English Language Arts Grade 3

PA Alternate Eligible Content

Pa Core Standards:

- CC.1.3.3.A Determine the central message, lesson, or moral in literary test; explain how it is conveyed in test.
- CC.1.3.3.B Ask and answer questions about the text and make inferences from text; referring to text to support responses.
- CC.1.3.3.C Describe characters in a story and explain how their actions contribute to the sequence of events.

Assessment Anchor

E03.A-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.A-K.1.1	E03.A-K.1.1.1	E03AK1.1.1a	Answer a literal question about a text
Demonstrate	Ask and answer questions to demonstrate understanding	E03AK1.1.1b	Ask a question about the text
understanding of key ideas and details in	of a text, referring explicitly to the text as the basis for the answers.	E03AK1.1.1c	Identify details from the text to support answers to literal questions
literature.	E03.A-K.1.1.2 Recount poems, dramas, or stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.	E03AK1.1.2a	Identify the central message of a text
		E03AK1.1.2b	Retell stories from literature, including literature from different cultures
	E03.A-K.1.1.3 Describe characters in a story (e.g., their traits, motivations, feelings) and explain how their actions contribute to the sequence of events. Note: "Story" means narration of events told through the text types of story, drama, or poem.	E03AK1.1.3a	Identify characters and what they do during events in a story

PA Core Standard:

CC.1.3.3.D Explain the point of view of the author.

Assessment Anchor

E03.A-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.A-C.2.1 Demonstrate understanding of craft and structure in literature.	E03.A-C.2.1.1 Explain the point of view from which a story is narrated, including the difference between first and third-person narrations. Note: "Story" means narration of events told through the text types of story, drama, or poem.	E03AC2.1.1a	Identify who is telling the story

PA Core Standard:

CC.1.3.3.H Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters.

Assessment Anchor

E03.A-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.A-C.3.1 Demonstrate understanding of connections within, between, and/or among texts.	E03.A-C.3.1.1 Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series). Note: "Stories" means narration of events told through the text types of stories, dramas, or poems.	E03AC3.1.1a	Identify similarities or differences between 2 pieces of text by the same author

PA Core Standard

- CC.1.3.3.F Determine the meaning of words and phrases as they are used in grade-level text, distinguishing literal from non-literal meaning as well as shades of meaning among related words.
- CC.1.3.3.I Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade-level reading and content, choosing flexibly from a range of strategies and tools.
- CC.1.3.3.J Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships.

Assessment Anchor

E03.A-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.A-V.4.1 Demonstrate understanding of vocabulary and figurative language in literature.	E03.A-V.4.1.1 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. a. Use context as a clue to the meaning of a word or phrase.	E03AV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
	 b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). 	E03AV4.1.1b	Use a root word or affix to determine the meaning of a word
	E03.A-V.4.1.2 Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of	E03AV4.1.2a	Identify the literal and nonliteral meanings of a word or phrase
	words and phrases in context (e.g., take steps). b. Distinguish shades of meaning among related words (e.g., knew, believed, suspected, heard, wondered).	E03AV4.1.2b	Use relationships between words to aid comprehension

PA Core Standard:

- CC.1.2.3.A Determine the main idea of a text; recount the key details and explain how they support the main idea.
- CC.1.2.3.B Ask and answer questions about the text and make inferences from text; refer to text to support responses.
- CC.1.2.3.C Explain how a series of events, concepts, or steps in a procedure is connected within a text, using language that pertains to time, sequence, and cause/effect.

Assessment Anchor

E03.B-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.B-K.1.1	E03.B-K.1.1.1	E03BK1.1.1a	Answer a literal question about a text
Demonstrate understanding of key ideas and details in informational texts.	Answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	E03BK1.1.1b	Identify details from the text to support answers to literal questions
	E03.B-K.1.1.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.	E03BK1.1.2a	Identify the main idea/central idea of a text
		E03BK1.1.2b	Retell key ideas from the text
	E03.B-K.1.1.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.	E03BK1.1.3a	Identify a connection between two events or steps in the text

PA Core Standard:

CC.1.2.3.D Explain the point of view of the author.

CC.1.2.3.E Use text features and search tools to locate and interpret information.

Assessment Anchor

E03.B-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.B-C.2.1 Demonstrate	E03.B-C.2.1.1 Explain the point of view from which a text is written.	E03BC2.1.1a	Identify one point-of-view in the text
understanding of craft and structure in informational texts.	E03.B-C.2.1.2 Use text features (e.g., headings, graphics, charts) and search tools (e.g., key words, sidebars, hyperlinks) to efficiently locate information relevant to a given topic.	E03BC2.1.2a	Identify information located in text features

PA Core Standard:

- CC.1.2.3.G Use information gained from text features to demonstrate understanding of a text.
- CC.1.2.3.H Describe how an author connects sentences and paragraphs in a text to support particular points.
- CC.1.2.3.I Compare and contrast the most important points and key details presented in two texts on the same topic.

Assessment Anchor

E03.B-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.B-C.3.1 Demonstrate understanding of connections within, between, and/or among informational texts.	E03.B-C.3.1.1 Describe the logical connection between particular sentences and paragraphs to support specific points in a text (e.g., comparison, cause/effect, first/second/third in a sequence).	E03BC3.1.1a	Identify evidence that supports a connection between two points in the text
	E03.B-C.3.1.2 Compare and contrast the most important points and key details presented in two texts on the same topic.	E03BC3.1.2a	Identify similarities or differences between 2 pieces of text on the same topic
	E03.B-C.3.1.3 Use information gained from illustrations, maps, photographs, and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).		

PA Core Standard:

- CC.1.2.3.F Determine the meaning of words and phrases as they are used in grade-level text, distinguishing literal from nonliteral meaning as well as shades of meaning among related words.
- CC.1.2.3.J Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships.
- CC.1.2.3.K Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade-level reading and content, choosing flexibly from a range of strategies and tools.

Assessment Anchor

E03.B-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E03.B-V.4.1 Demonstrate	E03.B-V.4.1.1 Determine or clarify the meaning of unknown and	E03BV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
understanding of vocabulary and figurative language in informational texts.	multiple-meaning words and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. a. Use context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). c. Determine the meaning of general academic and domain-specific words and phrases used in a text. d. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).	E03BV4.1.1b	Use a root word or affix to determine the meaning of a word
	E03.B-V.4.1.2 Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of	E03BV4.1.2a	Identify the literal and nonliteral meanings of a word or phrase
	words and phrases in context (e.g., take steps). b. Distinguish shades of meaning among related words (e.g., knew, believed, suspected, heard, wondered).	E03BV4.1.2b	Use relationships between words to aid comprehension

English Language Arts Grade 4

PA Alternate Eligible Content

PA Core Standards:

- CC.1.3.4.A Determine a theme of a text from details in the text; summarize the text.
- CC.1.3.4.B Cite relevant details from the text to support what the text says explicitly and make inferences.
- CC.1.3.4.C Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text.

Assessment Anchor

E04.A-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.A-K.1.1	E04.A-K.1.1.1	E04AK1.1.1a	Answer a literal question about a text
Demonstrate understanding of key ideas and details in	Refer to details and examples in a text when explaining what the text explicitly says and when drawing	E04AK1.1.1b	Answer an inferential question about a text
literature	inferences from the text.	E04AK1.1.1c	Identify details from the text to support answers to literal or inferential questions
	E04.A-K.1.1.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text.	E04AK1.1.2a	Identify the theme/central message of a text
		E04AK1.1.2b	Summarize the text
	E04.A-K.1.1.3 Describe in depth a character, setting, or event in a story, drama, or poem, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).	E04AK1.1.3a	Identify details from the text to answer questions related to the characters, setting or events

PA Core Standards:

CC.1.3.4.D Compare and contrast an event or topic told from two different points of view.

Assessment Anchor

E04.A-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.A-C.2.1 Demonstrate understanding of craft and structure in literature.	E04.A-C.2.1.1 Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations. Note: "Stories" means narration of events told through the text types of stories, dramas, or poems.	E04AC2.1.1a	Identify who told the story in two different texts

PA Core Standards:

CC.1.3.4.H Compare and contrast similar themes, topics, and patterns of events in literature, including texts from different cultures.

Assessment Anchor

E04.A-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.A-C.3.1 Demonstrate understanding of connections within, between, and/or among texts.	E04.A-C.3.1.1 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures. Note: "Stories" means narration of events told through the text types of stories, dramas, or poems.	E04AC3.1.1a	Identify similarities or differences between 2 pieces of text about one topic

PA Core Standards:

- CC.1.3.4.F Determine the meaning of words and phrases as they are used in grade-level text, including figurative language.
- CC.1.3.4.I Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.
- CC.1.3.4.J Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being and that are basic to a particular topic.

Assessment Anchor

E04.A-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.A-V.4.1 Demonstrate understanding of vocabulary and figurative language in literature.	monstrate understanding of cabulary and figurative guage in literature. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase, including words or phrases that allude to significant characters found in literature (e.g., Herculean effort). b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).	E04AV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
		E04AV4.1.1b	Use a root word or affix to determine the meaning of a word
		E04AV4.1.2a	Identify the nonliteral meaning of words or phrases
 a. Explain the meaning of similes and metaphors in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their antonyms and synonyms. 	E04AV4.1.2b	Use relationships between words to aid comprehension	

PA Core Standards:

- CC.1.2.4.A Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- CC.1.2.4.B Refer to details and examples in text to support what the text says explicitly and make inferences.
- CC.1.2.4.C Explain events, procedures, ideas, or concepts in a text, including what happened and why, based on specific information in the text.

Assessment Anchor

E04.B-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.B-K.1.1	E04.B-K.1.1.1	E04BK1.1.1a	Answer a literal question about a text
Demonstrate understanding of key ideas and details in	Refer to details and examples in a text when explaining what the text says explicitly and when drawing	E04BK1.1.1b	Answer an inferential question about a text
informational texts.	inferences from the text.	E04BK1.1.1c	Identify details from the text to support answers to literal or inferential questions
	E04.B-K.1.1.2 Determine the main idea of a text and explain how it is	E04BK1.1.2a	Identify the main idea/central idea of a text
	supported by key details; summarize the text.	E04BK1.1.2b	Summarize the text
	E04.B-K.1.1.3 Explain events, procedures, ideas, steps, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	E04BK1.1.3a	Identify details from the text to answer questions about events, procedures, ideas, steps, or concepts

PA Core Standards:

CC.1.2.4.D Compare and contrast an event or topic told from two different points of view.

CC.1.2.4.E Use text structure to interpret information (e.g., chronology, comparison, cause/effect, problem/solution).

Assessment Anchor

E04.B-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.B-C.2.1 Demonstrate understanding of craft and structure in informational texts.	E04.B-C.2.1.1 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.	E04BC2.1.1a	Identify two points-of-view about one event or topic in a text
	E04.B-C.2.1.2 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information and text features in a text or part of a text.	E04BC2.1.2a	Identify the text structure or text features in a text

PA Core Standards:

- CC.1.2.4.G Interpret various presentations of information within a text or digital source and explain how the information contributes to an understanding of text in which it appears.
- CC.1.2.4.H Explain how an author uses reasons and evidence to support particular points in a text.
- CC.1.2.4.I Integrate information from two texts on the same topic to demonstrate understanding of that topic.

Assessment Anchor

E03.B-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.B-C.3.1 Demonstrate understanding of connections within, between, and/or among informational texts.	E04.B-C.3.1.1 Explain how an author uses reasons and evidence to support particular points in a text.	E04BC3.1.1a	Identify a piece of evidence that an author uses to support a specific point in the text
	E04.B-C.3.1.2 Integrate information from two texts on the same topic in order to demonstrate subject knowledge.	E04BC3.1.2a	Combine information from 2 pieces of text on the same topic
	E04.B-C.3.1.3 Interpret text features (e.g., headings, graphics, charts, timelines, diagrams) and/or make connections between text and the content of text features.		

PA Core Standards:

- CC.1.2.4.F Determine the meaning of words and phrases as they are used in grade-level text, including figurative language.
- CC.1.2.4.J Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being and that are basic to a particular topic.
- CC.1.2.4.K Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.

Assessment Anchor

E04.B-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E04.B-V.4.1 Demonstrate understanding of vocabulary and figurative language in informational texts.	E04.B-V.4.1.1 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.	E04BV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
	 a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph). c. Determine the meaning of general academic and domain-specific words or phrases used in a text. 	E04BV4.1.1b	Use a root word or affix to determine the meaning of a word
	E04.B-V.4.1.2 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	E04BV4.1.2a	Identify the nonliteral meaning of a word or phrase
a. Explain the meaning of similes and metaphors in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their antonyms and synonyms.	E04BV4.1.2b	Use relationships between words to aid comprehension	

English Language Arts Grade 5

PA Alternate Eligible Content

PA Core Standards:

- CC.1.3.5.A Determine a theme of a text from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
- CC.1.3.5.B Cite textual evidence by quoting accurately from the text to explain what the text says explicitly and make inferences.
- CC.1.3.5.C Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text.

Assessment Anchor

E05.A-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.A-K.1.1	E05.A-K.1.1.1	E05AK1.1.1a	Answer a literal question about a text
Demonstrate understanding of key	Quote accurately from a text when explaining what the text says explicitly and when drawing inferences	E05AK1.1.1b	Answer an inferential question about a text
ideas and details in literature	and/or making generalizations from the text.	E05AK1.1.1c	Identify details from the text to support answers to literal and inferential questions
Det det	E05.A-K.1.1.2 Determine a theme of a story, drama, or poem from details in the text, Compare and contrast two or more characters, settings, or events in a story, drama, or poem, drawing on specific details in the text (e.g., how characters interact) including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.	E05AK1.1.2a	Identify the theme/central message of a story, drama, or poem using key details/evidence from the text
		E05AK1.1.2b	Summarize the text
		E05AK1.1.2c	Identify specific details in the text to compare two characters, settings, or events
	E05.A-K.1.1.3 Describe characters in a story (e.g., their traits, motivations, feelings) and explain how their actions contribute to the sequence of events. Note: "Story" means narration of events told through the text types of story, drama, or poem.	E05AK1.1.3a	Identify how characters' actions contribute to the story

PA Core Standards:

CC.1.3.5.D Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

Assessment Anchor

E05.A-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.A-C.2.1	E05.A-C.2.1.1	E05AC2.1.1a	Identify the narrator's point-of-view
Demonstrate understanding of craft and structure in literature.	Describe how a narrator's or speaker's point of view influences how events are described; describe an author's purpose and explain how it is conveyed in the text.	E05AC2.1.1b	Describe the author's purpose (entertain, inform, or persuade) in a text

PA Core Standards:

CC.1.3.5.H Compare and contrast texts in the same genre on their approaches to similar themes and topics as well as additional literary elements.

Assessment Anchor

E05.A-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.A-C.3.1 Demonstrate understanding of connections within, between, and/or among texts.	E05.A-C.3.1.1 Compare and contrast stories in the same genre on their approaches to similar themes and topics. Note: "Stories" means narration of events told through the text types of stories, dramas, or poems.	E05AC3.1.1a	Identify similarities or differences in two texts in the same genre

PA Core Standards:

- CC.1.3.5.F Determine the meaning of words and phrases as they are used in grade-level text, including interpretation of figurative language.
- CC.1.3.5.I Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies and tools.
- CC.1.3.5.J Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships.

Assessment Anchor

E05.A-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.A-V.4.1 Demonstrate understanding of	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).	E05AV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
vocabulary and figurative language in literature.		E05AV4.1.1b	Use a root word or affix to determine the meaning of a word
		E05AV4.1.2a	Identify the meaning of figurative language in context
	c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to	E05AV4.1.2b	Use relationships between words to aid comprehension

PA Core Standards:

- CC.1.2.5.A Determine two or more main ideas in a text and explain how they are supported by key details; summarize the text.
- CC.1.2.5.B Cite textual evidence by quoting accurately from the text to explain what the text says explicitly and make inferences.
- CC.1.2.5.C Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a text based on specific information in the text.

Assessment Anchor

E05.B-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.B-K.1.1	E05.B-K.1.1.1	E05BK1.1.1a	Answer a literal question about a text
Demonstrate understanding of key	Quote accurately from a text when explaining what the text says explicitly and when drawing inferences	E05BK1.1.1b	Answer an inferential question about a text
ideas and details in and/or making generalization informational texts.	and/or making generalizations from the text.	E05BK1.1.1c	Identify details from the text to support answers to literal and inferential questions
	E05.B-K.1.1.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.	E05BK1.1.2a	Summarize the text
		E05BK1.1.2b	Identify the main idea/central idea using key details/evidence from the text
	E05.B-K.1.1.3 Explain the relationships or interactions between two or more individuals, events, ideas, steps, or concepts in a historical, scientific, or technical text based on specific information in the text.	E05BK1.1.3a	Identify the relationship between two individuals, events, procedures, ideas, steps, or concepts in the text

PA Reporting Category: E05.B Informational Text PA Core Standards:

- CC.1.2.5.D Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
- CC.1.2.5.E Use text structure, in and among texts, to interpret information (e.g., chronology, comparison, cause/effect, problem/solution).

Assessment Anchor

E05.B-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.B-C.2.1 Demonstrate understanding of craft and structure in	E05.B-C.2.1.1 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.	E05BC2.1.1a	Identify similarities or differences in 2 points-of-view about one event or topic in a text
informational texts.	E05.B-C.2.1.2 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information and text features in two or more texts.	E05BC2.1.2a	Use text structure or text features to identify events, ideas, or concepts in a text

PA Core Standards:

- CC.1.2.5.G Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
- CC.1.2.5.H Determine how an author supports particular points in a text through reasons and evidence.
- CC.1.2.5.I Integrate information from several texts on the same topic to demonstrate understanding of that topic.

Assessment Anchor

E05.B-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.B-C.3.1 Demonstrate understanding of connections within,	E05.B-C.3.1.1 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).	E05BC3.1.1a	Identify evidence that supports an author's point in the text
between, and/or among informational texts.	E05.B-C.3.1.2 Integrate information from several texts on the same topic in order to demonstrate subject knowledge.	E05BC3.1.2a	Combine information from 2 or more pieces of text on the same topic
	E05.B-C.3.1.3 Interpret text features (e.g., headings, graphics, charts) and/or make connections between text and the content of text features.		

PA Core Standards:

- CC.1.2.5.F Determine the meaning of words and phrases as they are used in grade-level text, including interpretation of figurative language.
- CC.1.2.5.J Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships.
- CC.1.2.5.K Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.

Assessment Anchor

E05.B-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E05.B-V.4.1 Demonstrate understanding of	Demonstrate Determine or clarify the meaning of unknown and	E05BV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
vocabulary and figurative language in	5 reading and content, choosing flexibly from a range of strategies.	E05BV4.1.1b	Use a root word or affix to determine the meaning of a word
informational texts.	 a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis). c. Determine the meaning of general academic and domain-specific words and phrases used in a text. 	E05BV4.1.1c	Use relationships between words to aid comprehension
E05.B-V.4.1.2 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language (simile, metaphor, and personification) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.	E05BV4.1.2a	Identify meaning of figurative language in the context of a nonfiction text	

English Language Arts Grade 6

PA Alternate Eligible Content

PA Core Standards:

- CC.1.3.6.A Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- CC.1.3.6.B Cite textual evidence to support analysis of what the text says explicitly as well as inferences and/or generalizations drawn from the text.
- CC.1.3.6.C Describe how a particular story or drama's plot unfolds in a series of episodes, as well as how the characters respond or change as the plot moves toward a resolution.

Assessment Anchor

E06.A-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.A-K.1.1 Demonstrate understanding of key ideas and details in literature	E06.A-K.1.1.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences and/or generalizations drawn from the text.	E06AK1.1.1a	Answer a literal question about a text
		E06AK1.1.1b	Answer an inferential question about a text
		E06AK1.1.1c	Identify details and evidence from the text to answer literal and inferential questions
	E06.A-K.1.1.2 Determine a theme or central idea of a text and how it is conveyed through relevant details; provide a summary of the text distinct from personal opinions or judgments.	E06AK1.1.2a	Identify the theme/central message of a story, drama, or poem using key details/evidence from the text
		E06AK1.1.2b	Summarize the text
	E06.A-K.1.1.3 Describe how the plot of a particular story, drama, or poem unfolds, as well as how the characters respond or change as the plot moves toward a resolution.	E06AK1.1.3a	Identify how the elements in the plot of a story interact

PA Core Standards:

- CC.1.3.6.D Determine an author's purpose in a text and explain how it is conveyed in the text.
- CC.1.3.6.E Analyze how the structure of a text contributes to the development of theme, setting, and plot.
- CC.1.3.6.F Determine the meaning of words and phrases as they are used in grade-level reading and content, including interpretation of figurative language in context.

Assessment Anchor

E06.A-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.A-C.2.1 Demonstrate understanding of craft and structure in literature.	E06.A-C.2.1.1 Determine an author's purpose in a text and explain how it is conveyed in the text; explain how an author develops the point of view of the narrator or speaker in a text; describe the effectiveness of the point of view used by the author.	E06AC2.1.1a	Identify how the narrator's point- of-view affects the story
	E06.A-C.2.1.2 Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.		
	E06.A-C.2.1.3 Determine how the author uses the meaning of words or phrases, including figurative and connotative meanings, in a text; analyze the impact of a specific word choice on meaning and tone.	E06AC2.1.3a	Identify the meaning of a word or phrase in context and how it makes the reader feel

PA Core Standards:

CC.1.3.6.H Compare and contrast texts in different forms or genres in terms of their approaches to similar themes and topics as well as their use of additional literary elements.

Assessment Anchor

E06.A-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.A-C.3.1 Demonstrate understanding of connections within, between, and/or among texts.	E06.A-C.3.1.1 Compare and contrast texts in different forms or genres (e.g., stories, dramas, poems, historical novels, fantasy stories) in terms of their approaches to similar themes and topics.	E06AC3.1.1a	Identify similarities or differences in two texts in different genres

PA Core Standards:

- CC.1.3.6.F Determine the meaning of words and phrases as they are used in grade-level reading and content, including interpretation of figurative language in context.
- CC.1.3.6.I Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.
- CC.1.3.6.J Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Assessment Anchor

E06.A-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.A-V.4.1 Demonstrate understanding of	Demonstrate Understanding of meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.	E06AV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
vocabulary and figurative language in literature.		E06AV4.1.1b	Use a root word or affix to determine the meaning of a word
		E06AV4.1.2a	Identify the meaning of figurative language in context
		E06AV4.1.2b	Use relationships between words to aid comprehension

PA Core Standards:

- CC.1.2.6.A Determine the central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
- CC.1.2.6.B Cite textual evidence to support analysis of what the text says explicitly as well as inferences and/or generalizations drawn from the text.
- CC.1.2.6.C Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text.

Assessment Anchor

E06.B-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.B-K.1.1	E06.B-K.1.1.1	E06BK1.1.1a	Answer a literal question about a
Demonstrate	Cite textual evidence to support analysis of what the text says explicitly as well as inferences and/or generalizations drawn from the text.		text
understanding of key ideas and details in		E06BK1.1.1b	Answer an inferential question about a text
informational texts.		E06BK1.1.1c	Identify details and evidence from the text to answer literal and inferential questions
	E06.B-K.1.1.2 Determine a central idea of a text and how it is conveyed through relevant details; provide a summary of the text distinct from personal opinions or judgments.	E06BK1.1.2a	Identify the main idea/central idea using key details/evidence from the text
		E06BK1.1.2b	Summarize the text
	E06.B-K.1.1.3 Analyze in detail how a key individual, event, or idea is introduced, illustrated, or elaborated in a text (e.g., through examples, anecdotes, or sequence of steps).	E06BK1.1.3a	Identify how an individual's actions or an event or idea contribute to the text

PA Core Standards:

CC.1.2.6.D Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.

CC.1.2.6.E Analyze the author's structure through the use of paragraphs, chapters, or sections.

Assessment Anchor

E06.B-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.B-C.2.1 Demonstrate understanding of craft and structure in informational texts.	E06.B-C.2.1.1 Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	E06BC2.1.1a	Identify information within the text to determine the author's point-of-view
	E06.B-C.2.1.2 Analyze how a particular sentence, paragraph, chapter, section, or text feature fits into the overall structure of a text and contributes to the development of the ideas.	E06BC2.1.2a	Identify how a text feature or section fit into the text structure
	EO6.B-C.2.1.3 Determine how the author uses the meaning of words or phrases, including figurative, connotative, or technical meanings, in a text.	E06BC2.1.3a	Determine how word choice changes the meaning of text

PA Core Standards:

CC.1.2.6.H Evaluate an author's argument by examining claims and determining if they are supported by evidence.

CC.1.2.6.1 Examine how two authors present similar information in different types of text.

Assessment Anchor

E06.B-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.B-C.3.1 Demonstrate understanding of connections within, between, and/or among informational texts.	E06.B-C.3.1.1 Trace and evaluate the argument and specific claims in a text,	E06BC3.1.1a	Identify an argument or claim that the author makes
	distinguishing claims that are supported by reasons and evidence from claims that are not (e.g., fact/opinion, bias).	E06BC3.1.1b	Determine if evidence is fact or opinion
	E06.B-C.3.1.2 Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).	E06BC3.1.2a	Identify similarities or differences in two texts by different authors about the same topic

PA Core Standards:

- CC.1.2.6.F Determine the meaning of words and phrases as they are used in grade-level reading and content, including interpretation of figurative language in context.
- CC.1.2.6.J Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- CC.1.2.6.K Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.

Assessment Anchor

E06.B-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E06.B-V.4.1 Demonstrate understanding of	Demonstrate understanding of wocabulary and figurative language in informational Determine or clarify the meaning of unknown and multiplemeaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or	E06BV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
vocabulary and figurative language in informational texts.		E06BV4.1.1b	Use a root word or affix to determine the meaning of a word
		E06BV4.1.2a	Identify the meaning of figurative language in the context of a nonfiction text
		E06BV4.1.2b	Use relationships between words to aid comprehension

English Language Arts Grade 7

PA Alternate Eligible Content

PA Core Standards:

- CC.1.3.7.A Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.
- CC.1.3.7.B Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences, conclusions, and/or generalizations drawn from the text.
- CC.1.3.7.C Analyze how particular elements of a story or drama interact and how setting shapes the characters or plot.

Assessment Anchor

E07.A-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.A-K.1.1 Demonstrate understanding of	E07.A-K.1.1.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences, conclusions, and/or generalizations drawn from the text.	E07AK1.1.1a	Answer a literal question about a text
key ideas and details in literature		E07AK1.1.1b	Answer an inferential question about a text
		E07AK1.1.1c	Cite details and evidence from the text to answer literal and inferential questions
	E07.A-K.1.1.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.	E07AK1.1.2a	Identify the theme/central message of a story, drama, or poem using key details/evidence from the text
		E07AK1.1.2b	Summarize the text
	E07.A-K.1.1.3 Analyze how particular elements of a story, drama, or poem interact (e.g., how the setting shapes the characters or plot).	E07AK1.1.3a	Identify how two elements of a story, drama, or poem interact

PA Core Standards:

- CC.1.3.7.D Determine an author's purpose in a text and explain how it is conveyed in a text.
- CC.1.3.7.E Analyze how the structure of a text contributes to the development of theme, setting, and plot.
- CC.1.3.7.F Determine the meaning of words and phrases as they are used in grade-level reading and content, including interpretation of figurative, connotative meanings.

Assessment Anchor

E07.A-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.A-C.2.1 Demonstrate understanding of craft and structure in literature.	E07.A-C.2.1.1 Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	E07AC2.1.1a	Determine the points-of-view of two or more characters in a text
	E07.A-C.2.1.2 Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning.		
	E07.A-C.2.1.3 Determine how the author uses the meaning of words or phrases, including figurative and connotative meanings, in a text; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	E07AC2.1.3a	Determine how word choice changes the meaning of a text

PA Core Standards:

CC.1.3.7.H Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.

Assessment Anchor

E07.A-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.A-C.3.1 Demonstrate understanding of connections within, between, and/or among texts.	E07.A-C.3.1.1 Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history.	E07AC3.1.1a	Identify similarities or differences in a fictional portrayal and a historical account of the same period

PA Core Standards:

- CC.1.3.7.F Determine the meaning of words and phrases as they are used in grade-level reading and content, including interpretation of figurative, connotative meanings.
- CC.1.3.7.I Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.
- CC.1.3.7.J Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Assessment Anchor

E07.A-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.A-V.4.1 Demonstrate understanding of vocabulary and figurative language in literature. E07.A-V.4.1.1 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence	E07AV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word	
	or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel). E07.A-V.4.1.2 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., literary and mythological allusions) in context. b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand	E07AV4.1.1b	Use a root word or affix to determine the meaning of a word
		E07AV4.1.2a	Identify the meaning of figurative language in context
		E07AV4.1.2b	Use relationships between words to aid comprehension

PA Core Standards:

- CC.1.2.7.A Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.
- CC.1.2.7.B Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences, conclusions, and/or generalizations drawn from the text.
- CC.1.2.7.C Analyze the interactions between individuals, events, and ideas in a text.

Assessment Anchor

E07.B-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.B-K.1.1	E07.B-K.1.1.1	E07BK1.1.1a	Answer a literal question about a text
understanding of key ideas and details in informational texts. EC De ar pr	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as	E07BK1.1.1b	Answer an inferential question about a text
	inferences, conclusions, and/or generalizations drawn from the text.	E07BK1.1.1c	Cite details and evidence from the text to answer literal and inferential questions
	E07.B-K.1.1.2 Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.	E07BK1.1.2a	Identify two main ideas/central ideas in a text
		E07BK1.1.2b	Summarize the text
	E07.B-K.1.1.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, how individuals influence ideas or events).	E07BK1.1.3a	Identify two interactions between individuals, events, or ideas that contribute to the text

PA Core Standards:

- CC.1.2.7.D Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.
- CC.1.2.7.E Analyze the structure of the text through evaluation of the author's use of graphics, charts, and the major sections of the text.
- CC.1.2.7.F Determine the meaning of words and phrases as they are used in grade-level reading and content, including interpretation of figurative, connotative, and technical meanings.

Assessment Anchor

E07.B-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.B-C.2.1 Demonstrate understanding of craft and structure in informational texts.	E07.B-C.2.1.1 Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.	E07BC2.1.1a	Identify the author's point-of-view and an alternate point-of-view in a text
	E07.B-C.2.1.2 Analyze the structure an author uses to organize a text, including how major sections and text features contribute to the whole and to the development of the ideas.	E07BC2.1.2a	Identify how text features or sections fit into the text structure
	E07.B-C.2.1.3 Determine how the author uses the meaning of words or phrases, including figurative, connotative, or technical meanings, in a text; analyze the impact of a specific word choice on meaning and tone.	E07BC2.1.3a	Determine how word choice changes the meaning of text

PA Core Standards:

- CC.1.2.7.H Evaluate an author's argument, reasoning, and specific claims for the soundness of the argument and the relevance of the evidence.
- CC.1.2.7.I Analyze how two or more authors present and interpret facts on the same topic.

Assessment Anchor

E07.B-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.B-C.3.1 Demonstrate understanding of connections within, between, and/or among informational texts.	Trace and evaluate the argument and specific claims in a	E07BC3.1.1a	Identify an argument or claim that the author makes
		E07BC3.1.1b	Identify the evidence that supports the argument or claim
	E07.B-C.3.1.2 Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.	E07BC3.1.2a	Identify similarities or differences with details selected in two texts by different authors about the same topic

PA Core Standards:

- CC.1.2.7.F Determine the meaning of words and phrases as they are used in grade-level reading and content, including interpretation of figurative, connotative, and technical meanings.
- CC.1.2.7.J Acquire and accurately use grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- CC.1.2.7.K Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.

Assessment Anchor

E07.B-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E07.B-V.4.1 Demonstrate understanding of	E07.B-V.4.1.1 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7	E07BV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning words
vocabulary and figurative language in informational texts.	reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph, a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel). c. Determine the meaning of technical words and phrases used in a text.	E07BV4.1.1b	Use a root word or affix to determine the meaning of a word
	E07BV4.1.2a	Identify the meaning of figurative language in the context of a nonfiction text	
	synonym/antonym, analogy) to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g.,	E07BV4.1.2b	Use relationships between words to aid comprehension

English Language Arts Grade 8

PA Alternate Eligible Content

PA Core Standards:

- CC.1.3.8.A Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.
- CC.1.3.8.B Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences, conclusions, and/or generalizations drawn from the text.
- CC.1.3.8.C Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.

Assessment Anchor

E08.A-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.A-K.1.1 Demonstrate	E08.A-K.1.1.1 Cite the textual evidence that most strongly supports an	E08AK1.1.1a	Answer a literal question about a text
understanding of key ideas and details in	analysis of what the text says explicitly as well as inferences, conclusions, and/or generalizations drawn from the text.	E08AK1.1.1b	Answer an inferential question about a text
literature.		E08AK1.1.1c	Cite the most important details and evidence from the text to answer literal and inferential questions
	E08.A-K.1.1.2 Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	E08AK1.1.2a	Identify the theme/central message of a story, drama, or poem using key details/evidence from the text
		E08AK1.1.2b	Summarize the text
	E08.A-K.1.1.3 Analyze how particular lines of dialogue or incidents in a story, drama, or poem propel the action, reveal aspects of a character, or provoke a decision.	E08AK1.1.3a	Identify how two or more elements of a story, drama, or poem interact

PA Core Standards:

- CC.1.3.8.D Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.
- CC.1.3.8.E Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.
- CC.1.3.8.F Analyze the influence of the words and phrases in a text including figurative and connotative meanings and how they shape meaning and tone.

Assessment Anchor

E08.A-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.A-C.2.1 Demonstrate understanding of craft	Demonstrate Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of	E08AC2.1.1a	Determine the points-of-view of two or more characters or narrators in a text
and structure in literature.		E08AC2.1.1b	Determine how the characters in the story make the reader respond
	E08.A-C.2.1.2 Compare and contrast the structure of two or more texts, and analyze how the differing structure of each text contributes to its meaning and style.		
	E08.A-C.2.1.3 Determine how the author uses the meaning of words or phrases, including figurative and connotative meanings, in a text; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	E08AC2.1.3a	Identify the impact of word choice on the meaning of a text

PA Core Standards:

CC.1.3.8.H Analyze how a modern work of fiction draws on themes, patterns of events, or character types from traditional works, including describing how the material is rendered new.

Assessment Anchor

E08.A-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.A-C.3.1 Demonstrate understanding of connections within, between, and/or among texts.	E08.A-C.3.1.1 Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths and traditional stories, including describing how the material is rendered new. Note: "Stories" means narration of events told through the text types of stories, dramas, or poems.	E08AC3.1.1a	Identify similarities or differences in a modern work of fiction and a traditional story

PA Core Standards:

- CC.1.3.8.F Analyze the influence of the words and phrases in a text including figurative and connotative meanings, and how they shape meaning and tone.
- CC.1.3.8.I Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.
- CC.1.3.8.J Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Assessment Anchor

E08.A-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.A-V.4.1 Demonstrate understanding of vocabulary and figurative	Determine or clarify the meaning of unknown and multiplemeaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph, a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede).	E08AV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
language in literature.		E08AV4.1.1b	Use a root word or affix to determine the meaning of a word
		E08AV4.1.2a	Identify the meaning of figurative language in context
understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute).	E08AV4.1.2b	Use relationships between words to aid comprehension	

PA Core Standards:

- CC.1.2.8.A Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
- CC.1.2.8.B Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences, conclusions, and/or generalizations drawn from the text.
- CC.1.2.8.C Analyze how a text makes connections among and distinctions between individuals, ideas, or events.

Assessment Anchor

E08.B-K.1 Key Ideas and Details

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.B-K.1.1 Demonstrate understanding	E08.B-K.1.1.1 Cite the textual evidence that most strongly supports an	E08BK1.1.1a	Answer a literal question about a text
of key ideas and details in informational texts.	analysis of what the text says explicitly as well as inferences, conclusions, and/or generalizations drawn from the text.	E08BK1.1.1b	Answer an inferential question about a text
		E08BK1.1.1c	Cite the most important details and evidence from the text to answer literal and inferential questions
	E08.B-K.1.1.2 Determine a central idea of a text and analyze its development over the course of the text, including its	E08BK1.1.2a	Identify the main idea/central idea using 2 or more key details/evidence from the text
	relationship to supporting ideas; provide an objective summary of the text.	E08BK1.1.2b	Summarize the text
	E08.B-K.1.1.3 Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, categories).	E08BK1.1.3a	Identify two or more interactions between individuals, events, or ideas that contribute to the text

PA Core Standards:

- CC.1.2.8.D Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
- CC.1.2.8.E Analyze the structure of the text through evaluation of the author's use of specific sentences and paragraphs to develop and refine a concept.
- CC.1.2.8.F Analyze the influence of the words and phrases in a text including figurative, connotative, and technical meanings, and how they shape meaning and tone.

Assessment Anchor

E08.B-C.2 Craft and Structure

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.B-C.2.1 Demonstrate understanding of craft and structure in informational texts.	E08.B-C.2.1.1 Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	E08BC2.1.1a	Identify a difference in the author's point-of-view and an alternate point-of-view in a text
	E08.B-C.2.1.2 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.	E08BC2.1.2a	Identify the structure of a paragraph
	E08.B-C.2.1.3 Determine how the author uses the meaning of words or phrases, including figurative, connotative, or technical meanings, in a text; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	E08BC2.1.3a	Determine how word choice changes the meaning of a text

PA Core Standards:

- CC.1.2.8.H Evaluate an author's arguments, reasoning, and specific claims for the soundness of the arguments and the relevance of the evidence.
- CC.1.2.8.I Analyze two or more texts that provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.

Assessment Anchor

E08.B-C.3 Integration of Knowledge and Ideas

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.B-C.3.1 Demonstrate understanding	E08.B-C.3.1.1 Delineate and evaluate the argument and specific claims in a	E08BC3.1.1a	Identify an argument or claim that the author makes
of connections within, between, and/or among informational texts.	text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	E08BC3.1.1b	Identify the evidence that does or does not support the argument or claim
	E08.B-C.3.1.2 Analyze a case in which two or more texts provide conflicting information on the same topic, and identify where the texts disagree on matters of fact or interpretation.	E08BC3.1.2a	Identify conflicting information presented in two texts about the same topic

PA Core Standards:

- CC.1.2.8.F Analyze the influence of the words and phrases in a text including figurative, connotative, and technical meanings, and how they shape meaning and tone.
- CC.1.2.8.J Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
- CC.1.2.8.K Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade- level reading and content, choosing flexibly from a range of strategies and tools.

Assessment Anchor

E08.B-V.4 Vocabulary Acquisition and Use

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
E08.B-V.4.1 Demonstrate understanding of vocabulary and figurative	E08.B-V.4.1.1 Determine or clarify the meaning of unknown and multiplemeaning words or phrases based on grade 8 reading and	E08BV4.1.1a	Use context to determine the meaning of an unknown or multiple meaning word
language in informational texts.	content, choosing flexibly from a range of strategies. a. Use context (e.g., the overall meaning of a sentence or paragraph, a word's position or function in a sentence) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., precede, recede, secede). c. Determine the meaning of technical words and phrases used in a text.	E08BV4.1.1b	Use a root word or affix to determine the meaning of a word
	E08.B-V.4.1.2 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figures of speech (e.g., verbal irony, puns) in context.	E08BV4.1.2a	Identify the meaning of figurative language in the context of a nonfiction text
	 b. Use the relationship between particular words to better understand each of the words. c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., bullheaded, willful, firm, persistent, resolute). 	E08BV4.1.2b	Use relationships between words to aid comprehension

English Language Arts Grade 11

PA Alternate Eligible Content

CC.1.3.11-12.A

Determine and analyze the relationship between two or more themes or central ideas of a text, including the development and interaction of the themes; provide an objective summary of the text.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.3.1112Aa	Identify two themes/central messages of a text using key details/evidence from the text
CC1.3.1112Ab	Summarize the text

CC.1.3.11-12.B

Cite strong and thorough textual evidence to support analysis of what the text says explicitly, as well as inferences and conclusions based on and related to an author's implicit and explicit assumptions and beliefs.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.3.1112Ba	Answer a literal question about a text
CC1.3.1112Bb	Answer an inferential question about a text
CC1.3.1112Bc	Cite the most important details and evidence from the text to answer literal and inferential questions, including conclusions or summaries of the plot

CC.1.3.11-12.C

Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.1.3.11-12.D

Evaluate how an author's point of view or purpose shapes the content and style of a text.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.1.3.11-12.E

Evaluate the structure of texts including how specific sentences, paragraphs, and larger portions of the texts relate to each other and the whole.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.1.3.11-12.F

Evaluate how words and phrases shape meaning and tone in texts.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.3.1112Fa	Identify the impact of word choice on the meaning of text

CC.1.3.11-12.G

Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.3.1112Ga	Identify similarities or differences in a multi-media version or other interpretation of a story and the written story

CC.1.3.11-12.H

Demonstrate knowledge of foundational works of literature that reflect a variety of genres in the respective major periods of literature, including how two or more texts from the same period treat similar themes or topics.

CC.1.3.11-12.I

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade-level reading and content, choosing flexibly from a range of strategies and tools.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.3.1112la	Use context to determine the meaning of an unknown or multiple meaning word
CC1.3.1112lb	Use a root word or affix to determine the meaning of a word

CC.1.3.11-12.J

Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.3.1112Ja	Identify the meaning of a general academic and career-related word/phrase related to a text

CC.1.3.11-12.K

Read and comprehend literary fiction on grade level, reading independently and proficiently.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.1.2.11-12.A

Determine and analyze the relationship between two or more central ideas of a text, including the development and interaction of the central ideas; provide an objective summary of the text.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Aa	Identify two main ideas/central ideas using key details/evidence from the text
CC1.2.1112Ab	Summarize the text

CC.1.2.11-12.B

Cite strong and thorough textual evidence to support analysis of what the text says explicitly, as well as inferences and conclusions based on and related to an author's implicit and explicit assumptions and beliefs.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Ba	Answer a literal question about a text
CC1.2.1112Bb	Answer an inferential question about a text
CC1.2.1112Bc	Cite the most important details and evidence from the text to answer literal and inferential questions, including conclusions or summaries

CC.1.2.11-12.C

Analyze the interaction and development of a complex set of ideas, sequence of events, or specific individuals over the course of the text.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Ca	Identify why interactions occurred between two individuals, events, or ideas in the text

CC.1.2.11-12.D

Evaluate how an author's point of view or purpose shapes the content and style of a text.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Da	Identify the author's point-of-view in a text and give one or more examples that illustrate this view

CC.1.2.11-12.E

Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Ea	Identify an argument or claim in a text
CC1.2.1112Eb	Identify the evidence that does or does not support the argument or claim

CC.1.2.11-12.F

Evaluate how words and phrases shape meaning and tone in texts.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Fa	Determine the specific language/words that the author uses to contribute to the persuasiveness of the text

CC.1.2.11-12.G

Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.1.2.11-12.H

Analyze seminal texts based upon reasoning, premises, purposes, and arguments.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.1.2.11-12.I

Analyze foundational U.S. and world documents of historical, political, and literary significance for their themes, purposes, and rhetorical features.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112la	Identify main ideas/central ideas and concepts in U.S. documents of historical or political significance

CC.1.2.11-12.J

Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Ja	Determine the meaning of a general academic and domain-specific word or phrase related to a text

CC.1.2.11-12.K

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade-level reading and content, choosing flexibly from a range of strategies and tools.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112Ka	Use context to determine the meaning of an unknown or multiple meaning word
CC1.2.1112Kb	Use a root word and affix to determine the meaning of a word
CC1.2.1112Kc	Use relationships between words to aid comprehension

CC.1.2.11-12.L

Read and comprehend literary nonfiction and informational text on grade level, reading independently and proficiently.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC1.2.1112.La	Read and answer a question using informational material (e.g., schedules, maps, manuals)

Mathematics Grade 3

PA Alternate Eligible Content

PA Reporting Category: M03.A-T Numbers and Operations in Base Ten

PA Core Standards:

CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.

ASSESSMENT ANCHOR

M03.A-T.1 Use place-value understanding and properties of operations to perform multi-digit arithmetic.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.A-T.1.1 Apply place-value strategies to solve problems.	M03.A-T.1.1.1 Round two- and three-digit whole numbers to the nearest ten or hundred, respectively.	M03AT1.1.1a	Round a two-digit number to the nearest ten
	Add two- and three- digit whole numbers (limit sums	M03AT1.1.2a	Demonstrate understanding of addition with small sets
		M03AT1.1.2b	Demonstrate understanding subtraction with small sets
	M03.A-T.1.1.3 Multiply one-digit whole numbers by two-digit multiples of 10 (from 10 through 90).		
	M03.A-T.1.1.4 Order a set of whole numbers from least to greatest or greatest to least (up through 9,999, and limit sets to no more than four numbers).	M03AT1.1.4a	Order 3 numbers under 10

PA Reporting Category: M03.A-F Numbers and Operations - Fractions

PA Core Standards:

CC.2.1.3.C.1 Explore and develop an understanding of fractions as numbers.

ASSESSMENT ANCHOR

M03.A-F.1 Develop an understanding of fractions as numbers.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.A-F.1.1 Develop and apply number theory concepts to compare quantities and magnitudes of fractions and whole numbers.	M03.A-F.1.1.1 Demonstrate that when a whole or set is partitioned into y equal parts, the fraction 1/y represents 1 part of the whole and/or the fraction x/y represents x equal parts of the whole (limit denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; and no simplification necessary).	M03AF1.1.1a	Identify the unit fraction or other proper fraction (denominators = 2, 3, 4, 6) that matches the representation
	M03.A-F.1.1.2 Represent fractions on a number line (limit denominators to 2, 3, 4, 6, and 8; limit numerators to whole numbers less than the denominator; and no simplification necessary).		
	M03.A-F.1.1.3 Recognize and generate simple equivalent fractions (limit the denominators to 1, 2, 3, 4, 6, and 8 and limit numerators to whole numbers less than the denominator). Example 1: $1/2 = 2/4$ Example 2: $4/6 = 2/3$	M03AF1.1.3b	Identify equivalent fractions using representations
	M03.A-F.1.1.4 Express whole numbers as fractions, and/or generate fractions that are equivalent to whole numbers (limit denominators to 1, 2, 3, 4, 6, and 8). Example 1: Express 3 in the form 3 = 3/1. Example 2: Recognize that 6/1 = 6.		
	M03.A-F.1.1.5 Compare two fractions with the same denominator (limit denominators to 1, 2, 3, 4, 6, and 8), using the symbols >, =, or <, and/or justify the conclusions.		

PA Reporting Category: M03.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.3.A.1 Represent and solve problems involving multiplication and division.

ASSESSMENT ANCHOR

M03.B-O.1 Represent and solve problems involving multiplication and division.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.B-O.1.1 Understand various meanings of multiplication and division.	M03.B-O.1.1.1 Interpret and/or describe products of whole numbers (up to and including 10 × 10). Example 1: Interpret 35 as the total number of objects in 5 groups, each containing 7 objects. Example 2: Describe a context in which a total number of objects can be expressed as 5 × 7.	M03BO1.1.1a	Use a model in a multiplication situation
	M03.B-O.1.1.2 Interpret and/or describe whole-number quotients of whole numbers (limit dividends through 50 and limit divisors and quotients through 10). Example 1: Interpret 48 ÷ 8 as the number of objects in each share when 48 objects are partitioned equally into 8 shares, or as a number of shares when 48 objects are partitioned into equal shares of 8 objects each. Example 2: Describe a context in which a number of shares or a number of groups can be expressed as 48 ÷ 8.		
M03.B-O.1.2 Solve mathematical and real-world problems using multiplication and division, including determining the missing	M03.B-O.1.2.1 Use multiplication (up to and including 10 × 10) and/or division (limit dividends through 50 and limit divisors and quotients through 10) to solve word problems in situations involving equal groups, arrays, and/or measurement quantities.		
number in a multiplication and/or division equation.	M03.B-O.1.2.2 Determine the unknown whole number in a multiplication (up to and including 10 × 10) or division (limit dividends through 50 and limit divisors and quotients through 10) equation relating three whole numbers. Example: Determine the unknown number that makes an equation true.		

PA Reporting Category: M03.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.3.A.2 Understand properties of multiplication and the relationship between multiplication and division.

ASSESSMENT ANCHOR

M03.B-O.2 Understand properties of multiplication and the relationship between multiplication and division.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.B-O.2.1 Use properties to simplify and solve	M03.B-O.2.1.1 Apply the commutative property of multiplication (not identification or definition of the property).		
multiplication problems.	M03.B-O.2.1.2 Apply the associative property of multiplication (not identification or definition of the property).		
M03.B-O.2.2 Relate division to a missing-number multiplication equation.	M03.B-O.2.2.1 Interpret and/or model division as a multiplication equation with an unknown factor. Example: Find 32 ÷ 8 by solving 8 × ? = 32.		

PA Reporting Category: M03.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.3.A.4 Solve problems involving the four operations, and identify and explain patterns in arithmetic.

ASSESSMENT ANCHOR

M03.B-O.3 Solve problems involving the four operations, and identify and explain patterns in arithmetic.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.B-O.3.1 Use operations, patterns, and estimation strategies to solve	M03.B-O.3.1.1 Solve two-step word problems using the four operations (expressions are not explicitly stated). Limit to problems with whole numbers and having whole-number answers.	M03BO3.1.1a	Solve a 1-step real-world problem involving numbers under 10 using addition or subtraction
problems (may include word problems).	M03.B-O.3.1.2 Represent two-step word problems using equations with a symbol standing for the unknown quantity. Limit to problems with whole numbers and having whole-number answers.		
	M03.B-O.3.1.3 Assess the reasonableness of answers. Limit problems posed with whole numbers and having whole-number answers.		
	M03.B-O.3.1.4 Solve two-step equations using order of operations (equation is explicitly stated with no grouping symbols).		
	M03.B-O.3.1.5 Identify arithmetic patterns (including patterns in the	M03BO3.1.5a	Identify a mathematical pattern in a real-world problem
	addition table or multiplication table) and/or explain them using properties of operations. Example 1: Observe that 4 times a number is always even. Example 2: Explain why 6 times a number can be decomposed into three equal addends.	M03BO3.1.5b	Identify the 3 next terms in a mathematical pattern (increasing by 2, 5 or 10)
	M03.B-O.3.1.6 Create or match a story to a given combination of symbols $(+, -, \times, \div, <, >, $ and $=)$ and numbers.		
	M03.B-O.3.1.7 Identify the missing symbol (+, $-$, \times , \div , $<$, $>$, and $=$) that makes a number sentence true.		

PA Reporting Category: M03.C-G Geometry

PA Core Standards:

- CC.2.3.3.A.1 Identify, compare, and classify shapes and their attributes.
- CC.2.3.3.A.2 Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

ASSESSMENT ANCHOR

M03.C-G.1 Reason with shapes and their attributes.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.C-G.1.1 Analyze characteristics of polygons.	M03.C-G.1.1.1 Explain that shapes in different categories may share attributes and that the shared attributes can define a larger category. Example 1: A rhombus and a rectangle are both quadrilaterals since they both have exactly four sides. Example 2: A triangle and a pentagon are both polygons since they are both multi-sided plane figures.	M03CG1.1.1a	Identify similarities between two polygons
	M03.C-G.1.1.2 Recognize rhombi, rectangles, and squares as examples of quadrilaterals and/or draw examples of quadrilaterals that do not belong to any of these subcategories.		
	M03.C-G.1.1.3 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. Example 1: Partition a shape into 4 parts with equal areas. Example 2: Describe the area of each of 8 equal parts as 1/8 of the area of the shape.	M03CG1.1.3a	Partition a rectangle into parts with equal areas

PA Core Standards:

- CC.2.4.3.A.1 Solve problems involving measurement and estimation of temperature, liquid volume, mass or length.
- CC.2.4.3.A.2 Tell and write time to the nearest minute and solve problems by calculating time intervals.
- CC.2.4.3.A.3 Solve problems and make change involving money using a combination of coins and bills.

ASSESSMENT ANCHOR

M03.D-M.1 Solve problems involving measurement and estimation of intervals of time, money, liquid volumes, masses, and lengths of objects.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.D-M.1.1 Determine or calculate	M03.D-M.1.1.1 Tell, show, and/or write time (analog) to the nearest minute.	M03DM1.1.1a	Tell time to the hour or half hour on a clock
time and elapsed time.	M03.D-M.1.1.2 Calculate elapsed time to the minute in a given situation (total elapsed time limited to 60 minutes or less).		
M03.D-M.1.2 Use the attributes of liquid volume, mass, and length of objects.	M03.D-M.1.2.1 Measure and estimate liquid volumes and masses of objects using standard units (cups [c], pints [pt], quarts [qt], gallons [gal], ounces [oz.], and pounds [lb]) and metric units (liters [l], grams [g],and kilograms [kg]).	M03DM1.2.1a	Identify and use the appropriate measurement tool based on the situation
	M03.D-M.1.2.2 Add, subtract, multiply, and divide to solve one step word problems involving masses or liquid volumes that are given in the same units.		
	M03.D-M.1.2.3 Use a ruler to measure lengths to the nearest quarter inch or centimeter.	M03DM1.2.3a	Use a ruler and measure to the nearest inch (exact measurement)
M03.D-M.1.3 Count, compare, and make change using a collection of coins and one-dollar bills.	M03.D-M.1.3.1 Compare total values of combinations of coins (penny, nickel, dime, and quarter) and/or dollar bills less than \$5.00.	M03DM1.3.1a	Count money using coins or one-dollar bills
	M03.D-M.1.3.2 Make change for an amount up to \$5.00 with no more than \$2.00 change given (penny, nickel, dime, quarter, and dollar).		
	M03.D-M.1.3.3 Round amounts of money to the nearest dollar.		

PA Core Standards:

CC.2.4.3.A.4 Represent and interpret data using tally charts, tables, pictographs, line plots, and bar graphs.

ASSESSMENT ANCHOR

M03.D-M.2 Represent and interpret data.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.D-M.2.1 Organize, display, and answer questions based on data.	M03.D-M.2.1.1 Complete a scaled pictograph and a scaled bar graph to represent a data set with several categories (scales limited to 1, 2, 5, and 10).	M03DM2.1.1a	Add information to a pictograph, line plot, or bar graph
on adia.	M03.D-M.2.1.2 Solve one- and two-step problems using information to interpret data presented in scaled pictographs and scaled bar graphs (scales limited to 1, 2, 5, and 10). Example 1: (One-step) "Which category is the largest?" Example 2: (Two-step) "How many more are in category A than in category B?"		
	M03.D-M.2.1.3 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Display the data by making a line plot, where the horizontal scale is marked in appropriate units—whole numbers, halves, or quarters.		
	M03.D-M.2.1.4 Translate information from one type of display to another. Limit to pictographs, tally charts, bar graphs, and tables. Example: Convert a tally chart to a bar graph.		

PA Core Standards:

CC.2.4.3.A.5 Determine the area of a rectangle and apply the concept to multiplication and to addition.

ASSESSMENT ANCHOR

M03.D-M.3 Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.D-M.3.1 Find the areas of plane figures.	M03.D-M.3.1.1 Measure areas by counting unit squares (square cm, square m, square in., square ft., and non-standard square units).		
	M03.D-M.3.1.2 Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	M03DM3.1.2a	Measure the area of a rectangle by counting squares, tiling, or addition

PA Core Standards:

CC.2.4.3.A.6 Solve problems involving perimeters of polygons and distinguish between linear and area measures.

ASSESSMENT ANCHOR

M03.D-M.4 Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M03.D-M.4.1 Find and use the perimeters of plane figures.	M03.D-M.4.1.1 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, exhibiting rectangles with the same perimeter and different areas, and exhibiting rectangles with the same area and different perimeters. Use the same units throughout the problem.	M03DM4.1.1a	Find the perimeter of a rectangle

Mathematics

Grade 4

PA Alternate Eligible Content

PA Reporting Category: M04.A-T Numbers and Operations in Base Ten

PA Core Standards:

CC.2.1.4.B.1 Apply place-value concepts to show an understanding of multi-digit whole numbers.

ASSESSMENT ANCHOR

M04.A-T.1 Generalize place-value understanding for multi-digit whole numbers.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.A-T.1.1 Apply place-value and numeration concepts to compare, find equivalencies, and round.	M04.A-T.1.1.1 Demonstrate an understanding that in a multi-digit whole number (through 1,000,000), a digit in one place represents ten times what it represents in the place to its right. Example: Recognize that in the number 770, the 7 in the hundreds place is ten times the 7 in the tens place.	M04AT1.1.1a	Model relationships between adjacent digits in a multi-digit whole number
	M04.A-T.1.1.2 Read and write whole numbers in expanded, standard, and word form through 1,000,000.		
	M04.A-T.1.1.3 Compare two multi-digit numbers through 1,000,000 based on meanings of the digits in each place, using >, =, and < symbols.	M04AT1.1.3a	Compare to determine if a value is greater than, less than, or equal to another value
	M04.A-T.1.1.4 Round multi-digit whole numbers (through 1,000,000) to any place.		

PA Reporting Category: M04.A-T Numbers and Operations in Base Ten

PA Core Standards:

CC.2.1.4.B.2 Use place value understanding and properties of operations to perform multi-digit arithmetic.

ASSESSMENT ANCHOR

M04.A-T.2 Use place-value understanding and properties of operations to perform multi-digit arithmetic.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.A-T.2.1 Use operations to solve problems.	M04.A-T.2.1.1 Add and subtract multi-digit whole numbers (limit sums and subtrahends up to and including 1,000,000).	M04AT2.1.1a	Add or subtract whole numbers with sums and differences <1000
	M04.A-T.2.1.2 Multiply a whole number of up to four digits by a one-digit whole number and multiply 2 two-digit numbers.	M04AT2.1.2a	Demonstrate understanding of multiplication or division with small sets
	M04.A-T.2.1.3 Divide up to four-digit dividends by one-digit divisors with answers written as whole-number quotients and remainders.		
	M04.A-T.2.1.4 Estimate the answer to addition, subtraction, and multiplication problems using whole numbers through six digits (for multiplication, no more than 2 digits × 1 digit, excluding powers of 10).	M04AT2.1.4a	Assess the plausibility of results from addition or subtraction

PA Reporting Category: M04.A-F Numbers and Operations—Fractions

PA Core Standards:

CC.2.1.4.C.1 Extend the understanding of fractions to show equivalence and ordering.

ASSESSMENT ANCHOR

M04.A-F.1 Extend understanding of fraction equivalence and ordering.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.A-F.1.1 Find equivalencies and	M04.A-F.1.1.1 Recognize and generate equivalent fractions.	M04AF1.1.1a	Identify equivalent fractions
compare fractions.	M04.A-F.1.1.2 Compare two fractions with different numerators and different denominators (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100) using the symbols >, =, or < and justify the conclusions.	M04AF1.1.2a	Compare two fractions with like denominators

PA Reporting Category: M04.A-F Numbers and Operations—Fractions

PA Core Standards:

CC.2.1.4.C.2 Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

ASSESSMENT ANCHOR

M04.A-F.2 Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.A-F.2.1 Solve problems involving fractions and whole numbers (straight computation or word problems).	M04.A-F.2.1.1 Add and subtract fractions with a common denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100; answers do not need to be simplified; and no improper fractions as the final answer).	M04AF.2.1.1a	Add or subtract fractions with common denominators (denominators limited to 2, 3, 4, or 8)
	M04.A-F.2.1.2 Decompose a fraction or a mixed number into a sum of fractions with the same denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100), recording the decomposition by an equation. Justify decompositions (e.g., by using a visual fraction model). Example 1: $3/8 = 1/8 + 1/8 + 1/8$ OR $3/8 = 1/8 + 2/8$ Example 2: $21/12 = 1 + 1 + 1/12 = 12/12 + 12/12 + 1/12$	M04AF.2.1.2a	Decompose a proper fraction into multiple copies of a unit fraction (denominators limited to 3, 4, or 8)
	M04.A-F.2.1.3 Add and subtract mixed numbers with a common denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100; no regrouping with subtraction; fractions do not need to be simplified; and no improper fractions as the final answers).		
	M04.A-F.2.1.4 Solve word problems involving addition and subtraction of fractions referring to the same whole or set and having like denominators (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100).		
	M04.A-F.2.1.5 Multiply a whole number by a unit fraction (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100 and final answers do not need to be simplified or written as a mixed number). Example: $5 \times (1/4) = 5/4$		

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
	M04.A-F.2.1.6 Multiply a whole number by a non-unit fraction (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100 and final answers do not need to be simplified or written as a mixed number). Example: $3 \times (5/6) = 15/6$		
	M04.A-F.2.1.7 Solve word problems involving multiplication of a whole number by a fraction (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100).		

PA Reporting Category: M04.A-F Numbers and Operations—Fractions

PA Core Standards:

CC.2.1.4.C.3 Connect decimal notation to fractions, and compare decimal fractions (base 10 denominator, e.g., 19/100).

ASSESSMENT ANCHOR

M04.A-F.3 Understand decimal notation for fractions and compare decimal fractions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.A-F.3.1 Use operations to solve problems involving decimals, including converting between	M04.A-F.3.1.1 Add two fractions with respective denominators 10 and 100. Example: Express 3/10 as 30/100, and add 3/10 + 4/100 = 30/100 + 4/100 = 34/100.		
fractions and decimals (may include word problems).	M04.A-F.3.1.2 Use decimal notation for fractions with denominators 10 or 100. Example: Rewrite 0.62 as 62/100 and vice versa.	M04AF3.1.2a	Identify equivalent values in decimal or fraction form (limited to denominator of 10)
	M04.A-F.3.1.3 Compare two decimals to hundredths using the symbols >, =, or <, and justify the conclusions.		

PA Reporting Category: M04.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.4.A.1 Represent and solve problems involving the four operations.

ASSESSMENT ANCHOR

M04.B-O.1 Use the four operations with whole numbers to solve problems.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.B-O.1.1 Use numbers and symbols to model the concepts of expressions and equations.	M04.B-O.1.1.1 Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations. Example 1: Interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Example 2: Know that the statement 24 is 3 times as many as 8 can be represented by the equation $24 = 3 \times 8$ or $24 = 8 \times 3$.		
	M04.B-O.1.1.2 Multiply or divide to solve word problems involving multiplicative comparison, distinguishing multiplicative comparison from additive comparison. Example: Know that 3 × 4 can be used to represent that Student A has 4 objects and Student B has 3 times as many objects not just 3 more objects.	M04BO1.1.2a	Use a model to solve a real-world multiplication problem
	M04.B-O.1.1.3 Solve multi-step word problems posed with whole numbers using the four operations. Answers will be either whole numbers or have remainders that must be interpreted yielding a final answer that is a whole number. Represent these problems using equations with a symbol or letter standing for the unknown quantity.	M04BO1.1.3a	Solve a real-world problem with one or more steps using addition or subtraction
	M04.B-O.1.1.4 Identify the missing symbol $(+, -, \times, \div, =, <, \text{ and } >)$ that makes a number sentence true (single-digit divisor only).		

PA Reporting Category: M04.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.4.A.2 Develop and/or apply number theory concepts to find factors and multiples.

ASSESSMENT ANCHOR

M04.B-O.2 Gain familiarity with factors and multiples.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.B-O.2.1. Develop and apply number theory concepts to represent numbers in various ways.	M04.B-O.2.1.1 Find all factor pairs for a whole number in the interval 1 through 100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the interval 1 through 100 is a multiple of a given one digit number. Determine whether a given whole number in the interval 1 through 100 is prime or composite.	M04BO2.1.1a	Identify the multiples of 5 to 100 and 10 to 100 (e.g., count money)

PA Reporting Category: M04.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.4.A.4 Generate and analyze patterns using one rule.

ASSESSMENT ANCHOR

M04.B-O.3 Generate and analyze patterns.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.B-O.3.1 Recognize, describe, extend, create, and replicate a variety of patterns.	M04.B-O.3.1.1 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. Example 1: Given the rule "add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms alternate between odd and even numbers. Example 2: Given the rule "increase the number of sides by 1" and starting with a triangle, observe that the tops of the shapes alternate between a side and a vertex.	M04BO3.1.1a	Extend a pattern when shown a model and told the rule
	M04.B-O.3.1.2 Determine the missing elements in a function table (limit to +, –, or × and to whole numbers or money).		
	M04.B-O.3.1.3 Determine the rule for a function given a table (limit to +, -, or × and to whole numbers).		

PA Reporting Category: M04.C-G Geometry

PA Core Standards:

- CC.2.3.4.A.1 Draw lines and angles and identify these in two-dimensional figures.
- CC.2.3.4.A.2 Classify two-dimensional figures by properties of their lines and angles.
- CC.2.3.4.A.3 Recognize symmetric shapes and draw lines of symmetry.

ASSESSMENT ANCHOR

M04.C-G.1 Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.C-G.1.1 List properties, classify, draw, and identify geometric figures in two dimensions.	M04.C-G.1.1.1 Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel lines. Identify these in two dimensional figures.		
	M04.C-G.1.1.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	M04CG1.1.2a	Classify two-dimensional shapes based on attributes
	M04.C-G.1.1.3 Recognize a line of symmetry for a two dimensional figure as a line across the figure such that the figure can be folded along the line into mirroring parts. Identify line-symmetric figures and draw lines of symmetry (up to two lines of symmetry).	M04CG1.1.3a	Recognize a line of symmetry in a two-dimensional figure

PA Reporting Category: M04.D-M Measurement and Data

PA Core Standards:

CC.2.4.4.A.1 Solve problems involving measurement and conversions from a larger unit to a smaller unit.

ASSESSMENT ANCHOR

M04.D-M.1 Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.D-M.1.1 Solve problems involving length, weight (mass), liquid volume, time, area, and perimeter.	M04.D-M.1.1.1 Know relative sizes of measurement units within one system of units including standard units (in., ft, yd, mi; oz., lb; and c, pt, qt, gal), metric units (cm, m, km; g, kg; and mL, L), and time (sec, min, hr, day, wk, mo, and yr). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. A table of equivalencies will be provided. Example 1: Know that 1 kg is 1,000 times as heavy as 1 g. Example 2: Express the length of a 4-foot snake as 48 in.	M04DM1.1.1a	Identify the appropriate unit of measurement in a real-world problem
	M04.D-M.1.1.2 Use the four operations to solve word problems involving distances, intervals of time (such as elapsed time), liquid volumes, masses of objects; money, including problems involving simple fractions or decimals; and problems that require expressing measurements given in a larger unit in terms of a smaller unit.		
	M04.D-M.1.1.3 Apply the area and perimeter formulas for rectangles in real-world and mathematical problems (may include finding a missing side length). Whole numbers only. The formulas will be provided. M04.D-M.1.1.4	M04DM1.1.3a	Identify the area or perimeter of a rectangle
	Identify time (analog or digital) as the amount of minutes before or after the hour. Example 1: 2:50 is the same as 10 minutes before 3:00. Example 2: Quarter past six is the same as 6:15.		

PA Reporting Category: M04.D-M Measurement and Data

PA Core Standards:

CC.2.4.4.A.2 Translate information from one type of data display to another.

CC.2.4.4.A.4 Represent and interpret data involving fractions using information provided in a line plot.

ASSESSMENT ANCHOR

M04.D-M.2 Represent and interpret data.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.D-M.2.1 Organize, display, and answer questions based on data.	M04.D-M.2.1.1 Make a line plot to display a data set of measurements in fractions of a unit (e.g., intervals of 1/2, 1/4, or 1/8).	M04DM2.1.1a	Organize data into a pictograph, line plot, or bar graph
	M04.D-M.2.1.2 Solve problems involving addition and subtraction of fractions by using information presented in line plots (line plots must be labeled with common denominators, such as 1/4, 2/4, 3/4).	M04DM2.1.2a	Answer a question about data in a pictograph, line plot, or bar graph
	M04.D-M.2.1.3 Translate information from one type of display to another (table, chart, bar graph, or pictograph).		

PA Reporting Category: M04.D-M Measurement and Data

PA Core Standards:

CC.2.4.4.A.6 Measure angles and use properties of adjacent angles to solve problems.

ASSESSMENT ANCHOR

M04.D-M.3 Geometric measurement: understand concepts of angle; measure and create angles.

DESCRIPTOR	Comments Suggestions	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M04.D-M.3.1 Use appropriate tools and units to sketch an angle and determine	M04.D-M.3.1.1 Measure angles in whole-number degrees using a protractor. With the aid of a protractor, sketch angles of specified measure.		
angle measurements.	M04.D-M.3.1.2 Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems. (Angles must be adjacent and non-overlapping.)		

Mathematics

Grade 5

PA Alternate Eligible Content

PA Reporting Category: M05.A-T Numbers and Operations in Base Ten

PA Core Standards:

CC.2.1.5.B.1 Apply place-value concepts to show an understanding of operations and rounding as they pertain to whole numbers and decimals.

Assessment Anchor

M05.A-T.1 Understand the place-value system.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.A-T.1.1 Demonstrate understanding of place- value of whole numbers and decimals, and compare quantities or	M05.A-T.1.1.1 Demonstrate an understanding that in a multi-digit number, a digit in one place represents 1/10 of what it represents in the place to its left. Example: Recognize that in the number 770, the 7 in the tens place is 1/10 the 7 in the hundreds place.	M05AT1.1.1a	Identify place value in a 3-digit number using models
magnitudes of numbers.	M05.A-T.1.1.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. Example 1: $4 \times 10^2 = 400$ Example 2: $0.05 \div 10^3 = 0.00005$	M05AT1.1.2a	Identify a pattern and change in place value when a number up to 99 is multiplied by powers of 10
	M05.A-T.1.1.3 Read and write decimals to thousandths using base-ten numerals, word form, and expanded form. Example: $347.392 = 300 + 40 + 7 + 0.3 + 0.09 +$ $0.002 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (0.1) + 9 \times (0.01) + 2 \times$ (0.001)		
	M05.A-T.1.1.4 Compare two decimals to thousandths based on meanings of the digits in each place using >, =, and < symbols.	M05AT1.1.4a	Compare two numbers up to the hundredths place
	M05.A-T.1.1.5 Round decimals to any place (limit rounding to ones, tenths, hundredths, or thousandths place).	M05AT1.1.5a	Round a decimal from the tenths place to the nearest whole number

PA Reporting Category: M05.A-T Numbers and Operations in Base Ten

PA Core Standards:

CC.2.1.5.B.2 Extend an understanding of operations with whole numbers to perform operations including decimals.

Assessment Anchor

M05.A-T.2 Perform operations with multi-digit whole numbers and with decimals to hundredths.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.A-T.2.1 Use whole numbers and decimals to compute	M05.A-T.2.1.1 Multiply multi-digit whole numbers (not to exceed three-digit by three-digit).	M05AT2.1.1a	Multiply single-digit whole numbers
accurately (straight computation or word problems).	M05.A-T.2.1.2 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.	M05AT2.1.2a	Illustrate the concept of division using fair and equal shares
	M05.A-T.2.1.3 Add, subtract, multiply, and divide decimals to hundredths (no divisors with decimals).	M05AT2.1.3a	Add or subtract decimals to the tenths place

PA Reporting Category: M05.A-F Numbers and Operations—Fractions

PA Core Standards:

CC.2.1.5.C.1 Use the understanding of equivalency to add and subtract fractions.

Assessment Anchor

M05.A-F.1 Use equivalent fractions as a strategy to add and subtract fractions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.A-F.1.1 Solve addition and subtraction problems involving fractions (straight computation or word problems).	M05.A-F.1.1.1 Add and subtract fractions (including mixed numbers) with unlike denominators. (May include multiple methods and representations.) Example: 2/3 + 5/4 = 8/12 + 15/12 = 23/12	M05AF1.1.1a	Add or subtract proper fractions with common denominators to solve a real-world problem

PA Reporting Category: M05.A-F Numbers and Operations—Fractions

PA Core Standards:

CC.2.1.5.C.2 Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Assessment Anchor

M05.A-F.2 Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.A-F.2.1 Solve multiplication and division problems involving fractions and	M05.A-F.2.1.1 Solve word problems involving division of whole numbers leading to answers in the form of fractions (including mixed numbers).		
whole numbers (straight computation or word problems).	M05.A-F.2.1.2 Multiply a fraction (including mixed numbers) by a fraction.	M05.AF.2.1.2.a	Multiply a fraction by a whole number less than 10
	M05.A-F.2.1.3 Demonstrate an understanding of multiplication as scaling (resizing). Example 1: Comparing the size of a product to the size of one factor on the basis of the size of the other factor without performing the indicated multiplication. Example 2: Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number. M05.A-F.2.1.4 Divide unit fractions by whole numbers and whole numbers by		
	Divide unit fractions by whole numbers and whole numbers by unit fractions.		

PA Reporting Category: M05.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.5.A.1 Interpret and evaluate numerical expressions using order of operations.

Assessment Anchor

M05.B-O.1 Write and interpret numerical expressions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.B-O.1.1 Analyze and complete calculations by applying the order of operations	M05.B-O.1.1.1 Use multiple grouping symbols (parentheses, brackets, or braces) in numerical expressions and evaluate expressions containing these symbols.		
	M05.B-O.1.1.2 Write simple expressions that model calculations with numbers and interpret numerical expressions without evaluating them. Example 1: Express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Example 2: Recognize that 3 × (18,932 + 921) is three times as large as 18,932 + 921 without having to calculate the indicated sum or product.		

PA Reporting Category: M05.B-O Operations and Algebraic Thinking

PA Core Standards:

CC.2.2.5.A.4 Analyze patterns and relationships using two rules.

Assessment Anchor

M05.B-O.2 Analyze patterns and relationships.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.B-O.2.1 Create, extend, and	Create, extend, and Generate two numerical patterns using two given rules.	M05BO2.1.1a	Identify and extend numeric patterns
analyze patterns.		M05BO2.1.1b	Generate a pattern that follows 1 or more rules provided
	M05.B-O.2.1.2 Identify apparent relationships between corresponding terms of two patterns with the same starting numbers that follow different rules. Example: Given two patterns in which the first pattern follows the rule "add 8" and the second pattern follows the rule "add 2," observe that the terms in the first pattern are 4 times the size of the terms in the second pattern.		

PA Reporting Category: M05.C-G Geometry

PA Core Standards:

CC.2.3.5.A.1 Graph points in the first quadrant on the coordinate plane and interpret these points when solving real world and mathematical problems.

Assessment Anchor

M05.C-G.1 Graph points on the coordinate plane to solve real-world and mathematical problems.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.C-G.1.1 Identify parts of a coordinate grid and describe or interpret	M05.C-G.1.1.1 Identify parts of the coordinate plane (x-axis, y-axis, and the origin) and the ordered pair (x-coordinate and y-coordinate). Limit the coordinate plane to quadrant I.	M05CG1.1.1a	Identify an ordered pair (x,y) in quadrant I
points given an ordered pair.	M05.C-G.1.1.2 Represent real-world and mathematical problems by plotting points in quadrant I of the coordinate plane and interpret coordinate values of points in the context of the situation.	M05CG1.1.2a	Graph an ordered pair (<i>x,y</i>) in quadrant I

PA Reporting Category: M05.C-G Geometry

PA Core Standards:

CC.2.3.5.A.2 Classify two-dimensional figures into categories based on an understanding of their properties.

Assessment Anchor

M05.C-G.2 Classify two-dimensional figures into categories based on their properties.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.C-G.2.1 Use basic properties to classify two-dimensional figures.	M05.C-G.2.1.1 Classify two-dimensional figures in a hierarchy based on properties. Example 1: All polygons have at least three sides, and pentagons are polygons, so all pentagons have at least three sides. Example 2: A rectangle is a parallelogram, which is a quadrilateral, which is a polygon; so, a rectangle can be classified as a parallelogram, as a quadrilateral, and as a polygon.	M05CG2.1.1a	Identify a two-dimensional figure with specific attributes

PA Reporting Category: M05.D-M Measurement and Data

PA Core Standards:

CC.2.4.5.A.1 Solve problems using conversions within a given measurement system.

Assessment Anchor

M05.D-M.1 Convert like measurement units within a given measurement system.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.D-M.1.1 Solve problems using simple conversions (may include multistep, realworld problems).	M05.D-M.1.1.1 Convert between different-sized measurement units within a given measurement system. A table of equivalencies will be provided. Example: Convert 5 cm to meters.	M05DM1.1.1a	Use a conversion table to identify equivalent standard measurements of length or mass

PA Reporting Category: M05.D-M Measurement and Data

PA Core Standards:

CC.2.4.5.A.2 Represent and interpret data using appropriate scale.

CC.2.4.5.A.4 Solve problems involving computation of fractions using information provided in a line plot.

Assessment Anchor

M05.D-M.2 Represent and interpret data.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.D-M.2.1 Organize, display, and answer questions based	M05.D-M.2.1.1 Solve problems involving computation of fractions by using information presented in line plots.		
on data.	M05.D-M.2.1.2 Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs, and use a title, appropriate scale, and labels. A grid will be provided to display data on bar graphs or line graphs.	M05DM2.1.2a	Interpret one set of data given in 2 different displays

PA Reporting Category: M05.D-M Measurement and Data

PA Core Standards:

CC.2.4.5.A.5 Apply concepts of volume to solve problems and relate volume to multiplication and to addition.

Assessment Anchor

M05.D-M.3 Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M05.D-M.3.1 Use, describe, and develop procedures to solve problems involving volume.	M05.D-M.3.1.1 Apply the formulas $v = l \times w \times h$ and $v = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with wholenumber edge lengths in the context of solving real-world and mathematical problems. Formulas will be provided.		
	M05.D-M.3.1.2 Find volumes of solid figures composed of two non-overlapping right rectangular prisms.	M05DM3.1.2a	Find volume by using filling or multiplication

Mathematics Grade 6

PA Alternate Eligible Content

PA Reporting Category: M06.A-N The Number System

PA Core Standards:

CC.2.1.6.E.1 Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

Assessment Anchor

M06.A-N.1 Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.A-N.1.1 Solve real-world and mathematical problems involving division of fractions.	M06.A-N.1.1.1 Interpret and compute quotients of fractions (including mixed numbers), and solve word problems involving division of fractions by fractions. Example 1: Given a story context for (2/3) ÷ (3/4), explain that (2/3) ÷ (3/4) = 8/9 because 3/4 of 8/9 is 2/3. (In general, (a/b) ÷ (c/d) = (a/b) × (d/c) = ad/bc.) Example 2: How wide is a rectangular strip of land with length 3/4 mi and area 1/2 square mi? Example 3: How many 2 1/4-foot pieces can be cut from a 15 1/2-foot board?		

PA Reporting Category: M06.A-N The Number System

PA Core Standards:

CC.2.1.6.E.2 Identify and choose appropriate processes to compute fluently with multi-digit numbers.

CC.2.1.6.E.3 Develop and/or apply number theory concepts to find common factors and multiples.

Assessment Anchor

M06.A-N.2 Compute with multi-digit numbers and find common factors and multiples.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.A-N.2.1 Compute with multi-digit numbers using the four arithmetic operations with or without a calculator.	M06.A-N.2.1.1 Solve problems involving operations (+, -, ×, and ÷) with whole numbers, decimals (through thousandths), straight computation, or word problems.	M06AN2.1.1a	Solve a problem using up to 3-digit whole numbers and any of the four operations
M06.A-N.2.2 Apply number theory concepts (specifically factors and multiples).	M06.A-N.2.2.1 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12.	M06AN2.2.1a	Identify multiples for numbers 5, 10, 25, or 100
	M06.A-N.2.2.2 Apply the distributive property to express a sum of two whole numbers, 1 through 100, with a common factor as a multiple of a sum of two whole numbers with no common factor. Example: Express 36 + 8 as 4(9 + 2).		

PA Reporting Category: M06.A-N The Number System

PA Core Standards:

CC.2.1.6.E.4 Apply and extend previous understandings of numbers to the system of rational numbers.

Assessment Anchor

M06.A-N.3 Apply and extend previous understandings of numbers to the system of rational numbers.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.A-N.3.1 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values and locations on the	M06.A-N.3.1.1 Represent quantities in real-world contexts using positive and negative numbers, explaining the meaning of 0 in each situation (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge).	M06AN3.1.1a	Identify a specific integer in a real-world context
number line and coordinate plane.	M06.A-N.3.1.2 Determine the opposite of a number and recognize that the opposite of the opposite of a number is the number itself (e.g., $-(-3) = 3$; 0 is its own opposite).	M06AN3.1.2a	Identify the opposite of a number on the number line
	M06.A-N.3.1.3 Locate and plot integers and other rational numbers on a horizontal or vertical number line; locate and plot pairs of integers and other rational numbers on a coordinate plane.	M06AN3.1.3a	Locate positive and negative numbers on the number line
M06.A-N.3.2 Understand ordering and absolute value of rational numbers.	M06.A-N.3.2.1 Write, interpret, and explain statements of order for rational numbers in real-world contexts. Example: Write -3°C > -7°C to express the fact that 3°C is warmer than -7°C.		
	M06.A-N.3.2.2 Interpret the absolute value of a rational number as its distance from 0 on the number line and as a magnitude for a positive or negative quantity in a real-world situation. Example: For an account balance of –30 dollars, write -30 = 30 to describe the size of the debt in dollars, and recognize that an account balance less than –30 dollars represents a debt greater than 30 dollars.		
	M06.A-N.3.2.3 Solve real-world and mathematical problems by plotting points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	M06AN3.2.3a	Identify points in all four quadrants of the coordinate plane

PA Reporting Category: M06.A-R Ratios and Proportional Relationships

PA Core Standards:

CC.2.1.6.D.1 Understand ratio concepts and use ratio reasoning to solve problems.

Assessment Anchor

M06.A-R.1 Understand ratio concepts and use ratio reasoning to solve problems.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.A-R.1.1 Represent and/or solve real-world and mathematical problems using rates, ratios, and/or percents.	M06.A-R.1.1.1 Use ratio language and notation (such as 3 to 4, 3:4, 3/4) to describe a ratio relationship between two quantities. Example 1: "The ratio of girls to boys in a math class is 2:3 because for every 2 girls there are 3 boys." Example 2: "For every five votes candidate A received, candidate B received four votes."		
	M06.A-R.1.1.2 Find the unit rate a/b associated with a ratio a:b (with b ≠ 0) and use rate language in the context of a ratio relationship. Example 1: "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is 3/4 cup of flour for each cup of sugar." Example 2: "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."	M06AR1.1.2a	Identify the ratio that matches a given statement and/or representation
	M06.A-R.1.1.3 Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios.		
	M06.A-R.1.1.4 Solve unit rate problems including those involving unit pricing and constant speed. Example: If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	M06AR1.1.4a	Solve a 1-step real-world problem given the unit rate
	M06.A-R.1.1.5 Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percentage.	M06AR1.1.5a	Calculate a percent of a quantity as a rate per 100

PA Reporting Category: M06.B-E Expressions and Equations

PA Core Standards:

CC.2.2.6.B.1 Apply and extend previous understandings of arithmetic to algebraic expressions.

Assessment Anchor

M06.B-E.1 Apply and extend previous understandings of arithmetic to numerical and algebraic expressions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.B-E.1.1 Identify, write, and evaluate numerical and algebraic	M06.B-E.1.1.1 Write and evaluate numerical expressions involving whole-number exponents.		
expressions.	M06.B-E.1.1.2 Write algebraic expressions from verbal descriptions. Example: Express the description "five less than twice a number" as 2y – 5.		
	M06.B-E.1.1.3 Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity). Example: Describe the expression 2(8 + 7) as a product of two factors.		
	M06.B-E.1.1.4 Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems. Example: Evaluate the expression $b^2 - 5$ when $b = 4$.		
	M06.B-E.1.1.5 Apply the properties of operations to generate equivalent expressions. Example 1: Apply the distributive property to the expression 3 (2 + x) to produce the equivalent expression 6 + 3x. Example 2: Apply the distributive property to the expression 24x + 18y to produce the equivalent expression 6(4x + 3y). Example 3: Apply properties of operations to y + y + y to produce the equivalent expression 3y.		

PA Reporting Category: M06.B-E Expressions and Equations

PA Core Standards:

CC.2.2.6.B.2 Understand the process of solving a one-variable equation or inequality and apply to real-world and mathematical problems.

Assessment Anchor

M06.B-E.2 Interpret and solve one-variable equations and inequalities.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.B-E.2.1 Create, solve, and interpret one-variable equations or inequalities in real-world and mathematical problems.	M06.B-E.2.1.1 Use substitution to determine whether a given number in a specified set makes an equation or inequality true.		
	M06.B-E.2.1.2 Write algebraic expressions to represent realworld or mathematical problems.	M06BE2.1.2a	Select an algebraic expression involving addition or subtraction of whole numbers to solve a 1-step real-world problem
	M06.B-E.2.1.3 Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q for cases in which p, q, and x are all non-negative rational numbers.	M06BE2.1.3a	Use a 1-step algebraic expression to solve a real-world problem involving addition or subtraction of whole numbers
	M06.B-E.2.1.4 Write an inequality of the form x > c or x < c to represent a constraint or condition in a realworld or mathematical problem and/or represent solutions of such inequalities on number lines.		

PA Reporting Category: M06.B-E Expressions and Equations

PA Core Standards:

CC.2.2.6.B.3 Represent and analyze quantitative relationships between dependent and independent variables.

Assessment Anchor

M06.B-E.3 Represent and analyze quantitative relationships between dependent and independent variables.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.B-E.3.1 Use variables to represent two quantities in a real-world problem that change in relationship to one another.	M06.B-E.3.1.1 Write an equation to express the relationship between the dependent and independent variables. Example: In a problem involving motion at a constant speed of 65 units, write the equation d = 65t to represent the relationship between distance and time.	M06BE3.1.1a	Identify the relationship between two variables in an equation
	M06.B-E.3.1.2 Analyze the relationship between the dependent and independent variables using graphs and tables and/or relate these to an equation.		

PA Reporting Category: M06.C-G Geometry

PA Core Standards:

CC.2.3.6.A.1 Apply appropriate tools to solve real-world and mathematical problems involving area, surface area, and volume.

Assessment Anchor

M06.C-G.1 Solve real-world and mathematical problems involving area, surface area, and volume.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.C-G.1.1 Find area, surface area, and volume by applying formulas and using various strategies.	M06.C-G.1.1.1 Determine the area of triangles and special quadrilaterals (i.e., square, rectangle, parallelogram, rhombus, and trapezoid). Formulas will be provided.	M06CG1.1.1a	Find the area of a quadrilateral given the dimensions
	M06.C-G.1.1.2 Determine the area of irregular or compound polygons. Example: Find the area of a room in the shape of an irregular polygon by composing and/or decomposing.		
	M06.C-G.1.1.3 Determine the volume of right rectangular prisms with fractional edge lengths. Formulas will be provided.	M06CG1.1.3a	Solve a real-world problem involving volume using unit cubes or multiplication
	M06.C-G.1.1.4 Given coordinates for the vertices of a polygon in the plane, use the coordinates to find side lengths and area of the polygon (limited to triangles and special quadrilaterals). Formulas will be provided.		
	M06.C-G.1.1.5 Represent three-dimensional figures using nets made of rectangles and triangles.	M06CG1.1.5a	Classify three-dimensional figures
	M06.C-G.1.1.6 Determine the surface area of triangular and rectangular prisms (including cubes). Formulas will be provided.		

PA Reporting Category: M06.D-S Statistics and Probability

PA Core Standards:

CC.2.4.6.B.1 Demonstrate an understanding of statistical variability by displaying, analyzing, and summarizing distributions.

Assessment Anchor

M06.D-S.1 Demonstrate understanding of statistical variability by summarizing and describing distributions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M06.D-S.1.1 Display, analyze, and summarize numerical data sets in relation to their	M06.D-S.1.1.1 Display numerical data in plots on a number line, including line plots, histograms, and boxand-whisker plots.		
context.	M06.D-S.1.1.2 Determine quantitative measures of center (e.g., median, mean, mode) and variability (e.g., range, interquartile range, mean absolute deviation).	M06DS1.1.2a	Identify measures of central tendency (mean, median, mode)
	M06.D-S.1.1.3 Describe any overall pattern and any deviations from the overall pattern with reference to the context in which the data were gathered.	M06DS1.1.3a	Compare points in a line plot, histogram, or on a number line
	M06.D-S.1.1.4 Relate the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.		

Mathematics

Grade 7

PA Alternate Eligible Content

PA Reporting Category: M07.A-N The Number System

PA Core Standards:

CC.2.1.7.E.1 Apply and extend previous understandings of operations with fractions to operations with rational numbers.

Assessment Anchor

M07.A-N.1 Apply and extend previous understandings of operations to add, subtract, multiply, and divide rational numbers.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M07.A-N.1.1 Solve real-world and mathematical problems involving the four operations with rational numbers.	M07.A-N.1.1.1 Apply properties of operations to add and subtract rational numbers, including real-world contexts.	M07AN1.1.1a	Solve a 1-step addition or subtraction problem with fractions, decimals, or positive/negative integers
	M07.A-N.1.1.2 Represent addition and subtraction on a horizontal or vertical number line.	M07AN1.1.2a	Identify the difference between two numbers on the number line
	M07.A-N.1.1.3 Apply properties of operations to multiply and divide rational numbers, including real-world contexts; demonstrate that the decimal form of a rational number terminates or eventually repeats.	M07AN1.1.3a	Solve a multiplication or division problem with positive/negative rational numbers

PA Reporting Category: M07.A-R Ratios and Proportional Relationships

PA Core Standards:

CC.2.1.7.D.1 Analyze proportional relationships and use them to model and solve real-world and mathematical problems.

Assessment Anchor

M07.A-R.1 Demonstrate an understanding of proportional relationships.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M07.A-R.1.1 Analyze, recognize, and represent proportional relationships and use them to solve real-world and mathematical problems.	M07.A-R.1.1.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. Example: If a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2 / 1/4 miles per hour, equivalently 2 miles per hour.	M07AR1.1.1a	Find the unit rate in a real-world problem
	M07.A-R.1.1.2 Determine whether two quantities are proportionally related (e.g., by testing for equivalent ratios in a table, graphing on a coordinate plane and observing whether the graph is a straight line through the origin).		
	M07.A-R.1.1.3 Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	M07AR1.1.3a	Represent a proportional relationship on a line graph
	M07.A-R.1.1.4 Represent proportional relationships by equations. Example: If total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.		
	M07.A-R.1.1.5 Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r), where r is the unit rate.	M07AR1.1.5a	Interpret an ordered pair in a real-world problem
	M07.A-R.1.1.6 Use proportional relationships to solve multi-step ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease.	M07AR1.1.6a	Use percentages to solve a real-world problem

PA Reporting Category: M07.B-E Expressions and Equations

PA Core Standards:

CC.2.2.7.B.1 Apply properties of operations to generate equivalent expressions.

Assessment Anchor

M07.B-E.1 Represent expressions in equivalent forms.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	DRAFT ALTERNATE ELIGIBLE CONTENT
M07.B-E.1.1 Use properties of operations to generate equivalent expressions.	M07.B-E.1.1.1 Apply properties of operations to add, subtract, factor, and expand linear expressions with rational coefficients. Example 1: The expression $1/2 \cdot (x + 6)$ is equivalent to $1/2 \cdot x + 3$. Example 2: The expression $5.3 - y + 4.2$ is equivalent to $9.5 - y$ (or $-y + 9.5$). Example 3: The expression $4w - 10$ is equivalent to $2(2w - 5)$.		

PA Reporting Category: M07.B-E Expressions and Equations

PA Core Standards:

CC.2.2.7.B.3 Model and solve real-world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.

Assessment Anchor

M07.B-E.2 Solve real-world and mathematical problems using numerical and algebraic expressions, equations, and inequalities.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M07.B-E.2.1 Solve multi-step real-world and mathematical problems posed with positive and negative rational numbers.	M07.B-E.2.1.1 Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate. Example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50 an hour (or 1.1 × \$25 = \$27.50).		
M07.B-E.2.2 Use variables to represent quantities in a real-world or mathematical problem and construct simple equations and inequalities to solve problems.	M07.B-E.2.2.1 Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Example: The perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?	M07BE2.2.1a	Select an algebraic expression (equations or inequalities) using addition or subtraction of fractions, decimals, or positive/negative integers to solve a 1-step real-world problem
	M07.B-E.2.2.2 Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers, and graph the solution set of the inequality. Example: A salesperson is paid \$50 per week plus \$3 per sale. This week she wants her pay to be at least \$100. Write an inequality for the number of sales the salesperson needs to make and describe the solutions.		
M07.B-E.2.3 Determine the reasonableness of the answer(s) in problem- solving situations.	M07.B-E.2.3.1 Determine the reasonableness of answer(s) or interpret the solution(s) in the context of the problem. Example: If you want to place a towel bar that is 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.	M07BE2.3.1a	Identify a reasonable solution in the context of a problem using the four basic operations and numbers under 20

PA Reporting Category: M07.C-G Geometry

PA Core Standards:

CC.2.3.7.A.2 Visualize and represent geometric figures and describe the relationships between them.

Assessment Anchor

M07.C-G.1 Demonstrate an understanding of geometric figures and their properties.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	DRAFT ALTERNATE ELIGIBLE CONTENT
M07.C-G.1.1 Describe and apply properties of geometric figures.	M07.C-G.1.1.1 Solve problems involving scale drawings of geometric figures, including finding length and area.	M07CG1.1.1a	Solve a 1-step real-world problem related to scaling
	M07.C-G.1.1.2 Identify or describe the properties of all types of triangles based on angle and side measures.	M07CG1.1.2a	Identify the properties of a right triangle
	M07.C-G.1.1.3 Use and apply the triangle inequality theorem.		
	M07.C-G.1.1.4 Describe the two-dimensional figures that result from slicing three-dimensional figures. Example: Describe plane sections of right rectangular prisms and right rectangular pyramids.	M07CG1.1.4a	Identify a three-dimensional figure with specific attributes

PA Reporting Category: M07.C-G Geometry

PA Core Standards:

CC.2.3.7.A.1 Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.

Assessment Anchor

M07.C-G.2 Solve real-world and mathematical problems involving angle measure, circumference, area, surface area, and volume.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M07.C-G.2.1 Identify, use, and describe properties of angles and their measures.	M07.C-G.2.1.1 Identify and use properties of supplementary, complementary and adjacent angles in a multi- step problem to write and solve simple equations for an unknown angle in a figure.	M07CG2.1.1a	Use angle relationships to find the missing angle
	M07.C-G.2.1.2 Identify and use properties of angles formed when two parallel lines are cut by a transversal (e.g., angles may include alternate interior, alternate exterior, vertical, corresponding).		
M07.C-G.2.2 Determine circumference, area, surface area, and volume	M07.C-G.2.2.1 Find the area and circumference of a circle. Solve problems involving area and circumference of a circle(s). Formulas will be provided.		
	M07.C-G.2.2.2 Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. Formulas will be provided.	M07CG2.2.2a	Find the area or volume of a two- or three-dimensional object given the formula

PA Reporting Category: M07.D-S Statistics and Probability

PA Core Standards:

CC.2.4.7.B.1 Draw inferences about populations based on random sampling concepts.

Assessment Anchor

M07.D-S.1 Use random sampling to draw inferences about a population.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M07.D-S.1.1 Use random samples.	M07.D-S.1.1.1 Determine whether a sample is a random sample given a real-world situation.		
	M07.D-S.1.1.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Example 1: Estimate the mean word length in a book by randomly sampling words from the book. Example 2: Predict the winner of a school election based on randomly sampled survey data.		

PA Reporting Category: M07.D-S Statistics and Probability

PA Core Standards:

CC.2.4.7.B.2 Draw informal comparative inferences about two populations.

Assessment Anchor

M07.D-S.2 Draw comparative inferences about populations.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M07.D-S.2.1 Use statistical measures to compare two numerical data distributions.	M07.D-S.2.1.1 Compare two numerical data distributions using measures of center and variability. Example 1: The mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team. This difference is equal to approximately twice the variability (mean absolute deviation) on either team. On a line plot, note the difference between the two	M07DS2.1.1a	Compare two sets of data within a single pictograph, line plot, or bar graph
	distributions of heights. Example 2: Decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth- grade science book.	M07DS2.1.1b	Use measures of central tendency to interpret data, including overall patterns in the data

PA Reporting Category: M07.D-S Statistics and Probability

PA Core Standards:

CC.2.4.7.B.3 Investigate chance processes and develop, use, and evaluate probability models.

Assessment Anchor

M07.D-S.3 Investigate chance processes and develop, use, and evaluate probability models.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M07.D-S.3.1 Predict or determine the likelihood of outcomes.	M07.D-S.3.1.1 Predict or determine whether some outcomes are certain, more likely, less likely, equally likely, or impossible (i.e., a probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event).	M07DS3.1.1a	Identify the probability of events occurring as possible/impossible or likely/unlikely
M07.D-S.3.2 Use probability to predict outcomes	M07.D-S.3.2.1 Determine the probability of a chance event given relative frequency. Predict the approximate relative frequency given the probability. Example: When rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times but probably not exactly 200 times.		
	M07.D-S.3.2.2 Find the probability of a simple event, including the probability of a simple event not occurring. Example: What is the probability of not rolling a 1 on a number cube?		
	M07.D-S.3.2.3 Find probabilities of independent compound events using organized lists, tables, tree diagrams, and simulation.		

Mathematics

Grade 8

PA Alternate Eligible Content

PA Reporting Category: M08.A-N The Number System

PA Core Standards:

CC.2.1.8.E.1 Distinguish between rational and irrational numbers using their properties.

CC.2.1.8.E.4 Estimate irrational numbers by comparing them to rational numbers.

Assessment Anchor

M08.A-N.1 Demonstrate an understanding of rational and irrational numbers.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.A-N.1.1 Apply concepts of rational and irrational numbers.	M08.A-N.1.1.1 Determine whether a number is rational or irrational. For rational numbers, show that the decimal expansion terminates or repeats (limit repeating decimals to thousandths).		
	M08.A-N.1.1.2 Convert a terminating or repeating decimal to a rational number (limit repeating decimals to thousandths).	M08AN1.1.2a	Convert a fraction to a decimal up to the hundredths place
	M08.A-N.1.1.3 Estimate the value of irrational numbers without a calculator (limit whole number radicand to less than 144). Example: $\sqrt{5}$ is between 2 and 3 but closer to 2.		
	M08.A-N.1.1.4 Use rational approximations of irrational numbers to compare and order irrational numbers.		
	M08.A-N.1.1.5 Locate/identify rational and irrational numbers at their approximate locations on a number line.	M08AN1.1.5a	Locate a non-terminating decimal at its approximate location on the number line

PA Reporting Category: M08.B-E Expressions and Equations

PA Core Standards:

CC.2.2.8.B.1 Apply concepts of radicals and integer exponents to generate equivalent expressions.

Assessment Anchor

M08.B-E.1 Demonstrate an understanding of expressions and equations with radicals and integer exponents.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.B-E.1.1 Represent and use expressions and equations to solve problems involving radicals and integer exponents.	M08.B-E.1.1.1 Apply one or more properties of integer exponents to generate equivalent numerical expressions without a calculator (with final answers expressed in exponential form with positive exponents). Properties will be provided. Example: $3^{12} \times 3^{-15} = 3^{-3} = 1/(3^3)$		
	M08.B-E.1.1.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of perfect squares (up to and including 12^2) and cube roots of perfect cubes (up to and including 5^3) without a calculator. Example: If $x^2 = 25$ then $x = \pm \sqrt{25}$.	M08BE1.1.2a	Identify the meaning of an exponent (limited to exponents of 2 and 3)
	M08.B-E.1.1.3 Estimate very large or very small quantities by using numbers expressed in the form of a single digit times an integer power of 10 and express how many times larger or smaller one number is than another. Example: Estimate the population of the United States as 3 × 10 ⁸ and the population of the world as 7 × 10 ⁹ and determine that the world population is more than 20 times larger than the United States' population.		
	M08.B-E.1.1.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Express answers in scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology (e.g., interpret 4.7EE9 displayed on a calculator as 4.7 × 10 ⁹).		

PA Reporting Category: M08.B-E Expressions and Equations

PA Core Standards:

CC.2.2.8.B.2 Understand the connections between proportional relationships, lines, and linear equations.

Assessment Anchor

M08.B-E.2 Understand the connections between proportional relationships, lines, and linear equations.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.B-E.2.1 Analyze and describe linear relationships between two variables, using slope.	M08.B-E.2.1.1 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. Example: Compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	M08BE2.1.1a	Compare two proportional relationships shown in graph form
	M08.B-E.2.1.2 Use similar right triangles to show and explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane.		
	M08.B-E.2.1.3 Derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.	M08BE2.1.3a	Identify the slope and y- intercept of a line on a graph

PA Reporting Category: M08.B-E Expressions and Equations

PA Core Standards:

CC.2.2.8.B.3 Analyze and solve linear equations and pairs of simultaneous linear equations.

Assessment Anchor

M08.B-E.3 Analyze and solve linear equations and pairs of simultaneous linear equations.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.B-E.3.1 Write, solve, graph, and interpret linear equations in one or two variables, using various methods.	M08.B-E.3.1.1 Write and identify linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).	M08BE3.1.1a	Select an algebraic equation using addition or subtraction to solve a 2-step real-world problem with one variable
	M08.B-E.3.1.2 Solve linear equations that have rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	M08BE3.1.2a	Solve a 2-step real-world problem using an algebraic equation involving addition or subtraction and one variable
	M08.B-E.3.1.3 Interpret solutions to a system of two linear equations in two variables as points of intersection of their graphs because points of intersection satisfy both equations simultaneously.		
	M08.B-E.3.1.4 Solve systems of two linear equations in two variables algebraically and estimate solutions by graphing the equations. Solve simple cases by inspection. Example: $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because 3x + 2y cannot simultaneously be 5 and 6.		
	M08.B-E.3.1.5 Solve real-world and mathematical problems leading to two linear equations in two variables. Example: Given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.	M08BE3.1.5a	Graph a linear equation

PA Reporting Category: M08.B-F Functions

PA Core Standards:

CC.2.2.8.C.1 Define, evaluate, and compare functions.

Assessment Anchor

M08.B-F.1 Analyze and interpret functions.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.B-F.1.1 Define, evaluate, and compare functions displayed algebraically, graphically, or numerically in tables or by verbal descriptions.	M08.B-F.1.1.1 Determine whether a relation is a function. M08.B-F.1.1.2 Compare properties of two functions, each represented in a different way (i.e., algebraically, graphically, numerically in tables, or by verbal descriptions). Example: Given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change. M08.B-F.1.1.3		
	Interpret the equation y = mx + b as defining a linear function whose graph is a straight line; give examples of functions that are not linear.		

PA Reporting Category: M08.B-F Functions

PA Core Standards:

CC.2.2.8.C.2 Use concepts of functions to model relationships between quantities.

Assessment Anchor

M08.B-F.2 Use functions to model relationships between quantities.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.B-F.2.1 Represent or interpret functional relationships between quantities using tables, graphs, and descriptions.	M08.B-F.2.1.1 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models and in terms of its graph or a table of values.	M08BF2.1.1a	Determine the missing value in a graph showing a realworld linear relationship
	M08.B-F.2.1.2 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch or determine a graph that exhibits the qualitative features of a function that has been described verbally.	M08BF2.1.2a	Describe the relationship between two variables with a linear relationship displayed in graph form

PA Reporting Category: M08.C-G Geometry

PA Core Standards:

CC.2.3.8.A.2 Understand and apply congruence, similarity, and geometric transformations using various tools.

Assessment Anchor

M08.C-G.1 Demonstrate an understanding of geometric transformations.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.C-G.1.1 Apply properties of geometric transformations to verify congruence or similarity.	M08.C-G.1.1.1 Identify and apply properties of rotations, reflections, and translations. Example: Angle measures are preserved in rotations, reflections, and translations.	M08CG1.1.1a	Identify a rotation, reflection, or translation of a two- or three-dimensional figure
	M08.C-G.1.1.2 Given two congruent figures, describe a sequence of transformations that exhibits the congruence between them.	M08CG1.1.2a	Identify figures that are congruent/similar
	M08.C-G.1.1.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.		
	M08.C-G.1.1.4 Given two similar two-dimensional figures, describe a sequence of transformations that exhibits the similarity between them.		

PA Reporting Category: M08.C-G Geometry

PA Core Standards:

CC.2.3.8.A.3 Understand and apply the Pythagorean Theorem to solve problems.

Assessment Anchor

M08.C-G.2 Understand and apply the Pythagorean theorem.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.C-G.2.1 Solve problems involving right triangles by applying the Pythagorean theorem.	M08.C-G.2.1.1 Apply the converse of the Pythagorean theorem to show a triangle is a right triangle. M08.C-G.2.1.2	M08CG2.1.2a	Apply the Pythagorean
	Apply the Pythagorean theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. (Figures provided for problems in three dimensions will be consistent with Eligible Content in grade 8 and below.)		theorem to determine length/distance in a real-world problem
	M08.C-G.2.1.3 Apply the Pythagorean theorem to find the distance between two points in a coordinate system.		

PA Reporting Category: M08.C-G Geometry

PA Core Standards:

CC.2.3.8.A.1 Apply the concepts of volume of cylinders, cones, and spheres to solve real-world and mathematical problems.

Assessment Anchor

M08.C-G.3 Solve real-world and mathematical problems involving volume.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.C-G.3.1 Apply volume formulas of	M08.C-G.3.1.1 Apply formulas for the volumes of cones, cylinders, and	M08CG.3.1.1a	Complete the formula for volume to solve a real-world
cones, cylinders, and	spheres to solve real-world and mathematical problems.		or mathematical problem
spheres.	Formulas will be provided.		

PA Reporting Category: M08.D-S Statistics and Probability

PA Core Standards:

CC.2.4.8.B.1 Analyze and/or interpret bivariate data displayed in multiple representations.

CC.2.4.8.B.2 Understand that patterns of association can be seen in bivariate data utilizing frequencies.

Assessment Anchor

M08.D-S.1 Investigate patterns of association in bivariate data.

DESCRIPTOR	ELIGIBLE CONTENT	Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
M08.D-S.1.1 Analyze and interpret bivariate data displayed in multiple representations.	M08.D-S.1.1.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative correlation, linear association, and nonlinear association.		
	M08.D-S.1.1.2 For scatter plots that suggest a linear association, identify a line of best fit by judging the closeness of the data points to the line.	M08DS1.1.2a	Identify a statement that describes the relationship between variables displayed in a scatterplot
	M08.D-S.1.1.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. Example: In a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.		
M08.D-S.1.2 Understand that patterns of association can be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table.	M08.D-S.1.2.1 Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible associations between the two variables. Example: Given data on whether students have a curfew on school nights and whether they have assigned chores at home, is there evidence that those who have a curfew also tend to have chores?	M08DS1.2.1a	Answer a question using data from a two-way table

Mathematics Grade 11

PA Alternate Eligible Content

CC.2.1.HS.F.1: Apply and extend the properties of exponents to solve problems with rational exponents.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.1.HS.F.2: Apply properties of rational and irrational numbers to solve real world or mathematical problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.1.HSF2a	Convert between fractions and decimals in a real-world problem

PA Core Standards:

CC.2.1.HS.F.3: Apply quantitative reasoning to choose and Interpret units and scales in formulas, graphs and data displays.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.1.HSF3a	Identify and interpret scale in a real-world problem

PA Core Standards:

CC.2.1.HS.F.4: Use units as a way to understand problems and to guide the solution of multi-step problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.1.HSF4a	Determine the necessary units and solve a real-world problem

CC.2.1.HS.F.5: Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT	

PA Core Standards:

CC.2.1.HS.F.6: Extend the knowledge of arithmetic operations and apply to complex numbers.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.1.HS.F.7: Apply concepts of complex numbers in polynomial identities and quadratic equations to solve problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.C.1: Use the concept and notation of functions to interpret and apply them in terms of their context.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.2.HSC1a	Determine the missing coordinates in a table of values containing at least 2 complete ordered pairs

CC.2.2.HS.C.2: Graph and analyze functions and use their properties to make connections between the different representations.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.C.3: Write functions or sequences that model relationships between two quantities.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.2.HSC3a	Describe the linear relationship between two variables displayed in a table of values

PA Core Standards:

CC.2.2.HS.C.4: Interpret the effects transformations have on functions and find the inverses of functions.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.C.5: Construct and compare linear, quadratic, and exponential models to solve problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.2.HSC5a	Interpret the effect of a change in one variable on the other variable using graphs or tables
CC.2.2.HSC5b	Interpret a graphical representation of a linear model in a real-world problem

CC.2.2.HS.C.6: Interpret functions in terms of the situations they model.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.C.7: Apply radian measure of an angle and the unit circle to analyze the trigonometric functions.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.C.8: Choose trigonometric functions to model periodic phenomena and describe the properties of the graphs.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.C.9: Prove the Pythagorean identity and use it to calculate trigonometric ratios.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.2.2.HS.D.1: Interpret the structure of expressions to represent a quantity in terms of its context.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.2.HSD1a	Select an algebraic expression using any of the four operations and solve a real-world problem

PA Core Standards:

CC.2.2.HS.D.2: Write expressions in equivalent forms to solve problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.D.3: Extend the knowledge of arithmetic operations and apply to polynomials.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.D.4: Understand the relationship between zeros and factors of polynomials to make generalizations about functions and their graphs.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.2.2.HS.D.5: Use polynomial identities to solve problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.D.6: Extend the knowledge of rational functions to rewrite in equivalent forms.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.2.HS.D.7: Create and graph equations or inequalities to describe numbers or relationships.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.2.HSD7a	Translate a real-world problem into a one-variable equation

PA Core Standards:

CC.2.2.HS.D.8: Apply inverse operations to solve equations or formulas for a given variable.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.2.HSD8a	Solve a linear equation to find a missing attribute when determining area or volume

CC.2.2.HS.D.9: Use reasoning to solve equations and justify the solution method.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.2.HSD9a	Order a given sequence of steps to solve an equation

PA Core Standards:

CC.2.2.HS.D.10: Represent, solve, and interpret equations/inequalities and systems of equations/inequalities algebraically and graphically.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.1: Use geometric figures and their properties to represent transformations in the plane.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.2: Apply rigid transformations to determine and explain congruence.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.2.3.HS.A.3: Verify and apply geometric theorems as they relate to geometric figures.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.4: Apply the concept of congruence to create geometric constructions.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.5: Create justifications based on transformations to establish similarity of plane figures.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.6: Verify and apply theorems involving similarity as they relate to plane figures.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.2.3.HS.A.7: Apply trigonometric ratios to solve problems involving right triangles.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.8: Apply geometric theorems to verify properties of circles.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.9: Extend the concept of similarity to determine arc lengths and areas of sectors of circles.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.10: Translate between the geometric description and the equation for a conic section.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.2.3.HS.A.11: Apply coordinate geometry to prove simple geometric theorems algebraically.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.12: Explain volume formulas and use them to solve problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.3.HS.A.13: Analyze relationships between two-dimensional and three dimensional objects.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.3.HSA13a	Match corresponding two-dimensional and three-dimensional representations

PA Core Standards:

CC.2.3.HS.A.14: Apply geometric concepts to model and solve real world problems.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.3.HSA14a	Compare the area of two objects with one equivalent attribute

CC.2.4.HS.B.1: Summarize, represent, and interpret data on a single count or measurement variable.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.4.HSB1a	

PA Core Standards:

CC.2.4.HS.B.2: Summarize, represent, and interpret data on two categorical and quantitative variables.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.4.HSB2a	Interpret the means and/or medians of two sets of data

PA Core Standards:

CC.2.4.HS.B.3: Analyze linear models to make interpretations based on the data.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.4.HSB3a	Identify the relationship between two or more variables in a function

PA Core Standards:

CC.2.4.HS.B.4: Recognize and evaluate random processes underlying statistical experiments.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

CC.2.4.HS.B.5: Make inferences and justify conclusions based on sample surveys, experiments, and observational studies.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.4.HSB5a	Draw a conclusion about data presented in a two-way table representing a real-world problem

PA Core Standards:

CC.2.4.HS.B.6: Use the concepts of independence and conditional probability to interpret data.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT

PA Core Standards:

CC.2.4.HS.B.7: Apply the rules of probability to compute probabilities of compound events in a uniform probability model.

Alternate Eligible Content Code	ALTERNATE ELIGIBLE CONTENT
CC.2.4.HSB7a	Identify the probability of events based on real-world examples of conditional probability