same shape) (L) <p>The student demonstrates an understanding that interactions with the environment provide an opportunity for understanding scientific concepts by</p> <ul style="list-style-type: none"> [5/6] SA3.1 Observing features in the local environment (e.g., weather, land formations, commonly found animals) (L) 	<p>The student demonstrates understanding of the processes of science by</p> <ul style="list-style-type: none"> [7/8] SA1.1 Recording observations (L) <p>The student demonstrates an understanding of the attitudes and approaches to scientific inquiry by</p> <ul style="list-style-type: none"> [7/8] SA2.1 Asking questions that demonstrate understanding of cause-and-effect (L) <p>The student demonstrates an understanding that interactions with the environment provide an opportunity for understanding scientific concepts by</p> <ul style="list-style-type: none"> [7/8] SA3.1 Identifying self as interacting with the local environment (L) 	<p>The student demonstrates understanding of the processes of science by</p> <ul style="list-style-type: none"> [9/10] SA1.1 Recording, describing, and classifying observations (L) <p>The student demonstrates an understanding of the attitudes and approaches to scientific inquiry by</p> <ul style="list-style-type: none"> [9/10] SA2.1 Responding appropriately to questions based on observation/information (L) <p>The student demonstrates an understanding that interactions with the environment provide an opportunity for understanding scientific concepts by</p> <ul style="list-style-type: none"> [9/10] SA3.1 Observing what plants and /or animals live in the local environment (L)
<p>Early Entry Points</p> <p>Demonstrating the ability to investigate by looking at, touch, hearing, or smelling things in the environment</p>	<p>Early Entry Points</p> <p>Demonstrating the ability to investigate by looking at, touch, hearing, or smelling things in the environment</p>	<p>Early Entry Points</p> <p>Demonstrating the ability to investigate by looking at, touch, hearing, or smelling things in the environment</p>	<p>Early Entry Points</p> <p>Demonstrating the ability to investigate by looking at, touch, hearing, or smelling things in the environment</p>

SCIENCE Extended Grade Level Expectations (Assessed in grades 4, 8, and 10)

B1-Concepts of Physical Science			
<p>SB Students develop an understanding of the concepts, models, theories, universal principles, and facts that explain the physical world.</p> <p>SB1 Students develop an understanding of the characteristic properties of matter and the relationship of these properties to their structure and behavior.</p> <p>SB2 Students develop an understanding that energy appears in different forms, can be transformed from one form to another, can be transferred or moved from one place or system to another, may be unavailable for use, and is ultimately conserved.</p> <p>SB3 Students develop an understanding of the interactions between matter and energy, including physical, chemical, and nuclear changes, and the effects of these interactions on physical systems.</p> <p>SB4 Students develop an understanding of motions, forces, their characteristics and relationships, and natural forces and their effects.</p>			
Gr. 3/4	Gr. 5/6	Gr. 7/8	Gr. 9/10
<p>The student demonstrates an understanding of the structure and properties of matter by</p> <ul style="list-style-type: none"> [3/4] SB1.1 Identifying the basic characteristics of common objects (e.g., a rock is hard, water spills) <p>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by (L-4)</p> <ul style="list-style-type: none"> [3/4] SB2.1 Demonstrating that electricity can be turned on and off by flipping a switch <p>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by</p> <ul style="list-style-type: none"> [3/4] SB3.1 Identifying and naming two states of matter of water (liquid and ice) 	<p>The student demonstrates an understanding of the structure and properties of matter by</p> <ul style="list-style-type: none"> [5/6] SB1.1 Using simple descriptors such as color, size, shape, etc. to relate information about the properties of matter <p>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by (L-4)</p> <ul style="list-style-type: none"> [5/6] SB2.1 Identifying that objects need energy (e.g., a television needs electricity, cars need gas) <p>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by</p> <ul style="list-style-type: none"> [5/6] SB3.1 Identifying and naming the states of matter of water (ice, liquid, steam) 	<p>The student demonstrates an understanding of the structure and properties of matter by</p> <ul style="list-style-type: none"> [7/8] SB1.1 Using simple descriptors such as color, odor, texture, size, shape, etc. to relate information about the properties of matter <p>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by (L-4)</p> <ul style="list-style-type: none"> [7/8] SB2.1 Identifying familiar electrical devices <p>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by</p> <ul style="list-style-type: none"> [7/8] SB3.1 Identifying the physical changes commonly found in the environment (e.g., ice melts, leaves burn) 	<p>The student demonstrates an understanding of the structure and properties of matter by</p> <ul style="list-style-type: none"> [9/10] SB1.1 Identifying how matter can be composed of different substances (e.g., cement is made up of gravel and water) (ID) <p>The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by (L-4)</p> <ul style="list-style-type: none"> [9/10] SB2.1 Describing the ways in which objects get energy (e.g., changing the batteries in a CD player) <p>The student demonstrates an understanding of the interactions between matter and energy and the effects of these interactions on systems by</p> <ul style="list-style-type: none"> [9/10] SB3.1 Identifying an object as a liquid, solid, or gas

<p>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by (L-4)</p> <ul style="list-style-type: none"> • [3/4] SB4.1 Demonstrating ways objects can move (e.g., push, pull, drop, etc.) 	<p>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by (L-4)</p> <ul style="list-style-type: none"> • [5/6] SB4.1 Observing and describing the directional movement of objects 	<p>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by (L-4)</p> <ul style="list-style-type: none"> • [7/8] SB4.1 Identifying forces in the environment (e.g., what objects move faster, what objects are harder to push) 	<p>The student demonstrates an understanding of motions, forces, their characteristics, relationships, and effects by (L-4)</p> <ul style="list-style-type: none"> • [9/10] SB4.1 Observing and describing the movement of an object by its position, direction, and speed
<p>Early Entry Points Observing the changing state of water (e.g., ice to water)</p>	<p>Early Entry Points Observing the changing state of water (e.g., ice to water)</p>	<p>Early Entry Points Observing the changing state of water (e.g., ice to water)</p>	<p>Early Entry Points Observing the changing state of water (e.g., ice to water)</p>

ExGLEs are identified as Local (L) because they are for local assessment and will not be on a state assessment or they have been embedded in ExGLEs in other strands.

SCIENCE Extended Grade Level Expectations (Assessed in grades 4, 8, and 10)

C1-Concepts of Life Science			
<p>SC Students develop an understanding of the concepts, models, theories, facts, evidence, systems, and processes of life science.</p> <p>SC1 Students develop an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution.</p> <p>SC2 Students develop an understanding of the structure, function, behavior, development, life cycles, and diversity of living organisms.</p> <p>SC3 Students develop an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy.</p>			
Gr. 3/4	Gr. 5/6	Gr. 7/8	Gr. 9/10
<p>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution by</p> <ul style="list-style-type: none"> • [3/4] SC1.1 Identifying that parents of one species give birth to offspring of the same species (e.g., bears have bear cubs) <p>The student demonstrates an understanding the structure, function, behavior, development, life cycles, and diversity of living organisms by</p> <ul style="list-style-type: none"> • [3/4] SC2.1 Matching plants and animals to their habitats (e.g., fish live in water, birds live in trees) 	<p>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution by</p> <ul style="list-style-type: none"> • [5/6] SC1.1 Identifying that organisms differ from one species to another (e.g., cats to dogs) <p>The student demonstrates an understanding the structure, function, behavior, development, life cycles, and diversity of living organisms by</p> <ul style="list-style-type: none"> • [5/6] SC2.1 Identifying how habitats meet the needs of plants and animals (e.g., plants get nourishment from the soil) 	<p>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution by</p> <ul style="list-style-type: none"> • [7/8] SC1.1 Identifying similarities and differences among organisms (e.g., dogs with and without spots) <p>The student demonstrates an understanding the structure, function, behavior, development, life cycles, and diversity of living organisms by</p> <ul style="list-style-type: none"> • [7/8] SC2.1 Sequencing birth, growth, and death as part the of life cycle of the same plant or animal 	<p>The student demonstrates an understanding of how science explains changes in life forms over time, including genetics, heredity, the process of natural selection, and biological evolution by</p> <ul style="list-style-type: none"> • [9/10] SC1.1 Identifying characteristics that are inherited, passed down from parents (e.g., hair color, eye color) <p>The student demonstrates an understanding the structure, function, behavior, development, life cycles, and diversity of living organisms by</p> <ul style="list-style-type: none"> • [9/10] SC2.1 Identifying the purpose of different animal adaptations (e.g., why do seals have a layer of blubber)

<p>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by</p> <ul style="list-style-type: none"> • [3/4] SC3.1 Identifying living vs. non-living things 	<p>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by</p> <ul style="list-style-type: none"> • [5/6] SC3.1 Identifying that all organisms need food 	<p>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by</p> <ul style="list-style-type: none"> • [7/8] SC3.1 Identifying that plants need sunlight to grow 	<p>The student demonstrates an understanding that all organisms are linked to each other and their physical environments through the transfer and transformation of matter and energy by</p> <ul style="list-style-type: none"> • [9/10] SC3.1 Identifying that plants are eaten by animals, some animals eat only plants, (herbivores), some animals eat plants and animals (omnivores), and some animals eat other animals (carnivores)
<p>Early Entry Points Interacting with the environment through senses</p>	<p>Early Entry Points Interacting with the environment through senses</p>	<p>Early Entry Points Interacting with the environment through senses</p>	<p>Early Entry Points Interacting with the environment through senses</p>

ExGLEs are identified as Local (L) because they are for local assessment and will not be on a state assessment or they have been embedded in ExGLEs in other strands.

SCIENCE Extended Grade Level Expectations (Assessed in grades 4, 8, and 10)

D1-Concepts of Earth Science			
<p>SD Students develop an understanding of the concepts, processes, theories, models, evidence, and systems of earth and space sciences.</p> <p>SD1 Students develop an understanding of Earth’s geochemical cycles.</p> <p>SD2 Students develop an understanding of the origins, ongoing processes, and forces that shape the structure, composition, and physical history of the Earth.</p> <p>SD3 Students develop an understanding of the cyclical changes controlled by energy from the sun and by Earth’s position and motion in our solar system.</p> <p>SD4 Students develop an understanding of the theories regarding the evolution of the universe.</p>			
Gr. 3/4	Gr. 5/6	Gr. 7/8	Gr. 9/10
<p>The student demonstrates an understanding of geochemical cycles by</p> <ul style="list-style-type: none"> • [3/4] SD1.1 Identifying soil as separate from rocks and plants • [3/4] SD1.2 Identifying types of weather (e.g., hot, cold, wet) <p>The student demonstrates an understanding of the forces that shape Earth by</p> <ul style="list-style-type: none"> • [3/4] SD2.1 Identifying a variety of Earth’s features (e.g., rivers, lakes, mountains) <p>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth’s position and motion in our solar system by</p> <ul style="list-style-type: none"> • [3/4] SD3.1 Identifying night and day 	<p>The student demonstrates an understanding of geochemical cycles by</p> <ul style="list-style-type: none"> • [5/6] SD1.1 Describing characteristics of rocks • [5/6] SD1.2 Identifying types of weather relating to seasons <p>The student demonstrates an understanding of the forces that shape Earth by</p> <ul style="list-style-type: none"> • [5/6] SD2.1 Distinguishing water from land on a map <p>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth’s position and motion in our solar system by</p> <ul style="list-style-type: none"> • [5/6] SD3.1 Identifying that seasons repeat each year in a pattern 	<p>The student demonstrates an understanding of geochemical cycles by</p> <ul style="list-style-type: none"> • [7/8] SD1.1 Identifying that soil supports the growth of plants • [7/8] SD1.2 Identifying seasonal characteristics (e.g., it snows in winter, days are shorter in winter) <p>The student demonstrates an understanding of the forces that shape Earth by</p> <ul style="list-style-type: none"> • [7/8] SD2.1 Identifying that earth features can change (e.g., volcanoes erupt) <p>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth’s position and motion in our solar system by</p> <ul style="list-style-type: none"> • [7/8] SD3.1 Identifying the earth, sun, and moon 	<p>The student demonstrates an understanding of geochemical cycles by</p> <ul style="list-style-type: none"> • [9/10] SD1.1 Identifying that smaller rocks come from the weathering and breaking up of bigger rocks (ID) • [9/10] SD1.2 Relating states of water to weather (gas → cloud, liquid → rain, solid → snow) <p>The student demonstrates an understanding of the forces that shape Earth by</p> <ul style="list-style-type: none"> • [9/10] SD2.1 Identifying that water is a force of change (e.g., heavy rain causes landslides) <p>The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth’s position and motion in our solar system by</p> <ul style="list-style-type: none"> • [9/10] SD3.1 Identifying characteristics of the solar system (e.g., moon revolves around the earth)

<p>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by</p> <ul style="list-style-type: none"> • [3/4] SD4.1 Recognizing and using instruments of magnification (e.g., magnifying glass, binoculars) (L) 	<p>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by</p> <ul style="list-style-type: none"> • [5/6] SD4.1 Recognizing and using instruments of magnification (e.g., magnifying glass, binoculars) (L) 	<p>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by</p> <ul style="list-style-type: none"> • [7/8] SD4.1 Recognizing and using instruments of magnification (e.g., magnifying glass, binoculars, telescopes) (L) 	<p>The student demonstrates an understanding of the theories regarding the origin and evolution of the universe by</p> <ul style="list-style-type: none"> • [9/10] SD4.1 Recognizing and using instruments of magnification (e.g., magnifying glass, binoculars, telescopes) (L)
<p>Early Entry Points</p> <p>Demonstrating an awareness of changes in weather/temperature</p>	<p>Early Entry Points</p> <p>Demonstrating an awareness of changes in weather/temperature</p>	<p>Early Entry Points</p> <p>Demonstrating an awareness of changes in weather/temperature</p>	<p>Early Entry Points</p> <p>Demonstrating an awareness of changes in weather/temperature</p>

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SCIENCE Extended Grade Level Expectations (Assessed in grades 4, 8, and 10)

E1-Science and Technology

<p>SE Students develop an understanding of the relationships among science, technology, and society.</p> <p>SE1 Students develop an understanding of how scientific knowledge and technology are used in making decisions about issues, innovations, and responses to problems and everyday events.</p> <p>SE2 Students develop an understanding that solving problems involves different ways of thinking, perspectives, and curiosity that lead to the exploration of multiple paths that are analyzed using scientific, technological, and social merits.</p> <p>SE3 Students develop an understanding of how scientific discoveries and technological innovations affect and are affected by our lives and cultures.</p>			
Gr. 3/4	Gr. 5/6	Gr. 7/8	Gr. 9/10
<p>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by</p> <ul style="list-style-type: none"> [3/4] SE1.1 Restating a problem that the teacher has presented (L) <p>The student demonstrates an understanding that solving problems involves different ways of thinking, perspectives, and curiosity by</p> <ul style="list-style-type: none"> [3/4] SE2.1 Identifying a variety of tools (glue, scissors, etc.) and materials (e.g., paper, wood, plastic) <p>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by</p> <ul style="list-style-type: none"> [3/4] SE3.1 Identifying what materials found on earth are used for (e.g., a wooden house is made from trees) <p>Early Entry Points</p> <p>Using a variety of simple tools (e.g., paper clips, stapler, tape measure, etc.)</p>	<p>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by</p> <ul style="list-style-type: none"> [5/6] SE1.1 Identifying various options and solutions to a problem (L) <p>The student demonstrates an understanding that solving problems involves different ways of thinking, perspectives, and curiosity by</p> <ul style="list-style-type: none"> [5/6] SE2.1 Identifying a variety of tools and materials <p>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by</p> <ul style="list-style-type: none"> [5/6] SE3.1 Discriminating between human-made and natural objects <p>Early Entry Points</p> <p>Using a variety of simple tools (e.g., paper clips, stapler, tape measure, etc.)</p>	<p>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by</p> <ul style="list-style-type: none"> [7/8] SE1.1 Identifying steps in the problem-solving process (L) <p>The student demonstrates an understanding that solving problems involves different ways of thinking, perspectives, and curiosity by</p> <ul style="list-style-type: none"> [7/8] SE2.1 Matching a simple tool to its function <p>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by</p> <ul style="list-style-type: none"> [7/8] SE3.1 Identifying examples of technology (e.g., computer, telephones, electronic games, automobiles) <p>Early Entry Points</p> <p>Using a variety of simple tools (e.g., paper clips, stapler, tape measure, etc.)</p>	<p>The student demonstrates an understanding of how to integrate scientific knowledge and technology to address problems by</p> <ul style="list-style-type: none"> [9/10] SE1.1 Identifying ways that a problem can be solved through the use of technology (L) <p>The student demonstrates an understanding that solving problems involves different ways of thinking, perspectives, and curiosity by</p> <ul style="list-style-type: none"> [9/10] SE2.1 Identifying tools and their purposes (e.g., camera, hammer) <p>The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by</p> <ul style="list-style-type: none"> [9/10] SE3.1 Describing effects of technology on everyday life (e.g., washing machines, fish wheel, snow machines) <p>Early Entry Points</p> <p>Using a variety of simple tools (e.g., paper clips, stapler, tape measure, etc.)</p>

SCIENCE Extended Grade Level Expectations (Assessed in grades 4, 8, and 10)

F1-Cultural, Social, Personal Perspectives, and Science			
<p>SF Students develop an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives.</p> <p>SF1 Students develop an understanding of the interrelationships among individuals, cultures, societies, science, and technology.</p> <p>SF2 Students develop an understanding that some individuals, cultures, and societies use other beliefs and methods in addition to scientific methods to describe and understand the world.</p> <p>SF3 Students develop an understanding of the importance of recording and validating cultural knowledge.</p>			
Gr. 3/4	Gr. 5/6	Gr. 7/8	Gr. 9/10
<p>The student demonstrates an understanding the dynamic relationships among scientific, cultural, social, and personal perspectives by (L-4)</p> <ul style="list-style-type: none"> [3/4] SF1.1 Exploring local or traditional stories that explain a natural event (L) 	<p>The student demonstrates an understanding the dynamic relationships among scientific, cultural, social, and personal perspectives by (L-4)</p> <ul style="list-style-type: none"> [5/6] SF1.1 Exploring local or traditional stories that explain a natural event (L) 	<p>The student demonstrates an understanding the dynamic relationships among scientific, cultural, social, and personal perspectives by (L-4)</p> <ul style="list-style-type: none"> [7/8] SF1.1 Exploring local or traditional stories that explain a natural event (L) 	<p>The student demonstrates an understanding the dynamic relationships among scientific, cultural, social, and personal perspectives by (L-4)</p> <ul style="list-style-type: none"> [9/10] SF1.1 Exploring local or traditional stories that explain a natural event (L)

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SCIENCE Extended Grade Level Expectations (Assessed in grades 4, 8, and 10)

G1-History and Nature of Science			
<p>SG Students develop an understanding of the history and nature of science.</p> <p>SG1 Students develop an understanding that historical perspectives of scientific explanations demonstrate that scientific knowledge changes over time, building on prior knowledge.</p> <p>SG2 Students develop an understanding that the advancement of scientific knowledge embraces innovation and requires empirical evidence, repeatable investigations, logical arguments, and critical review in striving for the best possible explanations of the natural world.</p> <p>SG3 Students develop an understanding that scientific knowledge is ongoing and subject to change as new evidence becomes available through experimental and/or observational confirmation(s).</p> <p>SG4 Students develop an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base.</p>			
Gr. 3/4	Gr. 5/6	Gr. 7/8	Gr. 9/10
<p>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by</p> <ul style="list-style-type: none"> • [3/4] SG1.1 Demonstrating an understanding of cause-and-effect (e.g., when more water is added to a full glass, the water will spill out) <p>The student demonstrates an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base by</p> <ul style="list-style-type: none"> • [3/4] SG2.1 Identifying features in the natural world (e.g., trees, wind, clouds, grass, animals) 	<p>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by</p> <ul style="list-style-type: none"> • [5/6] SG1.1 Using a symbol to represent information/data <p>The student demonstrates an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base by</p> <ul style="list-style-type: none"> • [5/6] SG2.1 Distinguishing between the natural world and a man-made environment 	<p>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by</p> <ul style="list-style-type: none"> • [7/8] SG1.1 Making a record of observations over time (L) <p>The student demonstrates an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base by</p> <ul style="list-style-type: none"> • [7/8] SG2.1 Asking questions about the natural world (L) 	<p>The student demonstrates an understanding of the bases of the advancement of scientific knowledge by</p> <ul style="list-style-type: none"> • [9/10] SG1.1 Making a record of observations over time (L) <p>The student demonstrates an understanding that advancements in science depend on curiosity, creativity, imagination, and a broad knowledge base by</p> <ul style="list-style-type: none"> • [9/10] SG2.1 Asking questions about the natural world (L)
Early Entry Points	Early Entry Points	Early Entry Points	Early Entry Points
Interacting with the environment through senses	Interacting with the environment through senses	Interacting with the environment through senses	Interacting with the environment through senses

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Proficiency Descriptors

Proficiency descriptors for students taking the alternate assessment are included in this document.

Proficiency descriptors are statements that describe the knowledge and skills expected at different proficiency levels with respect to the content standards, performance standards, and grade-level expectations. Alaska has four proficiency levels: advanced, proficient, below proficient, and far below proficient. The proficiency level descriptors describe the expected level of performance at each of these four levels. See the **Appendix** for a further explanation of Alternate Achievement Standards and Proficiency Descriptors for the Alternate Assessment.

Special education teachers, content specialists, and parents met in April and November 2005 to develop draft proficiency descriptors for the alternate assessment. The state relied on the judgment and recommendations of these experienced special educators and reading, writing, and math teachers to determine a way to show individual growth across grade levels while providing access to the general education content. The committees decided that the proficiency descriptors and Extended Grade Level Expectations, version 1, would initially be presented in grade clusters: Grades 3-4, Grades 5-6, Grades 7-8, and Grades 9-10. Using the expectations of skills described in the proficiency descriptors, grade levels were assigned to the Extended Grade Level Expectations. The workgroups elected to use the same proficiency labels as the general education assessment uses (advanced, proficient, below proficient, and far below proficient).

A standard setting committee determines cut scores for the new alternate assessment and will use the proficiency descriptors during that process. During standard setting, the proficiency descriptors may be revised. They were formally by the State Board of Education in July 2007 (reading, writing, and mathematics) and in July 2008 (science). Currently, the draft proficiency descriptors function as a guide for teachers when instructing and assessing their students.



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PROFICIENCY LEVEL DESCRIPTORS - GRADES 3 AND 4

Proficiency Level	Reading	Writing	Mathematics	Score Ranges
Advanced	The student decodes or identifies simple sight words; identifies the main idea and/or main character from a story read aloud; identifies simple sight words in addition to his/her name; identifies all letter sound relationships; and blends more than 5 sounds to make words.	The student uses basic conventions of writing (e.g., capitalization, spacing/alignment, left to right); and communicates ideas to others by producing a graphic product (story/event) through the use of pictures and/or symbols.	The student rote counts single digit numbers to ten; identifies first, second, and last; identifies the basic geometric shapes of triangle, circle, square, and rectangle; and matches items with similar attributes (e.g., matches the triangles).	<u>Reading</u> 63 or above <u>Writing</u> 76 or above <u>Mathematics</u> 62 or above
Proficient	The student identifies signs and symbols; identifies letter sound relationships; blends sounds to make words; identifies a detail using pictures, symbols, or words from a story read aloud; identifies own name in print; and displays an understanding of print directionality.	The student reproduces/copies words using upper and lower case letters; writes/reproduces own first name; and orients graphics in legible format (right-side up, left to right).	The student rote counts single digit numbers to five; copies numbers; identifies first and last; identifies the basic geometric shapes of triangle, circle, and square; and matches items with the same attributes (e.g., matches blue triangles).	<u>Reading</u> 32-62 <u>Writing</u> 38-75 <u>Mathematics</u> 33-61
Below Proficient	The student handles books/literacy materials correctly; holds book upright, right direction; handles books/literacy materials correctly but without demonstration of directionality; identifies pictures and letters; points to words randomly, and is developing phonological awareness.	The student reproduces/copies upper and/or lowercase letters; and writes/reproduces simple strokes that form letters.	The student counts numbers less than five; identifies first or last, but not both; and identifies one of the basic geometric shapes (triangle, circle, or square).	<u>Reading</u> 8-31 <u>Writing</u> 7-37 <u>Mathematics</u> 6-32
Far Below Proficient	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	<u>Reading</u> 7 or below <u>Writing</u> 6 or below <u>Mathematics</u> 5 or below



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PROFICIENCY LEVEL DESCRIPTORS - GRADES 5 AND 6

Proficiency Level	Reading	Writing	Mathematics	Score Ranges
Advanced	The student reads a simple sentence of 3-5 or more words; identifies beginning and end of the sequence of events in the text; identifies or reads words of increasing complexity (e.g., more letters, more syllables); answers who, what, where questions about a passage read aloud; and follows 2-step written directions.	The student uses more conventions of writing (e.g., capitalization, end mark punctuation, letter/word order); and communicates ideas to others by producing a well-organized graphic product that uses complete sentences.	The student counts to 20 or above; graphs simple information; performs simple addition (using the numbers 1-12); creates a simple pattern; identifies more and less; identifies and names coins (penny, nickel, dime, and quarter); identifies value of coins; performs single-digit subtraction; and identifies where an object is located relative to another object (e.g., in and out, over and under).	<u>Reading</u> 77 or above <u>Writing</u> 67 or above <u>Mathematics</u> 61 or above
Proficient	The student identifies or reads simple sight words; reads simple sentences of 2-3 words; identifies the main idea and/or main character from a passage read aloud; and follows 1-step written directions.	The student communicates ideas to others by producing a story/event through the use of pictures and/or symbols; uses some basic conventions of writing (e.g., consistent use of capitalization and end mark punctuation, spacing/alignment, left to right); uses beginning (early phonetic) spelling as evidenced by the use of mostly consonants with a few vowels; and writes/reproduces own name, first and last.	The student rote counts single-digit numbers to 12; reads and writes/reproduces single-digit numbers; identifies first, second, and last; identifies the basic geometric shapes of triangle, circle, square, and rectangle; matches items with similar attributes (match the triangles); counts objects to five; identifies bigger/smaller, shorter/taller, and more; reads simple graphs or charts; reproduces simple patterns; identifies coins (penny, nickel, dime, and quarter); performs simple addition with the numbers 1-5; and identifies where an object is located relative to another object (in and out).	<u>Reading</u> 46-76 <u>Writing</u> 33-66 <u>Mathematics</u> 25-60
Below Proficient	The student displays an understanding of print directionality; identifies signs and symbols; identifies letters; identifies a detail using pictures, symbols, or words from a story read aloud; and identifies own name in print.	The student copies/reproduces words using upper and lower case letters; writes/reproduces own first name; and orients graphics in legible format (right-side up, left to right).	The student demonstrates the concept of one; rote counts to five; identifies first and last; identifies two geometric shapes; and identifies same/different.	<u>Reading</u> 11-45 <u>Writing</u> 10-32 <u>Mathematics</u> 8-24
Far Below Proficient	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	<u>Reading</u> 10 or below <u>Writing</u> 9 or below <u>Mathematics</u> 7 or below



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PROFICIENCY LEVEL DESCRIPTORS - GRADES 7 AND 8

Proficiency Level	Reading	Writing	Mathematics	Score Ranges
Advanced	The student decodes unfamiliar words using knowledge of letter-sound relationships (phonics), and word structure (base word, prefix, suffix); answers who, what (e.g., main idea), when, where, questions; identifies the theme or makes prediction about a reading passage; summarizes text accurately in correct sequence; and follows 3 or more step written directions.	The student uses a variety of simple sentences that support a topic; communicates by using a variety of words; uses conventions (e.g., capitalization, appropriate spacing, variety of ending punctuation marks such as exclamation and question mark); and correctly spells commonly used words.	The student skip counts by twos, fives, and tens; extends a simple pattern; interprets a simple graph; uses and applies basic units of measurement (e.g., time measurement, temperature, distance, and volume); identifies value of a combination of paper currency and coins; performs double-digit addition and subtraction with regrouping; and identifies whole, one-half, and one-quarter.	<u>Reading</u> 52 or above <u>Writing</u> 76 or above <u>Mathematics</u> 74 or above
Proficient	The student reads a simple sentence of 4-5 or more words; identifies beginning, middle, and end of the sequence of events in the text; obtains information using text features including pictures (illustrations for text), visual cues (e.g., chapter headings, bolded or italicized text); identifies or reads words of increasing complexity (e.g., 5 or more letters, or 2 or more syllables); identifies answers to who, what, where questions about a reading passage; and follows 2-step written directions.	The student communicates ideas by using complete sentences; communicates by choosing appropriate word choice related to the topic; and uses conventions of writing (e.g., capitalization, appropriate spacing, use of periods, and correct orientation of written letters and/or other graphics).	The student counts to 20 or above and skip counts by fives and tens; reads and writes/reproduces two-digit numbers; reads and writes two-digit numbers; identifies place value of ones and tens; creates simple tables, charts, or graphs; identifies which category of a table has the most or least; performs double-digit addition and subtraction without regrouping; identifies symbols +, -, and =; identifies units of measurement (e.g., time, money, linear, or distance); identifies value of a combination of coins; identifies paper currency (1, 5, 10, and 20); labels empty set as none or zero; identifies where an object is located relative to another object (e.g., in and out, over and under, in front of, and beside); and identifies whole and one-half.	<u>Reading</u> 33-51 <u>Writing</u> 41-75 <u>Mathematics</u> 52-73
Below Proficient	The student decodes simple words; identifies or reads simple sight words; reads simple sentences of 2-3 words; identifies story elements (main idea and/or main character) from a passage read aloud; and follows 1-step written directions.	The student communicates ideas to others (a story/event) by the use of one or two pictures and/or symbols; and uses some conventions of writing (e.g., capitalization and punctuation, spacing/alignment, left to right). There is a significant need for additional instructional opportunities to achieve the proficient level.	The student rote counts single-digit numbers; reads and writes/reproduces single-digit numbers; identifies first, second, and third in activities; identifies the basic geometric shapes of triangle, circle, and square; matches items with like attributes; and identifies coins (penny, nickel, dime, and quarter).	<u>Reading</u> 12-32 <u>Writing</u> 16-40 <u>Mathematics</u> 22-51
Far Below Proficient	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	<u>Reading</u> 11 or below <u>Writing</u> 15 or below <u>Mathematics</u> 21 or below



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PROFICIENCY LEVEL DESCRIPTORS - GRADES 9 AND 10

Proficiency Level	Reading	Writing	Mathematics	Score Ranges
Advanced	The student answers who, what, when, where, and why questions about a reading passage; uses strategies for decoding unfamiliar words and reads sentences with increasingly complex text; understands the difference between fact and opinion; and follows more complex written directions.	The student shows increasing complexity in sentence structure; consistently uses supporting details that are related to the topic; consistently organizes information about a topic in a variety of forms for different audiences and purposes that communicates a clear message; and corrects errors in spelling, capitalization (including proper nouns), end punctuation, and commas.	The student performs addition of multiple single-digit numbers; uses simple patterns to solve problems; determines the amount of money needed for a purchase; divides single-digit numbers by single-digit numbers; and identifies whole, one-half, one-quarter, one-third, and three-fourths.	<u>Reading</u> 57 or above <u>Writing</u> 82 or above <u>Mathematics</u> 81 or above
Proficient	The student answers who (main character), what (main idea, problem and solution), when and where (setting) questions about a reading passage; identifies the theme and makes predictions about a reading passage; summarizes text accurately in correct sequence; decodes unfamiliar words using knowledge of letter-sound relationships (phonics) and word structure (base word, prefix, suffix); and follows multi-step written directions to complete a task.	The student produces a variety of simple sentences that support a topic; communicates ideas for different audiences by using a variety of purposes that clearly communicates a message; uses simple editing strategies, such as checking for correct capitalization, punctuation and spelling.	The student performs double-digit addition and subtraction with regrouping; uses and applies basic units of measurement (e.g., time, measurement, temperature, distance, or volume); multiplies single-digit numbers by single-digit numbers; rounds numbers to the nearest ten; and identifies whole, one-half, one-quarter, and three-quarters.	<u>Reading</u> 43-56 <u>Writing</u> 47-81 <u>Mathematics</u> 63-80
Below Proficient	The student reads simple sentences of 2-3 words; answers one who, what, or where question about a passage read aloud; and follows 1- and 2-step written directions.	The student exhibits a limited or an unfocused idea that does not support a topic; communicates own ideas by using incomplete and complete sentences; and edits some errors in punctuation and capitalization.	The student reads and writes two-digit numbers; identifies size (bigger and smaller); reads a simple graph; identifies properties of basic geometric shapes (triangle, circle, and square); finds and supplies the missing element in a repeating pattern; and sorts coins by their value.	<u>Reading</u> 22-42 <u>Writing</u> 24-46 <u>Mathematics</u> 24-62
Far Below Proficient	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	There is a significant need for additional instructional opportunities to achieve the proficient level.	<u>Reading</u> 21 or below <u>Writing</u> 23 or below <u>Mathematics</u> 23 or below



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PROFICIENCY LEVEL DESCRIPTORS - GRADE 4

Proficiency Level	Science	Score Range
Advanced	The student demonstrates a highly developed conceptual understanding of the processes and content of science by identifying or demonstrating an understanding of: cause-and-effect (e.g., when more water is added to a full glass, the water will spill out); the concept that living things reproduce; basic characteristics of common objects (rock is hard, etc.); states of matter of water; living and non-living things; a variety of Earth's features and features in the natural world; types of weather; the relationship of plants and animals to their habitats; tools/materials and their uses; what materials found on earth are used for; transfer of energy (e.g., electricity can be turned on and off by a switch); and ways objects can move.	44 or above
Proficient	The student demonstrates a basic conceptual understanding of the processes and content of science by identifying or demonstrating an understanding of: cause-and-effect (e.g., when more water is added to a full glass, the water will spill out); the concept that living things reproduce; basic characteristics of common objects (rock is hard, etc.); states of matter of water; living and non-living things; a variety of Earth's features and features in the natural world; types of weather; the relationship of plants and animals to their habitats; tools/materials and their uses; what materials found on earth are used for; transfer of energy (e.g., electricity can be turned on and off by a switch); and ways objects can move.	24-43
Below Proficient	The student shows a partial understanding of the processes and content of science by identifying or demonstrating an understanding of: cause-and-effect (e.g., when more water is added to a full glass, the water will spill out); the concept that living things reproduce; basic characteristics of common objects (rock is hard, etc.); states of matter of water; living and non-living things; a variety of Earth's features and features in the natural world; types of weather; the relationship of plants and animals to their habitats; tools/materials and their uses; what materials found on earth are used for; transfer of energy (e.g., electricity can be turned on and off by a switch); and ways objects can move.	12-23
Far Below Proficient	The student did not display a minimal understanding of science processes or content as described in the extended grade level expectations.	11 or below



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PROFICIENCY LEVEL DESCRIPTORS - GRADE 8

Proficiency Level	Science	Score Range
Advanced	The student demonstrates a highly developed conceptual understanding of the processes and content of science by identifying or demonstrating an understanding of: the physical changes commonly found in the environment; the concept that organisms differ from one species to another; features of geophysical events; the earth, sun, and moon; seasonal characteristics; the uses of technology; simple descriptors to relate information about an object; familiar electronic devices; directional movement of objects; the stages of life cycles; the connection between living organisms and their environment; and tools to their function.	44 or above
Proficient	The student demonstrates a basic conceptual understanding of the processes and content of science by identifying or demonstrating an understanding of: the physical changes commonly found in the environment; the concept that organisms differ from one species to another; features of geophysical events; the earth, sun, and moon; seasonal characteristics; the uses of technology; simple descriptors to relate information about an object; familiar electronic devices; directional movement of objects; the stages of life cycles; the connection between living organisms and their environment; and tools to their function.	29-43
Below Proficient	The student shows a partial understanding of the processes and content of science by identifying or demonstrating an understanding of: the physical changes commonly found in the environment; the concept that organisms differ from one species to another; features of geophysical events; the earth, sun, and moon; seasonal characteristics; the uses of technology; simple descriptors to relate information about an object; familiar electronic devices; directional movement of objects; the stages of life cycles; the connection between living organisms and their environment; and tools to their function.	16-28
Far Below Proficient	The student did not display a minimal understanding of science processes or content as described in the extended grade level expectations.	15 or below



**ALASKA COMPREHENSIVE SYSTEM OF STUDENT ASSESSMENT (CSSA)
ALTERNATE ASSESSMENT
STUDENT REPORT
2008 SPRING**

PROFICIENCY LEVEL DESCRIPTORS - GRADE 10

Proficiency Level	Science	Score Range
Advanced	The student demonstrates a highly developed conceptual understanding of the processes and content of science by identifying or demonstrating an understanding of: the basic characteristics of matter, including identifying objects as liquid, solid, or gas; the way in which objects get energy; how the states of water affect weather; purpose of different animal adaptations; the classification of animals as herbivores, carnivores, and omnivores; the characteristics of the solar system; the movement of objects; inherited traits; how the Earth's surface can change as a result of geological activity; tools and their purposes; and the characteristics of the solar system.	44 or above
Proficient	The student demonstrates a basic conceptual understanding of the processes and content of science by identifying or demonstrating an understanding of: the basic characteristics of matter, including identifying objects as liquid, solid, or gas; the way in which objects get energy; how the states of water affect weather; purpose of different animal adaptations; the classification of animals as herbivores, carnivores, and omnivores; the characteristics of the solar system; the movement of objects; inherited traits; how the Earth's surface can change as a result of geological activity; tools and their purposes; and the characteristics of the solar system.	26-43
Below Proficient	The student shows a partial understanding of the processes and content of science by identifying or demonstrating an understanding of: the basic characteristics of matter, including identifying objects as liquid, solid, or gas; the way in which objects get energy; how the states of water affect weather; purpose of different animal adaptations; the classification of animals as herbivores, carnivores, and omnivores; the characteristics of the solar system; the movement of objects; inherited traits; how the Earth's surface can change as a result of geological activity; tools and their purposes; and the characteristics of the solar system.	18-25
Far Below Proficient	The student did not display a minimal understanding of science processes or content as described in the extended grade level expectations.	17 or below

Appendix

Alternate Assessments are designed for students with significant cognitive disabilities that prevent them from taking the regular Standards Based Assessment (SBA) with or without accommodations. Students must meet the eligibility criteria as specified in the *Participation Guidelines* or located on the Alternate Assessment website in expanded format at <http://www.eed.state.ak.us/tls/assessment/AlternateOptional/05-06/ExpandedFormatPartCriteriaAug05.pdf>

Access Skills are the very basic, underlying social, motor, or communication skills needed by students to be able to accomplish the content learning standards and may be part of the student's Individualized Education Program's (IEP). Instead of teaching these skills in isolation, they may be embedded within the context of standards-based instructional activities. This allows the student to practice targeted IEP skills while providing access to the general education curriculum. Access skills are not part of the grade level expectations but when used during content-related activities, they meaningfully engage students in the content activities and expose students to new ideas while practicing necessary skills required in the student's IEP.

Age-Appropriate Instruction and Materials – Instruction of students should open up opportunities to access the content standards, not limit participation in the grade level instructional activities. Materials and activities should reflect the chronological age of the student and be consistent with the content, activities, materials, and expected outcomes for all students. Materials may be adapted to provide access for the student with an Individualized Education Program (IEP).

Content Standards are broad statements of what students should know and be able to do as a result of their public school experience.

Performance Standards are aligned to the Content Standards and are measurable statements of what students should know and be able to do in the age spans 5-7, 8-10, 11-14, and 15-18. Within these standards are **strands**, which are clusters of learning standards in the content area organized around a central idea or concept.

Grade Level Expectations (GLEs) are specific statements of the knowledge and/or skills that students are expected to demonstrate at each grade level. They serve as checkpoints that monitor progress towards the performance standards and ultimately, the content standards. The grade-level expectations do not replace the performance standards; rather, they serve to clarify the standards. They also serve to define and communicate eligible content, or the range of knowledge and skills from which instruction and the new assessments are designed.

Extended Grade Level Expectations (ExGLEs) are linked to the Performance Standards/Grade Level Expectations. They are measurable statements of what students with significant cognitive disabilities should know and be able to do at grade level. The extended grade level expectations are foundational skills and are less complex than the grade level expectations.

Early Entry Points describe the least complex skills and are prerequisites to the skills being assessed. They provide a range of options at which a student with a disability can access the learning standard at a less complex level. See above for definition of **Access Skills** and their relationship to standards.

Achievement Standards are descriptions of a test taker's competency, and **Alternate Achievement Standards (AAS)** are descriptions of competency for students who take the alternate assessment. There are four components of achievement standards.

1. **Labels** designating the different levels of student achievement. Alaska's proficiency levels are labeled: Advanced, Proficient, Below Proficient, and Far Below Proficient.

2. **Proficiency descriptors** are narrative statements describing student achievement at the different levels of competence useful in determining cut scores.
3. **Cut scores** separate the different achievement levels
4. **Exemplars** are samples of student work or student test results.