4th Grade Curriculum Guide

7/28/16

CVSD ELA Scope and Sequence

4th Grade		Reading Informational Text and Literature	Writing	Foundational Skills and Speaking/Listening
Units	**Timeline**	**Priority Standards**	**Priority Standards**	**Priority Standards**
Unit 1: Exploring Narrative Reading and Writing	Trimester 1	CC.1.3.4.A	W.4.3	CC.1.1.4.D
		CC.1.3.4.B	W.4.5	CC.1.5.4.D
		CC.1.3.4.C	W.4.9	
		CC.1.3.4.D	L.4.1	
		CC.1.3.4.F	L.4.2	
Unit 2: Exploring Informational Reading and Writing	Trimester 2	CC.1.2.4.A	W.4.2	CC.1.1.4.D
		CC.1.2.4.B	W.4.5	CC.1.5.4.D
		CC.1.2.4.C	W.4.9	
		CC.1.2.4.D	L.4.1	
		CC.1.2.4.E	L.4.2	
		CC.1.2.4.F		
		CC.1.2.4.I		
Unit 3: Exploring Persuasive Reading and Writing	Trimester 3	CC.1.2.4.A	W.4.1	CC.1.1.4.D
		CC.1.2.4.B	W.4.5	CC.1.5.4.D
		CC.1.2.4.D	W.4.9	
		CC.1.2.4.F	L.4.1	
		CC.1.3.4.A	L.4.2	
		CC.1.3.4.B		
		CC.1.3.4.D		
		CC.1.3.4.F		

ELA Priority Standards ~ Grade 4

CCSS	PA Core	Foundational Skills
RF.4.3	CC.1.1.4.D.	Know and apply grade level phonics and word analysis skills in decoding words. Use combined knowledge of all letter- sound correspondences, syllabication patterns, and morphology to read accurately unfamiliar multisyllabic words.
		Reading Informational Text
RI.4.2	CC.1.2.4.A	Determine the main idea of a text and explain how it is supported by key details; summarize the text.
RI.4.1	CC.1.2.4.B	Refer to details and examples in text to support what the text says explicitly and make inferences.
RI.4.3	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.
RI.4.6	CC.1.2.4.D	Compare and contrast an event or topic told from two different points of view.
RI.4.4	CC.1.2.4.F	Determine the meaning of words and phrases as they are used in grade level text, including figurative language.
RI.4.5	CC.1.2.4.E.	Use text structure to interpret information (e.g., chronology, comparison, cause/effect, problem/solution).
RI.4.9	CC.1.2.4.I.	Integrate information from two texts on the same topic to demonstrate understanding of that topic.
		Reading Literature
RL.4.2	CC.1.3.4.A	Determine a theme of a text from details in the text; summarize the text.
RL.4.1	CC.1.3.4.B	Cite relevant details from text to support what the text says explicitly and make inferences.
RL.4.3	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.
RL.4.6	CC.1.3.4.D	Compare and contrast an event or topic told from two different points of view.
RL.4.4 L.4.5	CC.1.3.4.F	Determine the meaning of words and phrases as they are used in grade level text, including figurative language.
		Writing
W.4.1	CC.1.4.4.G-J	Write opinion pieces on topics or texts supporting a point of view with reasons and information.
W.4.2	CC.1.4.4.A-D	Write informative/explanatory texts to examin a topic and convey ideas and information clearly.
W.4.3	CC.1.4.4.M-P	Write narratives to develop real or imagined experiences or events using effective technique, descriptive details and clear event sequences.
L.4.1	CC.1.4.4.F L & R	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. • Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). • Form and use progressive (e.g., I was walking; I am walking; I will be walking) verb tenses. • Use modal auxiliaries (e.g., can, may, must) to convey various conditions. • Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag). • Form and use prepositional phrases. • Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. • Produce simple, compound and complex sentences. • Correctly use frequently confused words (e.g., to, too, two, there, their,).
L.4.2	CC.1.4.4.F L & R	Demonstrate a grade appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation, and spelling.
W.4.9	CC.1.4.4.S	Draw evidence from literary or informational texts to support analysis, reflection, and research.
W.4.5	CC.1.4.2.T	With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
		Speech and Listening
SL.4.4	CC.1.5.4.D	Report+A21:C27 on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speaking clearly with adequate volume, appropriate pacing, and clear pronunciation.

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RF.4.3	CC.1.1.4.D - Know and apply grade level phonics and word analysis skills in decoding words. • Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology to read accurately unfamiliar multisyllabic words.

Taught in Unit(s)

Units 1- 3

Explanation/Example of Standard

Students continue learning specific strategies for decoding words in texts. They are required to apply the specific strategies for decoding and spelling multi-syllabic words. Use questions and prompts such as:

- Does that sound right?
- Does that look right?
- Does that make sense?
- Look at the word, does it look like …?
- You said …does it look like …?

Common Misconceptions

Phonics rules always apply. (In reality, rules are meant to be broken in phonics. There is always an exception to rules in phonics.)

Big Idea(s)	Essential Question(s)
Great readers apply many different strategies when trying to decode an unknown word in their text, including using phonics skills and meaning. Great readers understand the importance of using meaning and context clues to figure out an unknown word.	What strategies can I use to help me decode unknown words in my reading?

Assessments

See unit map for specific unit common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• letter-sound correspondences • syllabication patterns • morphology	• read accurately unfamiliar multisyllabic words

I Can Statements

I can analyze words and use phonics to help me read fourth grade words.
I can read and understand root words that also have prefixes or suffixes.
I can read unfamiliar words that have more than one syllable.

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RI.4.2	CC.1.2.4.A – Determine the main idea of a text; explain how it is supported by key details; summarize the text.

Taught in Unit(s)

Units 2-3

Explanation/Example of Standard

Fourth grade students must identify the main idea and find the most important details that strengthen the main idea. They must also explain the text in their own words. Use questions and prompts such as:

- What is the main idea of this text?
- What are the important ideas in this text?
- How do the details support the main idea?
- Summarize the text from beginning to end in a few sentences.

Common Misconceptions

A summary is a full retelling of the text. (In reality it only addresses the key ideas and/or details from the text and should be accomplished in only a few sentences.)

Big Idea(s)	Essential Question(s)
Authors of informational text include key details in order to help readers make meaning of the text. Good readers use key details in an informational text to identify the main topic. Good readers develop effective summaries that capture the main ideas of informational text(s).	• How do you determine the main idea of a text? • What is the difference between the main idea and details in a text? • How do the details support the main idea? • What are the characteristics of an effective summary?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
W04.B-K.1 - Key Ideas and Details	E03.B-K.1.1.2	Determine the main idea of a text; explain how it is supported by key details; summarize the text.

Concepts (what students need to know)	Skills (what students must be able to do)
• Informational text (both literary nonfiction and expository/technical texts) • Main idea • Key details • Characteristics of explanation (e.g., what and why) • Difference between main ideas and key details in a text • Informational text features and/or structure(s) that help suggest main idea • Characteristics of an effective summary for informational text	• Determine the main idea of an informational text • Recognize how ideas are organized in an informational text • Describe or graphically represent the relationship between main idea and details. • Explain how the main idea is supported by key details • Summarize the main idea in an informational text, including the most important parts of the piece.

• How to summarize	

I Can Statements
I can use details to summarize the main idea in informational text. I can figure out the main idea in nonfiction by thinking about the details in the text. I can summarize a piece of nonfiction in my own words.

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RI.4.1	CC.1.2.4.B - Refer to details and examples in a text when explaining what the text says explicitly and make inferences.

Taught in Unit(s)

Unit 2-3

Explanation/Example of Standard

Fourth grade students are required to refer to specific examples when explaining the text and drawing conclusions. Use questions and prompts such as:

- What is the main idea of this text? How do you know?
- What are the important ideas in this text? Show where you found them in the text.

Common Misconceptions

Inferences are the same as predictions. (In reality, an inference is different in that it should be based on examples and details from the text. It cannot be a random guess.)

Big Idea(s)	Essential Question(s)
Authors include key details in informational texts which can help a reader ask and answer questions. Good readers use examples and details from the text to support their inferences. Good readers use textual evidence connections to their own lives and their background knowledge to make inferences and draw conclusions about what they read. Good readers make meaning using the details and examples in a text.	• How do I find explicit information in a story or a text? • What does it mean to make an inference? • What are the steps to making an inference? • How will making an inference help me to understand the story better? • Why is it important to use information from the text to support my inference?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.B-K.1.1	Key Ideas and Details	E04.B-K.1.1.1	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

Concepts (what students need to know)	Skills (what students must be able to do)
• Inference • Prediction • Details and examples • Generalizations • Background knowledge • Explicitly stated information from the text • Author's decisions (e.g., paragraphing, quotations, organization of text, formatting devices, mode of	• Make, test and revise predictions as they read • Use the combination of explicitly stated information , background knowledge, and connections to the text to answer questions they have as they read • Refer to details and examples from the text when explaining what the text says • Make implied inferences about author's decisions

development used, notes to readers)	and the content of a text • Refer to details and examples from the text when drawing inferences
I Can Statements	
I can infer meanings of informational text from the title page, table of contents and chapter headings. I can draw conclusions from maps, charts, graphs and diagrams. I can explain what a piece of nonfiction teaches me by referring to details and examples in the text.	

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RI.4.3	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.

Taught in Unit(s)

Unit 2

Explanation/Example of Standard

Fourth grade students tell how or why historical events, scientific ideas or "how to" procedures happened and use the text to support their answers. Use questions and prompts such as:

- Which step comes first? After that? What happened first? What happened after that?
- Think about these historical events. Tell how they are connected.

Common Misconceptions

When I explain "why something happened" it is an opinion.

Big Idea(s)	Essential Question(s)
Authors include specific information to explain events, procedures, ideas and concepts in scientific, technical and historical texts and why they occur. Good readers understand the relationships between and among events, ideas/concepts or steps/procedures and use that information to make sense of what they read	How do I identify the events, key ideas/concepts or steps in an informational text? How do I distinguish between key ideas and explanatory details? Why is it important to understand the connection in between each step in a sequence of events?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.B-K.1	Key Ideas and Details	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.

Concepts (what students need to know)	Skills (what students must be able to do)
• Informational text (both literary nonfiction and expository/technical texts) • How to explain (e.g., what and why) • Key ideas/concepts, events, steps in informational texts. • Specific details that explain key ideas, events, steps • Key features of content-specific texts (e.g., science, technical and historical texts) based on text features (e.g., events, steps, procedures) • Text structure in informational texts (e.g., time, sequence, cause/effect, steps). • Connections and relationships (e.g., one piece of	• Identify the events, key ideas/ concepts, steps in informational texts • Distinguish between key ideas and explanatory details • Identify and describe how informational and technical texts are structured • Identify words/phrases that signal explanations • Explain how ideas, events, steps are connected • Use specific information to explain what and why key events, ideas, procedures, events happened

text “explains” another or stands in “contrast” to another or “comes before” another) • Transition/linking words that signal explanations (e.g., because, then, as a consequence, in contrast) for informational texts.	
I Can Statements	
I can explain, with details, complete instructions or procedures. I can explain why and how events, procedures, ideas or concepts in historical, scientific or technical texts happened by using the information presented.	

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RI.4.6	CC.1.2.4.D – Compare and contrast an event or topic told from two different points of view.

Taught in Unit(s)

Unit 2-3

Explanation/Example of Standard

Fourth grade students are required to find the similarities and differences in perspectives (first and second hand) about the same event or subject. They will give descriptions about how the information is presented for each perspective. Use questions and prompts such as:

- What is the author emphasizing mostly in the firsthand account? What is the author emphasizing in the secondhand account?
- Is the information provided by the author the same or different?

Common Misconceptions

First person point of view is the same as a firsthand account and second person point of view is the same thing as a secondhand account.

Big Idea(s)	Essential Question(s)
An author's focus/viewpoint affects the choices he/she makes (e.g., style, word choice, content) in shaping a text. Good readers look at first and secondhand account of the same event or topic to obtain different information. Good readers recognize that the same event can be interpreted differently when told from different perspectives/viewpoints.	• What is the difference between a first and second hand account of an event or subject? • What is the difference between a primary and secondary source? • Why is it important to know what viewpoint a story or text is told from? • How can I compare and contrast an event or topic told from two different points of view? • What is the benefit of comparing or contrasting an event or topic told from two different points of view?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E.04.B-C.2	Craft and Structure	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 presented.

Concepts (what students need to know)	Skills (what students must be able to do)
• Informational text (both literary nonfiction and expository/technical texts) • Compare • Contrast • Firsthand account (primary) of an event or topic • Secondhand (secondary) account of an event or topic	• Identify the author's purpose for writing a text • Identify a firsthand account • Identify a secondhand account • Explain how a firsthand and secondhand account are different • Compare and contrast a firsthand and secondhand account of an event or topic

• Author's viewpoint/focus/attitude • Author's roles/purposes (to inform, to persuade, to explain how, to entertain) for writing a text	• Describe differences in focus and information provided by firsthand and secondhand accounts of an event or topic • Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided
I Can Statements	
I can compare and contrast a firsthand and secondhand account of the same event or topic.	

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RI.4.5	CC.1.2.4.E – Use text structure to interpret information (e.g., chronology, comparison, cause/effect, problem/solution).

Taught in Unit(s)

Unit 2

Explanation/Example of Standard

Fourth grade students must explain how the events, ideas, or concepts fit into the overall structure of a text. Use questions and prompts such as:

- What features in the text help you find important information about what you are reading?
- How is the information presented/organized in this text? What does the author want the reader to understand about this text?

Common Misconceptions

Key words always determine text structure. (In reality, they are a guide not a rule when determining text structure.)

Text structure and text features are the same. (They are not the same. Text structure refers to the way the information in the text is organized eg. Chronological order or descriptive. Text features are different features that may be used in a text to help with understanding eg. Diagrams or glossary)

Big Idea(s)	Essential Question(s)
Authors of informational text use various structures to share information. Good readers use text features to locate relevant information.	• What are the characteristics of the chronological text structure? • What are the characteristics of the comparison text structure? • What are the characteristics of the cause and effect text structure? • What are the characteristics of the problem and solution text structure? • What are the characteristics of the descriptive text structure? • How does understanding a text's structure help me to interpret information from the text?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.B-C.2	Craft and Structure	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.

Concepts (what students need to know)	Skills (what students must be able to do)
• Informational text (both literary nonfiction and expository/technical texts) • How to describe	• Describe the overall structure of events in an informational text or part of a text • Describe the overall structure of ideas in an

• Text structure/patterns of organization (e.g., chronology, comparison, cause/effect, problem/solution)	informational text or part of a text • Describe the overall structure of concepts in an informational text or part of a text • Describe the overall structure of information in an informational text or part of a text • Describe the overall text structure of events, ideas, concepts, or information in a text or part of a text
I Can Statements	
I can describe how various forms of nonfiction are structured (e.g., time order, comparison, cause & effect or problem & solution).	

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RI.4.4 L.4.4 L.4.5	CC.1.2.4.F – Determine the meaning of words and phrases as they are used in grade-level text, including figurative language.

Taught in Unit(s)

Units 2-3

Explanation/Example of Standard

Learning words at this stage includes exploring the meaning of simple similes, metaphors, idioms, adages, and proverbs; demonstrating understanding of relationships between words (synonyms and antonyms); and developing print and digital reference use (glossary, dictionary, and thesaurus).

Common Misconceptions

Figurative language is not used in informational text.

Big Idea(s)	Essential Question(s)
Authors make purposeful language choices to enhance the meaning in informational text(s). Good readers actively seek the meaning of unknown words/phrases to clarify understanding of informational text(s).	• How can I find context clues within a passage to help me figure out the meaning of an unknown word or phrase? • How can I determine the correct meaning of a multi-meaning word using context clues? • How can I distinguish between literal and non-literal meaning in a text? • How can I identify and determine the true meaning of figurative language in informational text? • How does the author use purposeful language choice to help enhance the meaning of informational text?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E.04.B-V.4	Vocabulary Acquisition and Use	E.04.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. • Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
		E.04.B-V.4.1.2	Demonstrate understanding of figurative language, word relationships and nuances in word meanings. • Explain the meaning of similes and metaphors in context. • Recognize the meaning of

			common idioms, adages and proverbs • Demonstrate understanding of words by relating them to their antonyms and synonyms.

Concepts (what students need to know)	**Skills** (what students must be able to do)
• Informational Text • Word choice • Context clues • Literal/ Denotative meaning • Connotative meaning • Figurative language or non-literal meaning (e.g., simile, metaphor) • Idioms, adages and proverbs	• Read and reread other sentences, paragraphs, and non-linguistic images in the text to identify context clues • Use context clues to help unlock the meaning of unknown words/phrases • Determine the appropriate definition of words that have more than one meaning • Differentiate between literal and non-literal meaning • Identify and interpret figurative language • Describe how figurative language and other language choices enhance meaning • Recognize the meaning of common idioms, adages and proverbs • Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area

I Can Statements

I can determine the meaning of unknown words by using a variety-of context clues, including word, sentence and paragraph clues.
I can recognize the difference between the meaning of connotation and denotation.
I can determine the meanings of unknown multiple-meaning words by using context clues.
I can use print and computer dictionaries to help me find the pronunciations and clarify meanings of new words or phrases.
I can understand figurative language, word relationships and small shades of differences in word meanings.
I can explain the meaning of simple similes and metaphors in context.
I can recognize and explain the meaning of common idioms, adages and proverbs.
I can understand words by relating them to their antonyms and synonyms.

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RI.4.9	CC.1.2.4.I – Integrate information from two texts on the same topic to demonstrate understanding of that topic.

Taught in Unit(s)

Unit 2

Explanation/Example of Standard

Fourth grade students will combine information from two texts about the same subject in a written or oral response that demonstrates knowledge of the subject. Use questions and prompts such as:

- What is the same about the points presented in these texts? What is different?
- Look at these two texts about the same topic. Can you find the important information from both texts to add to your notes? Can you tell me about the important ideas you found in each text?

Common Misconceptions

All sources can be trusted as fact.

Big Idea(s)	Essential Question(s)
Authors of informational text provide information and key details on topics in different ways. Good readers make meaning of informational texts by integrating important information presented in two texts in order to present it for a specific purpose.	• How can I use information from two texts on the same topic to gain a better understanding of the topic? • How can I demonstrate my understanding of a topic learned about from two different texts?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.B-C.3	Integration of Knowledge and Ideas	E04.B-C.3.1.2	Integrate information from two texts on the same topic in order to demonstrate subject knowledge.

Concepts (what students need to know)	Skills (what students must be able to do)
• Informational text (both literary nonfiction and expository texts) • Compare/contrast • Important points/main ideas • Most important vs. least important parts • Key/supporting details • Purpose for gathering information • Methods to manage and organize selected information (graphic organizers) • How to integrate information in a purposeful way	• Establish a purpose for gathering information • Identify the most important points from two texts for a given purpose • Identify the key/supporting details from two texts for a given purpose • Use a method for managing and organizing selected information • Integrate information for two texts on the same topic in order to write or speak about the subject knowledgably

I Can Statements

I can use information from two different texts on the same topic to help me write or speak knowledgeably about the topic.

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RL.4.2	CC.1.3.4.A – Determine a theme of a text from details in the text; summarize the text.

Taught in Unit(s)

Unit 1, 3

Explanation/Example of Standard

In fourth grade, the central message or lesson is now referred to as theme (a unifying idea that is a recurrent element in literary or artistic work). Students are continuing to determine a theme and expanding this work to other genres. Use questions and prompts such as:

- What is the theme of this text?
- Summarize the story from beginning to end in a few sentences.

Common Misconceptions

A summary is the same as retelling all events and details from the story. (In reality, a DRA summary is not an actual summary.)

Big Idea(s)	Essential Question(s)
Authors of literary texts include details that help readers determine the theme or central idea(s). Good readers create effective summaries that capture the central idea(s) or theme of the text.	• How can the story details help me to determine the theme of a story? • What are the characteristics of a good summary?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E.04.A-K.1	Key Ideas and Details	E04.A-K.1.1.2	Determine the theme of a story, drama or poem from details in the text; summarize the text.

Concepts (what students need to know)	Skills (what students must be able to do)
• Literary texts • How to summarize • Theme • Characteristics of an effective summary for literary texts	• Determine the theme of literary text(s) • Identify the characteristics of an effective summary for literary texts • Summarize the text

I Can Statements

I can find the theme, and state whether it is implied or direct.
I can figure out the theme of a piece of fiction by thinking about the details in the text.
I can summarize a piece of fiction in my own words.

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RL.4.1	CC.1.3.4.B – Cite relevant details from the text to support what the text says explicitly and make inferences.

Taught in Unit(s)

Unit 1, 3

Explanation/Example of Standard

Fourth grade students should refer to the text when drawing conclusions as well as when answering directly stated questions. Use questions and prompts such as:

- Can you tell me the reasons why the character said …in the story? Show me where you linked your thinking to the text.
- What are the most important events that happened in the story? How do you know?

Common Misconceptions

"I am working on inferencing."- Inference is a noun. To infer is a verb. So we work on making an inference, but we are inferring when we speak.

Inferences are the same as predictions. (In reality, an inference is different in that it should be based on examples and details from the text. It cannot be a random guess.)

Big Idea(s)	Essential Question(s)
Authors include key details in literary texts which can help a reader ask and answer questions. Good readers use examples and details from the text to support their inferences. Good readers use textual evidence, connections to their own lives and their background knowledge to make inferences and draw conclusions about what they read. Good readers make meaning using the details and examples in a text.	• How do I find explicit information in a story or text? • What does it mean to make an inference? • What are the steps to making an inference? • How will making an inference help me to understand the story better? • Why is it important to use information from the text to support my inference?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.A-K.1	Key Ideas and Details	E04.A-K.1.1.1	Refer to details and examples in a text when explaining what the text explicitly says and when drawing inferences from the text.

Concepts (what students need to know)	Skills (what students must be able to do)
• Text references • Explicit information • Inference	• Make, test and revise predictions as they read • Use the combination of background knowledge and explicitly stated information to answer

• Prediction • Generalizations • Prior knowledge • Literary elements (e.g., character, setting, events) • Details and examples • Author's decisions • Supportive details and examples	questions they have as they read • Refer to details and examples from the text when explaining what the text says • Make implied inferences about literary elements and author's decisions in a text • Refer to details and examples from the text when drawing inferences
I Can Statements	
I can explain a story by referring to details and examples in the text. I can make conclusions about an author's meaning by thinking about the details and examples in the text (drawing conclusions).	

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
RL 4.3	CC.1.3.4.C – Describe in depth a character, setting or event in a story or drama, drawing on the specific details in the text.

Taught in Unit(s)

Unit 1

Explanation/Example of Standard

Fourth grade students are required to refer to the text to describe various story elements. Use questions and prompts such as:

- Can you tell me how the character is feeling is this part of the story? Explain why the character is feeling this way.
- How does the setting influence the story?

Common Misconceptions

The setting is the location of the story. (In reality the setting includes location, time period and time)

Big Idea(s)	Essential Question(s)
Authors use specific details in a story or drama to describe characters, settings, or events. Good readers use specific details from a literary text to support their thinking about characters, settings or events.	• What are the essential elements of a story? • What are the essential elements of a drama? • What is the impact of a character, the setting, or event on the text?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.A-K.1	Key Ideas and Details	E04.A-K.1.1.3	Describe in depth a character, setting or event in a story, drama or poem, drawing on the specific details in the text (e.g., a character's thoughts, words or actions).

Concepts (what students need to know)	Skills (what students must be able to do)

• Literary texts
• Key ideas
• Important/supporting key details
• Story Elements
  ○ Plot (e.g., events, climax/turning point, resolution,)
  ○ Conflict (man vs. man, man vs. self, man vs. nature, etc.)
  ○ Characters and character roles (hero/villain, major/ minor, protagonist/ antagonist)
  ○ Setting (e.g., time, place)
• Drama Elements
  ○ Scenes
  ○ Dialogue
	• Identify important, specific details that support key ideas
	• Identify and describe the plot events in a story or drama, including the beginning, rising actions, climax, falling actions, and conclusion.
	• Describe or graphically represent characters (traits, thoughts, words, feelings and actions), including examples from the text regarding their thoughts, feelings, actions, statements, and/or the way other people react/talk about them.
	• Identify and describe the setting in a story or drama, specifically the physical location and the time period. Include any progression/changes this setting.

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○ Stage directions • Character traits, actions, feelings, words	• Classify events as the beginning, rising actions, climax, falling actions, and conclusion.
I Can Statements	
I can describe the thoughts, words and interactions of characters. I can tell how the setting influences the story. I can explain in detail, the plot, the conflict and the resolution. I can use specific details in a story to help me describe a character, setting or event in the story.	

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Common Core State Standard	PA Core Standard
RL.4.6	CC.1.3.4.D – Compare and contrast an event or topic told from two different points of view.

Taught in Unit(s)

Unit 1, 3

Explanation/Example of Standard

Students will find the similarities and differences in the narration between a story written in first person and a story written in third person point of view. Use questions and prompts such as:

- Think about what you read. Who is telling the story?
- Think about what you read. Do you agree with the way the characters are thinking in this story? Do you agree with the way the narrator is thinking in this story? How is your thinking the same or different?

Common Misconceptions

Second Person Point of View- (This does exist, a how-to, but is not discussed in this unit).
Dialogue signals first person point of view. "I went to the store and you won't believe what happened!"

Big Idea(s)	Essential Question(s)
An author's purpose for writing a piece of text affects the choices he/she makes in constructing the text including the point of view selected. Good readers recognize that there are some similarities and differences between first and third person point of view.	• What is the difference between first person and third person point of view? • Why is it important to know what viewpoint a story or text is being told from? • How can I compare and contrast an event or topic told from two different points of view? • What is the benefit of comparing and contrasting an event or topic told from two different points of view?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.A-C.2	Craft and Structure	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: "Story" means narration of events told through the text types of stories, dramas or poems.

Concepts (what students need to know)	Skills (what students must be able to do)
• Literary text(s) • Compare • Contrast	• Identify the author's purpose for writing a text • Identify the point of view of a text • Describe how point of view affects a literary text

• Point of View (first-person, third-person) • Author's view point • Narrator/Narration • Speaker • Audience • Differences between first-person and third-person narrations • Author's purpose (e.g., to inform, to persuade, to entertain, to describe, to explain how) for writing a text	• Differentiate between first-person and third-person narration • Identify the strengths and weaknesses of using first-person and third-person point of view. • Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations
I Can Statements	
I can compare and contrast different stories by thinking about the different points of view. I can tell the difference between first- and third- person narrators. I can tell whether the narrator of a story is in first or third person.	

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Common Core State Standard	PA Core Standard
RL.4.4 L.4.4 L.4.5	CC.1.3.4.F – Determine the meaning of words and phrases as they are used in grade-level text, including figurative language.

Taught in Unit(s)

Unit 1, 3

Explanation/Example of Standard

Learning words at this stage includes exploring the meaning of simple similes, metaphors, idioms, adages, and proverbs; demonstrating understanding of relationships between words (synonyms and antonyms); and developing print and digital reference use (glossary, dictionary, and thesaurus).

Common Misconceptions

Like does not always signify a simile.
Idioms, proverbs and adages are the same thing. (Idioms are common expressions within a particular culture that have non-literal meanings that must be learned. Ex. Break a leg. Proverbs are statements of practical advice or wisdom simply stated ex. A stitch in time saves nine. Adages are proverbs that have been in common use for a long time, ex. A penny saved is a penny earned.)

Big Idea(s)	Essential Question(s)
Authors make purposeful language choices to create meaning in literary text(s). Good readers actively seek the meaning of unknown words/phrases to clarify understanding of literary text(s).	• How can I use context clues to determine the meaning of an unknown word? • What is the difference between a simile and metaphor? • How can I determine the meaning of idioms, adages and proverbs? • What tools can I use to help determine the meaning of unknown words? • How do I determine the relationship between words including synonyms and antonyms?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E.04.B-V.4	Vocabulary Acquisition and Use	E.04.A-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. • 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*).
		E.04.A-V.4.1.2	Demonstrate understanding of figurative language, word

			relationships and nuances in word meanings. • Explain the meaning of similes and metaphors in context. • Recognize and explain in meaning of common idioms, adages and proverbs • Demonstrate understanding of words by relating them to their antonyms and synonyms.

Concepts (what students need to know)	**Skills** (what students must be able to do)
• Literary text • Word choice • Context clues • Literal/ Denotative meaning • Connotative meaning • Figurative language or non-literal meaning (e.g., simile, metaphor, idiom) • Words/phrases that reference well-known characters or stories (e.g., from well-known mythology, fairy tales, fables, legends) • Literary devices (e.g., alliteration, repetition, rhythm, rhyme, dialogue) • Mood	• Read and reread other sentences, paragraphs, and non-linguistic images in the text to identify context clues • Use context clues to help unlock the meaning of unknown words/phrases • Determine the appropriate definition of words that have more than one meaning • Differentiate between literal and non-literal meaning • Identify and interpret figurative language and literary devices • Describe how figurative language, literary devices, and other language choices enhance meaning • Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology

I Can Statements

I can determine the meaning of unknown words by using a variety-of context clues, including word, sentence and paragraph clues.
I can recognize the difference between the meaning of connotation and denotation.
I can determine the meanings of unknown multiple-meaning words by using context clues.
I can use print and computer dictionaries to help me find the pronunciations and clarify meanings of new words or phrases.
I can understand figurative language, word relationships and small shades of differences in word meanings.
I can explain the meaning of simple similes and metaphors in context.
I can recognize and explain the meaning of common idioms, adages and proverbs.
I can understand words by relating them to their antonyms and synonyms.
I can identify word origins to determine the meaning of unknown words and phrases.

CVSD ELA Curriculum Map ~ 4th Grade

PA Core Standards	Common Core State Standard
CC.1.4.4.E-F, K-L & Q-S	L.4.1 - Demonstrate command of the conventions of standard English grammar and usage when writing. • Use relative pronouns (who, whose, whom, which that) and relative adverbs (where, when, why). • Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses. • Use modal auxiliaries (e.g., can, may must) to convey various conditions. • Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag). • Form and use prepositional phrases. • Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. • Produce simple, compound and complex sentences. • Correctly use frequently confused words (e.g., to, too, two, there, their) L.4.2 - Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. • Use correct capitalization. • Use commas and quotation marks to mark direct speech and quotations from a text. • Use a comma before a coordinating conjunction in a compound sentence. • Spell grade-appropriate words correctly, consulting references as needed.

Taught in Unit(s)
Units 1-3

Explanation/Example of Standard
Fourth grade student must have a command of the grammar and usage of spoken and written standard English. Standards that are related to conventions are appropriate to formal spoken English as they are to formal written English. At this level, emphasis expands to include relative pronouns and adverbs, progressive verb tenses, prepositional phrases, and more complex, complete sentences. With conventions, students are adept at ending punctuation, comma usage, and appropriate use of capitalization. Students at this level are spelling grade level words appropriately and consulting reference materials for spelling as needed.

Common Misconceptions
Who and whom are interchangeable. Adjectives can be placed in any order. Commas are not needed in front of the word “and”.

Big Idea(s)	Essential Question(s)
Good writer’s and speakers understand the importance of using the conventions of standard English grammar in the speaking and writing. Good writers understand the importance of capitalization, punctuation and spelling in their writing because it makes the writing easier to understand for the reader.	• What are relative pronouns and when are they used? • What is a relative adverb and when is it used? • What are progressive verb tenses and when are they used? • What are modal auxiliaries how are they used? • How can I use multiple adjectives in a sentence?

Good writers know how to use language and punctuation to create a greater impact in their writing and understand the situations where more formal language is needed.	• What are prepositional phrases and how are they formed and used? • What are the characteristics of a complete sentence and how can I recognize a sentence fragment or run-on? • How can I write using simple, compound or complex sentences? • How do I recognize and appropriately use frequently confused words? • When is capitalization needed in my writing? • How do I use commas and quotation marks to mark direct speech or quotations from text? • How are commas used in a compound sentence? • Why is it important and what references can I use to make sure I am spelling correctly? • How can I choose my words and phrases to help convey an idea precisely? • How can punctuation be used for effect? • How can I tell when formal English is needed in my writing and speaking?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.D.1	Conventions of Standard English	E04.D.1.1.1	Use relative pronouns (who, whose, whom, which that) and relative adverbs (where, when, why).
		E04.D.1.1.2	Form and use the progressive verb tenses (e.g., I was walking; I am walking; I will be walking).
		E04.D.1.1.3	Use modal auxiliaries (e.g., can, may must) to convey various conditions.
		E04.D.1.1.4	Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag).
		E04.D.1.1.5	Form and use prepositional phrases.
		E04.D.1.1.6	Produce complete sentences, recognizing and correcting inappropriate fragments and run-on sentences.
		E04.D.1.1.7	Correctly use frequently confused words (e.g., to, too, two, there, their, they're)
		E04.D.1.1.8	Ensure subject-verb and pronoun-antecedent agreement.
		E.04.D.1.2.1	Use correct capitalization.
		E.04.D.1.2.2	Use commas and quotation marks to mark direct speech and quotations from a text.
		E.04.D.1.2.3	Use a comma before a coordinating

			conjunction in a compound sentence.
		E.04.D.1.2.4	Spell grade-appropriate words correctly.

Concepts (what students need to know)	**Skills** (what students must be able to do)
• Relative Pronouns • Progressives • Modal Auxillaries • Order of adjectives • Prepositional Phrases • Complete Sentence • Dialogue Punctuation • Conjunction Punctuation	• Use a relative pronoun correctly • Write and use progressive verb tenses correctly • Use auxiliary words to convey different conditions • Order adjectives appropriately • Identify and write prepositional phrases • Identify the components of and write a complete sentence • Use punctuation correctly within dialogue • Use punctuation correctly in front of a conjunction • Use correct capitalization • Use frequently confused words correctly

I Can Statements

I can use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why) correctly when I speak or write.
I can correctly write and use progressive verb tenses (e.g., I was talking, I am talking, I will be talking).
I can use auxiliary words to show different conditions (e.g., can, may, must).
I can correctly order adjectives within sentences according to conventional standard English.
I can correctly write and use prepositional phrases.
I can write complete sentences.
I can recognize inappropriate sentence fragments and run on sentences.
I can correctly use frequently confused words (e.g., to, too, two; their & there).
I can correctly use capitalization in all of my writing.
I can use commas and quotation marks appropriately in dialogue.
I can correctly use a comma and conjunction when connecting two simple sentences.
I can use an appropriate reference to help me spell fourth grade words.

CVSD ELA Curriculum Map ~ 4th Grade

PA Core Standard	Common Core State Standard
CC.1.4.4.G-J, S	W.4.1 – Write opinion pieces on topics or texts, supporting a point of view with reasons and information. • Introduce the topic or text they are writing about, state an opinion, and create an organizational structure in which related idea are grouped to support the writer's purpose. • Provide reasons that are supported by the facts and details. • Link opinion and reasons using words and phrases (e.g., *for instance, in order to, in addition*) to connect opinion and reasons. • Provide a concluding statement or section related to the opinion presented.

Taught in Unit(s)

Unit 3

Explanation/Example of Standard

Fourth grade students should write opinion pieces that clearly state their preferences and supply the reasoning for their thinking. In doing so, students need to understand how their reasoning supports their opinion, search and find facts to support their viewpoint, and share this thinking. Students also build their argument by linking their ideas together. At this level, students are using a variety of sentence structures and more complex sentences. They are developing the use of more complex linking phrases like (for instance, in order to, in addition).

Students need to engage in behaviors (turn and talk, small group discussion, and numerous writing and speaking activities) that lead to the expression of ideas both verbally and in writing. Students will also need a purposeful focus on choice-making throughout ELA. For example, fourth grade students need to be able to choose precise vocabulary in their writing that clarifies their thinking about a topic.

Fourth grade students are required to include both an introduction and a concluding statement or section in their writing. Students need to use strategies for introducing concepts (such as beginning with a fact, dialogue, or question about the topic) and concluding their thoughts (using summary statements) when writing. They are learning to further organize their writing by developing the use of text features (headings, sections, illustrations, and multimedia). Students also write with complex sentences to link the parts of their writing together.

Common Misconceptions

My argument is fact. (In reality, your argument is opinion but your reasons should be factual in nature.)

Big Idea(s)	Essential Question(s)
Good persuasive writers address the needs of the audience and build a reasoned and logical case to support a clear position. Good authors use model/examples texts to guide them as they compose their own persuasive pieces.	• How do I support my topic with facts or proof? • Why is it important to support my topics with facts or proof? • How do I create an effective introduction to a persuasive/opinion writing piece? • How do I connect points in my writing as I support my opinion? • How do I appeal to my audience with my writing? • How do I develop a conclusion that states my points clearly?

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<tr><th colspan="2">Assessment Anchor</th><th colspan="2">Eligible Content</th></tr>
<tr><td rowspan="4">E04.C.1</td><td rowspan="4">Text Types and Purposes</td><td>E04.C.1.1.1</td><td>Introduce the topic or for the intended audience, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.</td></tr>
<tr><td>E04.C.1.1.2</td><td>Provide reasons that are supported by facts and details.</td></tr>
<tr><td>E04.C.1.1.3</td><td>Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition)</td></tr>
<tr><td>E04.C.1.1.4</td><td>Provide a concluding statement or section related to the opinion presented.</td></tr>
<tr><th colspan="2">Concepts
(what students need to know)</th><th colspan="2">Skills
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Persuasion and argument
Difference between relevant and irrelevant reasons/facts/support/examples
Opinion/position
Reason(s) (e.g., claims, support)
Evidence (e.g., examples, facts)
Logical argument
Primary sources
Secondary sources (e.g., UDLib/Search)
Effective introduction (e.g., one that takes a clear position, clarifies the issue provides necessary background)
Logical order of supporting reasons (e.g., weakest to strongest argument, strongest to weakest argument)
Linking/transition words and phrases (e.g., for instance, in order to, in addition)
Awareness of audience
Organizational pattern
Strategies for dealing with opposing point of view
How to use linking/transition words (e.g., on the other hand) to show relationship
Format choices (e.g., letters [business and friendly], simple editorials, advertisements)
Effective conclusion (e.g., one that begins to move beyond summary, call to action, next step)

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Identify an issue in a topic or text
Distinguish the pros and cons
Select an opinion/ position
Develop opinion/position/claim(s)
Use primary and secondary sources to locate, sort, and select reasons based on facts, examples, and/or evidence for both sides

acknowledging the opposing point of view
differentiating between relevant and irrelevant reasons/evidence
including an appropriate variety of reasons/evidence
addressing the needs of the audience,
prioritizing the reasons/evidence

Select an appropriate writing format
Write opinion/position pieces on topics or texts, supporting a point of view with reasons and information by:

introducing a topic or text
stating an opinion
creating an organizational structure in which related ideas are grouped to support the writer's purpose
providing reasons that are supported by facts and details
acknowledging alternate or opposing claim(s)
providing a concluding statement or section related to the opinion/position presented
Linking opinion/position and reasons using words and phrases

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	• Using linking/transition words that show relationships
I Can Statements	
I can use my point of view with reasons to share my opinion.	

CVSD ELA Curriculum Map ~ 4th Grade

PA Core Standards	Common Core State Standard
CC.1.4.4.A-D, S	W.4.2 – Write informative/explanatory texts to examine a topic, and convey ideas and information clearly. • Introduce a topic and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations and multimedia when useful to aiding comprehension. • Develop the topic with facts, definitions, concrete details, quotations or other information and examples related to the topic. • Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*). • Use precise language and domain-specific vocabulary to inform about or explain the topic. • Provide a concluding statement or section related to the information or explanation presented.

Taught in Unit(s)

Unit 2

Explanation/Example of Standard

Fourth grade students write informative/ explanatory pieces. They must be able to find and group information together in a logical way. In order to do so, students need strategies for researching a topic (gathering data), selecting relevant information (note taking), grouping like ideas, and developing a way to present the ideas from beginning to end (format and organization of written presentation).

Students need to engage in behaviors (turn and talk, small group discussion, and numerous writing and speaking activities) that lead to the expression of ideas both verbally and in writing. Students will also need a purposeful focus on choice-making throughout ELA.
For example, fourth grade students need to be able to choose precise vocabulary in their writing that clarifies their thinking about a topic.

Fourth grade students are required to include both an introduction and a concluding statement or section in their writing. Students need to use strategies for introducing concepts (such as beginning with a fact, dialogue, or question about the topic) and concluding their thoughts (using summary statements) when writing. They are learning to further organize their writing by developing the use of text features (headings, sections, illustrations, and multimedia). Students also write with complex sentences to link the parts of their writing together.

Common Misconceptions

Opinion can be used when writing an informational piece. (Informational pieces should be based in fact only.)

Big Idea(s)	Essential Question(s)
Good authors use informative/explanatory writing to communicate information related to real-world tasks. Good authors use model/example texts to guide them as they compose informative/expository texts. Good readers and writers write to make meaning of what they read.	• How do I choose one focus/topic for my writing? • How do I develop an effective introduction for an informational writing piece? • Why is it important to use facts, definitions, details and illustrations to support my topic? • How do I organize and connect my ideas in an effective manner? • How do I develop an effective conclusion for an informational writing piece?

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<tr><td rowspan="4">E04.C.1</td><td rowspan="4">Text Types and Purposes</td><td>E.04.C.1.2.1</td><td>Introduce a topic for the intended audience and group related information in paragraphs and/or sections to support the writer's purpose.</td></tr>
<tr><td>E.04.C.1.2.2</td><td>Develop the topic with facts, definitions, concrete details, quotations or other information and examples related to the topic.</td></tr>
<tr><td>E.04.C.1.2.3</td><td>Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).</td></tr>
<tr><td>E.04.C.1.2.5</td><td>Providing a concluding statement or section related to the information or explanation presented.</td></tr>
<tr><th colspan="2">Concepts
(what students need to know)</th><th colspan="2">Skills
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Informative/explanatory writing
Topic
Relevant information(e.g., facts, definitions, concrete details, personal experiences, quotations, observations, interviews)
Organizational patterns (e.g., definition, classification, comparison/contrast, and cause/effect)
Formatting devices (e.g., headings, paragraphs)
Illustrations
Multimedia
Domain-specific vocabulary
Style (e.g., formal, informal, specific to audience)
Primary sources
Secondary sources (e.g., UDLib/Search)
Effective introduction/ hook (e.g., one that is separate from the body and presents a simple thesis)
Awareness of audience
Linking /Transition words, phrases, clauses (e.g., another, for example, also, because)
Forms (e.g., letters to appropriate individuals/organizations (editor, boards, business), summaries, reports (book, research), essays, articles (newspaper, magazine), messages/memos, notices, biography, autobiography, reviews)
Effective conclusion/concluding statement or section (e.g., one that moves beyond The End)

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Select an interesting, yet manageable, subject for writing or one that meets the requirements of the assignment
Analyze and use primary and secondary sources to locate, sort (categorize, classify) and select relevant facts, definitions, concrete details, quotations or other information and examples

differentiating between relevant and irrelevant information
addressing the needs of the audience
generating new ideas and/or perspectives
avoiding plagiarism
selecting an organizational pattern appropriate for the topic and purpose

Select an appropriate writing form

Write informative/ explanatory texts to examine a topic and convey ideas and information clearly by

engaging the reader with an introduction/hook that presents the topic
introducing the topic clearly
grouping related information in paragraphs and sections
addressing the needs of the audience
developing topic with facts, definitions, concrete details, quotations or other information and examples related to the topic
linking ideas within categories and information using words, phrases, and clauses

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	• using formatting devices to aid comprehension when appropriate • using precise language and domain-specific vocabulary to inform about or explain the topic • providing a concluding statement or section that follows from the information or explanation presented

I Can Statements

I can write an informational report using facts, examples and details in logical order.
I can clearly write to inform and to explain my ideas.
I can choose a topic and develop a plan for getting information.
I can gather and use information from many sources.
I can identify and summarize important information.
I can sort and organize information using charts, tables and graphic organizers.
I can understand the meaning of plagiarism (copy another's work) and create a list of sources I used to get my information.

CVSD ELA Curriculum Map ~ 4th Grade

PA Core Standard	Common Core State Standard
CC.1.4.4.M-P	W.4.3 – Write narratives to develop real or imagined experiences or events using effective technique, descriptive details and clear event sequences. • Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. • Use dialogue and descriptions to develop experiences and events or show the response of characters to situations. • Use a variety of transitional words and phrases to manage the sequence of events. • Use concrete words and phrases and sensory details to convey experiences and events precisely • Provide a conclusion that follows from the narrated experiences or events.

Taught in Unit(s)

Unit 1

Explanation/Example of Standard

Fourth grade students write real and imaginative stories and students are expected to use description to show characters‟ thoughts and feelings as well as the details of characters interactions through dialogue. As students develop characters and use dialogue, they will need to understand how to introduce characters and how to engage characters in conversation in their writing.

Students need to engage in behaviors (turn and talk, small group discussion, and numerous writing and speaking activities) that lead to the expression of ideas both verbally and in writing. Students will also need a purposeful focus on choice-making throughout ELA. For example, fourth grade students need to be able to choose precise vocabulary in their writing that clarifies their thinking about a topic.

Fourth grade students are required to include both an introduction and a concluding statement or section in their writing. Students need to use strategies for introducing concepts (such as beginning with a fact, dialogue, or question about the topic) and concluding their thoughts (using summary statements) when writing. They are learning to further organize their writing by developing the use of text features (headings, sections, illustrations, and multimedia). Students also write with complex sentences to link the parts of their writing together.

Common Misconceptions

Narrative writing is always fiction. (In reality, many narratives are non-fiction.)

Big Idea(s)	Essential Question(s)
Good authors of narrative writing effectively develop real or imagined experiences or events to tell a story that engages the reader. Good authors use model/example texts to guide them as they compose their own narrative pieces. Good authors use narrative elements to develop other kinds of writing such as argumentative and informational texts.	• How do I choose a “focused topic” for my narrative writing piece? • How do I establish a situation and introduce a narrator and/or characters? • Why is it important for me to show style in my writing? • Why is it important to sequence the events in my story to provide a sense of closure? • How can I use dialogue to enhance my writing?

Good authors use sensory images to describe feelings, events, and/or characters.	

Assessments
See unit map for specific unit common assessments

Assessment Anchor		**Eligible Content**	
E.04.C.1	Text Types and Purposes	E04.C.1.3.1	Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally to support the writer's purpose.
		E04.C.1.3.2	Use narrative techniques, such as dialogue and description, to develop experiences and events or to show the responses of characters to situations.
		E04.C.1.3.3	Use a variety of transitional words and phrases to manage the sequence of events.
		E.04.C.1.3.4	Use concrete words and phrases and sensory details to convey experiences and events precisely.
		E04.C.1.3.5	Provide a conclusion that follows from the narrated experiences or events.

Concepts (what students need to know)	**Skills** (what students must be able to do)

• Narrative writing
• Topic
• Event(s) (topic and situation-what happened. For example, "my dog" is a topic; "my dog ate my homework" is an event)
• Characters
• Characters responses to situations
• Narrator
• Dialogue
• Elaboration
• Awareness of audience
• Description
• Reaction/response (e.g., Why was the event important? How did the event make you feel?)
• Organizational pattern(s) (e.g., chronological, reflective, flashback)
• Relevant, concrete details/examples
• Difference between relevant and irrelevant details
• Sensory images (e.g., figurative language: descriptions of how things look, feel, smell, taste, sound)
• Transitional words and phrases
• Sequence of events
• Closure/ending/conclusion
	• Select/identify real or imagined experiences or event(s) to tell about
	• Select/identify details about an event(s) and people
	  • differentiating between relevant and irrelevant details
	  • addressing the needs of the audience
	  • selecting an organizational pattern appropriate for the topic and purpose
	• Select an appropriate writing form
	• Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences by
	  • Orienting the reader by establishing a situation and introducing a narrator and/or characters;
	  • organizing an event
	  • sequence that unfolds naturally
	  • using dialogue and description to develop experiences and events or show the response of characters to situations
	  • using a variety of transitional words and phrases to manage the sequence of events
	  • using concrete words and phrases and sensory details to convey experiences and events precisely

• Forms (e.g., short stories, journals, poems, personal essays)	• providing a conclusion that follows from the narrated experiences or events

I Can Statements
I can use details and descriptive words to create plot, characters, setting and point of view to write a narrative. I can write stories using a clear sequence of events and descriptive details.

CVSD ELA Curriculum Map ~ 4th Grade

PA Core Standard	Common Core State Standard
CC.1.4.4.T	W.4.5 – With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising and editing.

Taught in Unit(s)

Units 1-3

Explanation/Example of Standard

With assistance from adults and peers, students should develop revising and editing skills. In order to do so, students need to understand how to change word choice and sentence structure in their writing to strengthen their piece. They need assistance with planning for writing using graphic organizers (story frames, story mountains, story maps). They also need to develop the ability to recognize spelling, grammar, and punctuation errors and have strategies for correcting these errors with assistance (conferences, check sheets, peer editing).

Common Misconceptions

Revising and editing are optional.
You only edit and revise a long piece of writing.

Big Idea(s)	Essential Question(s)
Writing is strengthened when good writers go through the process of planning, revising and editing.	• How does planning for my writing piece help to improve the quality of my writing? • How do I choose an appropriate graphic organizer based on my mode of writing? • How does revising help to improve the quality of my writing? • How does editing help to improve the quality of my writing? • What tools can I use to help me to revise and edit my writing piece? • How can I self-monitor during my writing for areas of need before I conference with the teacher? • How can I be an effective peer editor and reviser?

Assessments

See unit map for specific unit common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• Plan • Graphic Organizer • Edit • Revise • Word Choice • Sentence Structure	• Use a graphic organizer to create a plan • Self-monitor writing to find areas in need of improvement • Revise for word choice, expansion of ideas, deletion of unneeded information or sentence structure • Edit for grade level appropriate grammar • Locate and use resources to help move through the process

I Can Statements
I can plan, revise and edit my writing with the help of peers and adults. I can use different strategies for organizing my writing (brainstorming, webs, lists, diagrams, etc.). I can organize my writing by using an introduction, body, and/or a solution, closing statement or summary. I can use a variety of sentence structure and word choices. I can create paragraphs with topic sentence and supporting sentences. I can use transitional words and phrases. I can show that I made thoughtful revisions. I can add descriptive words and details leave out unimportant items, rearrange words, sentences and paragraphs, and use resources to help me choose better words. I can proofread and edit my own work. I can use checklists and rubrics to help me judge the quality of my writing.

CVSD ELA Curriculum Map ~ 4th Grade

PA Core Standard	Common Core State Standard
CC.1.4.4. B-E, H-K & S	W.4.9 – Draw evidence from literary or informational texts to support analysis, reflection and research • Apply grade 4 reading standards to literature (e.g., "Describe in depth a character, setting or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words or actions].") • Apply grade 4 reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").

Taught in Unit(s)

Unit 1-3

Explanation/Example of Standard

Fourth grade students use strategies for reading literary and information text as they investigate topics. When reading literary texts, fourth grade students have to refer to the text when drawing conclusions as well as when answering directly stated questions. The central message or lesson is now referred to as theme (a unifying idea that is a recurrent element in literary or artistic work). Students continue to determine a theme and expand this work to other genres. They are required to refer to the text to describe various story elements. When reading informational texts, fourth grade students must understand what is heard, viewed, or presented through various media formats to help make meaning of the text. Students give an explanation about how an author uses proof to support a point in the text. At this level, students will combine information from two texts about the same subject in a written or oral response that demonstrates knowledge of the subject.

Common Misconceptions

My reflection is fact. (In reality, your reflection can be opinion but needs to be based on facts from the story that support it.)

Big Idea(s)	Essential Question(s)
Great readers are able to go back to a text and find evidence to support their analysis, reflection or research. Great readers know that in order to gain deep comprehension of a text, they must be able to write or speak about a text, drawing support from the text itself.	• Why is it important to find evidence to support my analysis or reflection of a literary text? • How do I find appropriate evidence to support my analysis or reflections of a literary text? • Why is it important to find evidence to support my analysis, reflection or research of an informational text? • How do I find appropriate evidence to support my analysis or reflections of a literary text?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
E04.E.1	Evidence-Based Analysis of Text	E04.E.1.1.1	Introduce text(s) for the intended audience, state an opinion and/or topic, establish a situation, and create an organizational structure in which related ideas are logically grouped to support the writer's purpose.

		E04.E.1.1.2	Develop the analysis using a variety of evidence from text(s) to support claims, opinions, ideas and inferences.
		E.04.E.1.1.3	Link ideas within categories of information using words and phrases (e.g., another, for example, also, because)
		E.04.E.1.1.4	Use precise language and domain-specific vocabulary to inform about or explain the topic and/or convey the experience and events.
		E.04.E.1.1.5	Provide a concluding statement or section related to the analysis presented.

Concepts (what students need to know)	**Skills** (what students must be able to do)
• Analyze • Reflect • Evidence • Support • Fact • Opinion	• Read carefully to gain deep comprehension of text • Reflect on what was read • Analyze the text to find the big ideas, distinguish between fact and opinion and locate supporting details • Develop a reflection that contains text-based support • Write with clarity and meaning

I Can Statements

I can gather evidence from all my reading to support my writing.
I can use my background knowledge and context clues to respond to novels, stories and poems and support my thoughts from the readings.

CVSD ELA Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
SL.4.4	CC.1.5.4.D – Report on a topic or text, tell a story or recount an experience in an organized manner, using appropriate facts and relevant descriptive details to support main ideas or themes; speak clearly with adequate volume, appropriate pacing and clear pronunciation.

Taught in Unit(s)

Units 1-3

Explanation/Example of Standard

While adept at reporting on a topic or text, telling a story, or recounting an event, fourth graders will focus on doing so in an organized, logical manner. The aforementioned items should be done orally and in coherent, spoken sentences. Fourth graders will do so at an appropriate *pace*. Attention to details to support main ideas or themes is important in fourth grade.

Common Misconceptions

TBD

Big Idea(s)	Essential Question(s)
Great speakers understand how to effectively organize their main ideas and details on a topic in order to make their presentation more meaningful to the audience. Great speakers understand the importance of voice clarity, volume and pacing when presenting to an audience.	• How can I use appropriate facts and descriptive details in an organized manner to support my main idea when reporting on a topic? • Why is it important to speak clearly, annunciate my words and speak with adequate volume and pacing when reporting on a topic?

Assessments

See unit map for specific unit common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• speaking clearly • adequate volume • appropriate pacing • clear pronunciation	• Report on a topic or text, tell a story or recount an experience with appropriate facts and relevant details • Speak clearly to others • Speak at an adequate volume • Speak at an appropriate pace • Pronounce words correctly

I Can Statements

I can speak clearly, at the correct volume, and speed to be understood.
I can report on a topic or tell a story with correct and appropriate facts and details to support my main idea.
I can vary my tone, volume and speed to stress important ideas.
I can give a detailed and descriptive presentation using personal experience.
I can present information that:

- Presents information clearly and in sequential order
- Demonstrates an understanding of the topic
- Includes facts, details, examples, quotes, stats, and stories
- Organizes information to include an introduction, body and conclusion

CVSD Math Scope Sequence ~ 4th Grade

		2.1 Numbers & Operations	2.2 Algebraic Concepts	2.3 Geometry	2.4 Measurement, Data
Unit	**Time Line**	**Priority Standards**	**Priority Standards**	**Priority Standards**	**Priority Standards**
1	Trimester 1 - 20 Days	CC.2.1.4.B.1a	CC.2.2.4.A.1		
		CC.2.1.4.B.2a			
2	Trimester 1 - 30 Days	CC.2.1.4.B.1b	CC.2.2.4.A.1		
		CC.2.1.4.B.2b			
3	Trimester 1 - 10 Days	CC.2.1.4.B.1b	CC.2.2.4.A.1		
	Trimester 2 - 10 Days	CC.2.1.4.B.2b			
4	Trimester 2 - 30 Days	CC.2.1.4.B.2c	CC.2.2.4.A.1		
			CC.2.2.4.A.2		
			CC.2.2.4.A.4		
6	Trimester 2 - 17 Days	CC.2.1.4.C.2			CC.2.4.4.A.4
7	Trimester 3 - 23 Days	CC.2.1.4.C.1			CC.2.4.4.A.4
		CC.2.1.4.C.3			
8	Trimester 3 - 20 Days			CC.2.3.4.A.1	CC.2.4.4.A.6
				CC.2.3.4.A.2	
				CC.2.3.4.A.3	
5	Trimester 3 - 17 Days				CC.2.4.4.A.1

Fourth Grade Math Priority Standards

CCSS	PA CORE	Numbers and Operations
4.NBT.1 4.NBT.2 4.NBT.3	CC.2.1.4.B.1a	Understand concepts of place value including base-ten, comparison and rounding.
4.NBT.1 4.NBT.2 4.NBT.3	CC.2.1.4.B.1b	Apply knowledge of place value to multi-digit equations in all four operations.
4.NBT.4 4.NBT.5 4.NBT.6	CC.2.1.4.B.2a	Use place value understanding and properties of operations to add and subtract multi-digit numbers.
4.NBT.4 4.NBT.5 4.NBT.6	CC.2.1.4.B.2b	Use place value understanding and properties of operations to multiply and divide multi-digit numbers.
4.NBT.4 4.NBT.5 4.NBT.6	CC.2.1.4.B.2c	Demonstrate and apply understanding of orders of operations.
4.NF.1 4.NF.2 4.NF.3	CC.2.1.4.C.1	Extend the understanding of fractions to show equivalence and ordering.
4.NF.3 4.NF.4	CC.2.1.4.C.2	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.
4.NF.5 4.NF.6 4.NF.7	CC.2.1.4.C.3	Connect decimal notation to fractions, and compare decimal fractions (base 10 denominators e.g. 19/100).
CCSS	**PA CORE**	**Algebraic Concepts**
4.OA.1 4.OA.2 4.OA.3	CC.2.2.4.A.1	Represent and solve problems involving the four operations.
4.OA.4	CC.2.2.4.A.2	Develop and/or apply number theory concepts to find factors and multiples.
4.OA.5	CC.2.2.4.A.4	Generate and analyze patterns using one rule.
CCSS	**PA CORE**	**Geometry**
4.G.1	CC.2.3.4.A.1	Draw lines and angles and identify these in two-dimensional figures.
4.G.2	CC.2.3.4.A.2	Classify two-dimensional figures by properties of their lines and angles.
4.G.3	CC.2.3.4.A.3	Recognize symmetric shapes and draw lines of symmetry.
CCSS	**PA CORE**	**Measurement, Data, and Probability**
4.MD.1 4.MD.2 4.MD.3	CC.2.4.4.A.1	Solve problems involving measurement and conversions from a larger unit to a smaller unit.
N/A	CC.2.4.4.A.2	Translate information from one type of data display to another.
4.MD.4	CC.2.4.4.A.4	Represent and interpret data involving fractions using information provided in a line plot.
4.MD.5 4.MD.6 4.MD.7	CC.2.4.4.A.6	Measure angles and use properties of adjacent angles to solve problems.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.NBT.1, 4.NBT.2, 4.NBT.3	**CC.2.1.4.B.1a**- Understand concepts of place value including base-ten, comparison and rounding. **CC.2.1.4.B.1b**- Apply knowledge of place value to multi-digit equations in all four operations.

Taught in Unit(s)

Unit 1(CC.2.1.4.B.1a), Unit 2(CC.2.1.4.B.1b), Unit 3(CC.2.1.4.B.1b)

Explanation/Example of Standard

Explanation: Apply place-value and numeration concepts to compare, find equivalencies, and round.

Examples: Students should be familiar with and use place value as they work with numbers. Some activities that will help students develop understanding of this standard are:

- How is the 2 in the number 582 similar to and different from the 2 in the number 528?
- Investigate the product of 10 and any number, then justify why the number now has a 0 at the end. (7 x 10 = 70 because 70 represents 7 tens and no ones, 10 x 35 = 350 because the 3 in 350 represents 3 hundreds, which is 10 times as much as 3 tens, and the 5 represents 5 tens, which is 10 times as much as 5 ones.) While students can easily see the pattern of adding a 0 at the end of a number when multiplying by 10, they need to be able to justify why this works.
- Investigate the pattern, 6, 60, 600, 6,000, 60,000, 600,000 by dividing each number by the previous number.
- Students should have flexibility with the different number forms. Traditional expanded form is 285 = 200 + 80 + 5. Written form is two hundred eighty-five. However, students should have opportunities to explore the idea that 285 could also be 28 tens plus 5 ones or 1 hundred, 18 tens, and 5 ones.
- Students should be able to compare two multi-digit whole numbers using appropriate symbols.
- The expanded form of 275 is 200 + 70 + 5. Students use place value to compare numbers. For example, in comparing 34,570 and 34,192, a student might say, both numbers have the same value of 10,000s and the same value of 1000s however, the value in the 100s place is different so that is where I would compare the two numbers.
- Students should have numerous experiences using a number line and a hundreds chart as tools to support their work with rounding.
- Your class is collecting bottled water for a service project. The goal is to collect 300 bottles of water. On the first day, Max brings in 3 packs with 6 bottles in each container. Sarah wheels in 6 packs with 6 bottles in each container. About how many bottles of water still need to be collected? Example Student Answer: First, I multiplied 3 and 6 which equals 18. Then I multiplied 6 and 6 which is 36. I know 18 plus 36 is about 50. I'm trying to get to 300. 50 plus another 50 is 100. Then I need 2 more hundreds. So we still need 250 bottles.

Common Misconceptions

1. **When writing numerals from verbal descriptions, many students will understand the 1000 and the 2 but then instead of placing the 2 in the ones place, students will write the numbers as they hear them, 10002 (ten thousand two).**
2. **Students often assume that the first digit of a multi-digit number indicates the "greatness" of a number. The assumption is made that 954 is greater than 1002 because students are focusing on the first digit instead of the number as a whole.**
3. **Students have difficulty identifying when estimation is appropriate, reasonable, and accurate.**

Big Idea(s)	Essential Question(s)
Place Value to One Million	How can numbers be expressed, ordered, and compared? How does the position of a digit in a number affect its value? In what ways can numbers be composed and decomposed?

	How are place value patterns repeated in numbers? How can place value properties aid computation? What are strategies to make a reasonable estimate?

Assessments		
See unit map for specific unit common assessments		
Assessment Anchor	**Eligible Content**	
M04.A-T.1 Generalize place-value understanding for multi-digit whole numbers.	**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.
	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.
	M04.A-T.1.1.4	Round multi-digit whole numbers (through 1,000,000) to any place.

Concepts (what students need to know)	**Skills** (what students must be able to do)
Place value Multi-digit whole numbers	Apply place value concepts to multi-digit numbers.

I Can Statements
I can read, write and compare whole numbers to 1 million using different forms of a number. I can round whole numbers to a given place value. I can recognize the base ten pattern for whole numbers.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.NBT.4, 4.NBT.5, 4.NBT.6	**CC.2.1.4.B.2a** Use place value understanding and properties of operations to add and subtract multi-digit numbers. **CC.2.1.4.B.2b** Use place value understanding and properties of operations to multiply and divide multi-digit numbers. **CC.2.1.4.B.2c** Understand and apply knowledge of order of operations.

Taught in Unit(s)

Unit 1(CC.2.1.4.B.2a), Unit 2(CC.2.1.4.B.2b), Unit 3 (CC.2.1.4.B.2b), Unit 4 (CC.2.1.4.B.2c)

Explanation/Example of Standard

Explanation: Use operations to solve problems.

Examples:

- Students build on their understanding of addition and subtraction, their use of place value and their flexibility with multiple strategies to make sense of the standard algorithm. They continue to use place value in describing and justifying the processes they use to add and subtract. This standard refers to fluency, which means accuracy and efficiency (using a reasonable amount of steps and time), and flexibility (using a variety strategies such as the distributive property, decomposing and recomposing numbers, etc.). This is the first grade level in which students are expected to be proficient at using the standard algorithm to add and subtract. However, other previously learned strategies are still appropriate for students to use. When students begin using the standard algorithm their explanation may be quite lengthy. After much practice with using place value to justify their steps, they will develop fluency with the algorithm. Students should be able to explain why the algorithm works.
- Students should know that it is mathematically possible to subtract a larger number from a smaller number but that their work with whole numbers does not allow this as the difference would result in a negative number.
- Students who develop flexibility in breaking numbers apart (decomposing numbers) have a better understanding of the importance of place value and the distributive property in multi-digit multiplication. Students use base ten blocks, area models, partitioning, compensation strategies, etc. when multiplying whole numbers and use words and diagrams to explain their thinking. They use the terms factor and product when communicating their reasoning. Multiple strategies enable students to develop fluency with multiplication and transfer that understanding to division. Use of the standard algorithm for multiplication and understanding why it works, is an expectation in the 5th grade. This standard calls for students to multiply numbers using a variety of strategies.
- A 4th grade teacher bought 4 new pencil boxes. She has 260 pencils. She wants to put the pencils in the boxes so that each box has the same number of pencils. How many pencils will there be in each box?

-Using Base 10 Blocks: Students build 260 with base 10 blocks and distribute them into 4 equal groups. Some students may need to trade the 2 hundreds for tens but others may easily recognize that 200 divided by 4 is 50.

-Using Place Value: 260 ÷ 4 = (200 ÷ 4) + (60 ÷ 4)

-Using Multiplication: 4 x 50 = 200, 4 x 10 = 40, 4 x 5 = 20; 50 + 10 + 5 = 65; so 260 ÷ 4 = 65

Common Misconceptions

1. **Students may confuse when to 'carry' and when to 'borrow'.**
2. **Students often do not notice the need of borrowing and just take the smaller digit from the larger one.**
3. **Students having difficulty with lining up similar place values in numbers as they are adding and subtracting.**
4. **Students are having a difficult time with a standard addition or subtraction algorithm.**
5. **Students have difficulty devising a number model to solve a given word problem task.**
6. **Students are not able to distinguish whether a word problem involves multiplicative comparison or additive comparison.**
7. **Students have difficulty estimating and/or determining if the answer is reasonable.**

Big Idea(s)	Essential Question(s)

Addition with Greater Numbers Subtraction with Greater Numbers Multiplication with Tens and Hundreds Multiply by One-Digit Numbers Multiplication with Two-Digit Numbers Multiplication with Thousands Dividing Whole Numbers	How can place value properties aid computation? What are different models for addition and subtraction? What are different models for multiplication and division? What questions can be answered using addition and subtraction? What questions can be answered using multiplication and division? How do the four operations relate to one another?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.A-T.2 Use place-value understanding and properties of operations to perform multi-digit arithmetic.	**M04.A-T.2.1.1**	Add and subtract multi-digit whole numbers (limit sums and subtrahends up to and including 1,000,000).
	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.
	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 x 1 digit, excluding powers of 10).

Concepts (what students need to know)	**Skills** (what students must be able to do)
Place value Properties of operations Multi-digit arithmetic	Solve multi-digit arithmetic problems

I Can Statements

I can add, subtract, multiply and divide multidigit numbers.
I can use words, pictures and numbers to describe patterns and relationships in addition, subtraction, multiplication, and division.
I can make a table using addition, subtraction, multiplication, and division to solve problems.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.NF.1, 4.NF.2, 4.NF.3	**CC.2.1.4.C.1** Extend the understanding of fractions to show equivalence and ordering.
Taught in Unit(s)	
Unit 7	
Explanation/Example of Standard	

Find equivalencies and compare fractions.

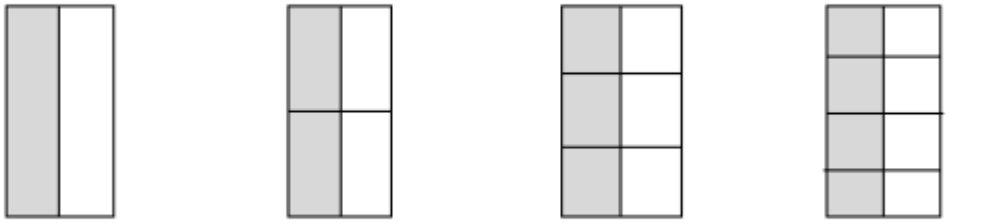
This standard refers to visual fraction models. This includes area models, linear models (number lines) or it could be a collection/set models. This standard extends the work in third grade by using additional denominators (5, 10, 12, and 100). Students can use visual models or applets to generate equivalent fractions.

Example:

All the area models show 1/2. The second model shows 2/4 but also shows that 1/2 and 2/4 are equivalent fractions because their areas are equivalent. When a horizontal line is drawn through the center of the model, the number of equal parts doubles and size of the parts is halved.

Students will begin to notice connections between the models and fractions in the way both the parts and wholes are counted and begin to generate a rule for writing equivalent fractions.

$1/2 \times 2/2 = 2/4.$



$\frac{1}{2}$ $\frac{2}{4} = \frac{2 \times 1}{2 \times 2}$ $\frac{3}{6} = \frac{3 \times 1}{3 \times 2}$ $\frac{4}{8} = \frac{4 \times 1}{4 \times 2}$

This standard calls students to compare fractions by creating visual fraction models or finding common denominators or numerators. **Students' experiences should focus on visual fraction models rather than algorithms**. When tested, models may or may not be included. Students should learn to draw fraction models to help them compare and use reasoning skills based on fraction benchmarks. Students must also recognize that they must consider the size of the whole when comparing fractions (ie,1/2 and 1/8 of two medium pizzas is very different from1/2 of one medium and 1/8 of one large). Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

Example:

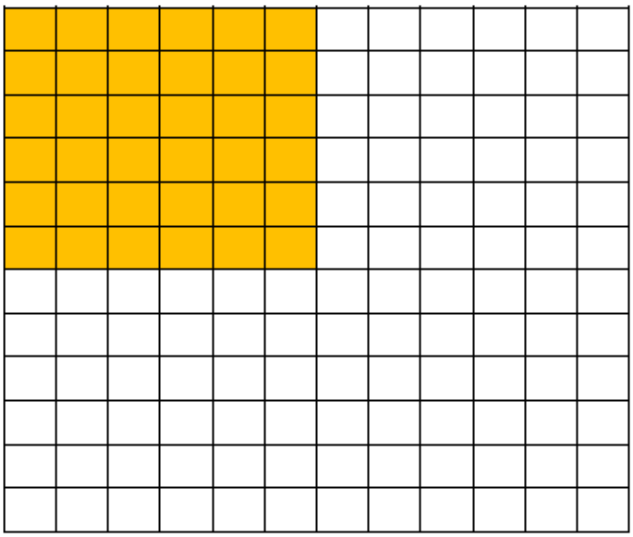
Use patterns blocks.

1. If a red trapezoid is one whole, which block shows 1/3 ?
2. If the blue rhombus is 1/3, which block shows one whole?
3. If the red trapezoid is one whole, which block shows 2/3?

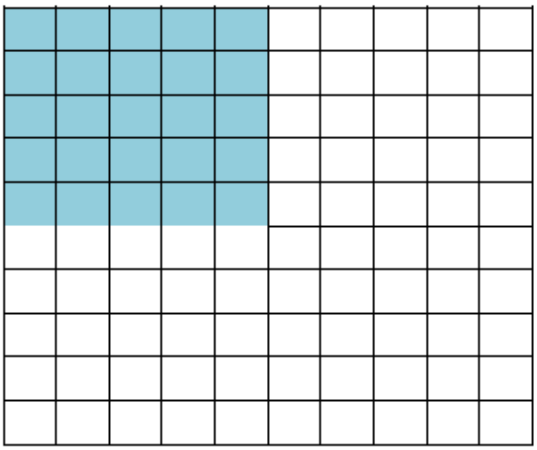
Melisa used a 12 x 12 grid to represent 1 and Nancy used a 10 x 10 grid to represent 1.

Each girl shaded grid squares to show ¼. How many grid squares did Melisa shade? How many grid squares did Nancy shade? Why did they need to shade different numbers of grid squares?

Possible solution: Melisa shaded 36 grid squares; Nancy shaded 25 grid squares. The total number of little squares is different in the two grids, so 1/3 *of each total number is different.*



Melisa's grid

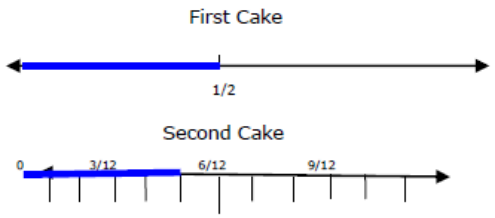


Nancy's grid

Example:
There are two cakes on the counter that are the same size. The first cake has ½ of it left. The second cake has 5/12 left. Which cake has more left?

Student 1
Area model:
The first cake has more left over. The second cake has 5/12 left which is smaller than ½.

Student 2
Linear/Number Line model:



Student 3 explanation using Benchmark Fractions next page

Melisa's grid

Nancy's grid

36

Student 3:
I know that 6/12 equals 1/2. Therefore, the second cake which has 7/12 left is greater than 1/2.

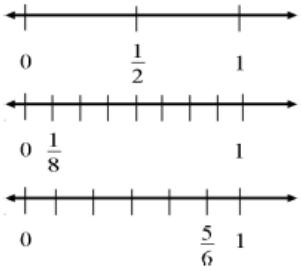
Benchmark fractions include common fractions between 0 and 1 such as halves, thirds, fourths, fifths, sixths, eighths, tenths, twelfths, and hundredths.

Fractions can be compared using benchmarks, common denominators, or common numerators. Symbols used to describe comparisons include <, >, =.

It is important that students explain the relationship between the numerator and the denominator, using

Benchmark Fractions. See examples below:

Fractions may be compared using $\frac{1}{2}$ as a benchmark.



Possible student thinking by using benchmarks:

- $\frac{1}{8}$ is smaller than $\frac{1}{2}$ because when 1 whole is cut into 8 pieces, the pieces are much smaller than when 1 whole is cut into 2 pieces.

Possible student thinking by creating common denominators:

- $\frac{5}{6} > \frac{1}{2}$ because $\frac{3}{6} = \frac{1}{2}$ and $\frac{5}{6} > \frac{3}{6}$

Fractions with common denominators may be compared using the numerators as a guide.

- $\frac{2}{6} < \frac{3}{6} < \frac{5}{6}$

Fractions with common numerators may be compared and ordered using the denominators as a guide.

$\frac{3}{10} < \frac{3}{8} < \frac{3}{4}$

Common Misconceptions

Students think that when generating equivalent fractions they need to multiply or divide either the numerator or denominator, such as, changing 1/2 to sixths. They would multiply the denominator by 3 to get 1/6, instead of multiplying the numerator by 3 also. Their focus is only on the multiple of the denominator, not the whole fraction. It's important that students use a fraction in the form of **one** such as 3/3 so that the numerator and denominator do not contain the original numerator or denominator.

Students think that it does not matter which model to use when finding the sum or difference of fractions. They may represent one fraction with a rectangle and the other fraction with a circle. They need to know that the models need to represent the same whole.

Big Idea(s)	Essential Question(s)
• Comparing Fractions • Equivalent Fractions	• How can you compare two fractions with the same numerator and different denominators or with the same denominators and different numerators? • How can you use a number line to compare fractions and mixed numbers? • How can you compare fractional parts of different-size wholes when the fractions are the same or different? • What are the steps to finding equivalent fractions?

	• How are equivalent fractions the same size even though the number and size of the parts are different?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.A-F.1 Extend understanding of fraction equivalence and ordering.	**M04.A-F.1.1.1**	Recognize and generate equivalent 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.

Concepts (what students need to know)	**Skills** (what students must be able to do)
• Equivalent fractions can be generated using area models, ratio models, number lines and fractions bars. • Compare fractions using common denominator, common numerator, comparison to benchmark and distance to benchmark; as well as determining when each strategy is appropriate.	• Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. **CC.4.NF.1** • Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. **CC.4.NF.2** • Models that can show equivalence include area models, ratio model, number line, and fraction bars.

I Can Statements

- I can identify equivalent (equal) fractions and decimals using number, words and pictures.
- I can use number line, fraction bars and pictures to compare fractions.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.NF.3, 4.NF.4	**CC.2.1.4.C.2** Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. Click here to enter text.
Taught in Unit(s)	
Unit 6	
Explanation/Example of Standard	

Solve problems involving fractions and whole numbers (straight computation or word problems).

A fraction with a numerator of one is called a **unit fraction.** When students investigate fractions other than unit fractions, such as 2/3, they should be able to decompose the non-unit fraction into a combination of several unit fractions.
Example: 2/3 = 1/3 + 1/3
Being able to visualize this decomposition into unit fractions helps students when adding or subtracting fractions. Students need multiple opportunities to work with mixed numbers and be able to decompose them in more than one way. Students may use visual models to help develop this understanding.

Example:

- 1 ¼ - ¾ =

4/4 + ¼ = 5/4
5/4 – ¾ = 2/4 or ½

Example of word problem:

- Mary and Lacey decide to share a pizza. Mary ate 3/6 and Lacey ate 2/6 of the pizza. How much of the pizza did the girls eat together?

Solution: The amount of pizza Mary ate can be thought of a 3/6 or 1/6 and 1/6 and 1/6. The amount of pizza Lacey ate can be thought of a 1/6 and 1/6. The total amount of pizza they ate is 1/6 + 1/6 + 1/6 + 1/6 + 1/6 or 5/6 of the whole pizza.

A separate algorithm for mixed numbers in addition and subtraction is not necessary. Students will tend to add or subtract the whole numbers first and then work with the fractions using the same strategies they have applied to problems that contained only fractions.

Example:

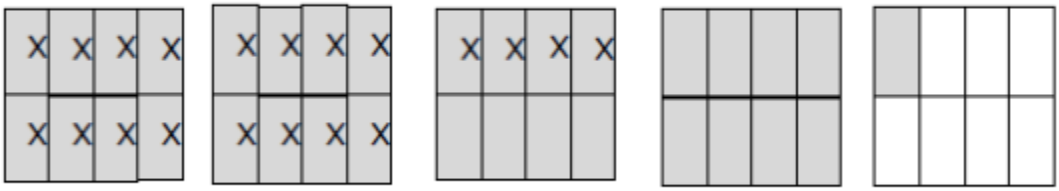
- Susan and Avery need 8 3/8 feet of ribbon to package gift baskets. Susan has 3 1/8 feet of ribbon and Avery has 5 3/8 feet of ribbon. How much ribbon do they have altogether? Will it be enough to complete the project? Explain why or why not.

The student thinks: I can add the ribbon Susan has to the ribbon Avery has to find out how much ribbon they have altogether. Susan has 3 1/8 feet of ribbon and Avery has 5 3/8 feet of ribbon. I can write this as
3 1/8 + 5 3/8. I know they have 8 feet of ribbon by adding the 3 and 5. They also have 1/8 and 3/8 which makes a total of 4/8 more. Altogether they have 8 4/8 feet of ribbon. 8 4/8 is larger than 8 3/8 so they will have enough ribbon to complete the project. They will even have a little extra ribbon left, 1/8 foot.

Example:

- Timothy has 4 1/8 pizzas left over from his soccer party. After giving some pizza to his friend, he has 2 4/8 of a pizza left. How much pizza did Timothy give to his friend?

Solution: Timothy had 4 1/8 pizzas to start. This is 33/8 of a pizza. The x's show the pizza he has left which is 2 4/8 pizzas or 20/8 pizzas. The shaded rectangles without the x's are the pizza he gave to his friend which is 13/8 or 1 5/8 pizzas.



Mixed numbers are introduced for the first time in Fourth Grade. Students should have ample experiences
of adding and subtracting mixed numbers where they work with mixed numbers or convert mixed numbers into improper fractions. Keep in mind Concrete-Representation-Abstract (CRA) approach to teaching fractions. Students need to be able to —show‖ their thinking using concrete and/or representations BEFORE they move to abstract thinking.
Example:
While solving the problem 3 ¾ = 2 ¼' students could do the following:

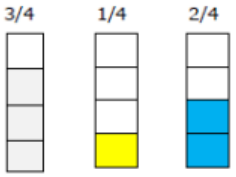
Student 1
3 + 2 = 5 and ¾ + ¼ = 1 so
5+ 1 = 6

Student 2
3 ¾ + 2 = 5 ¾ + ¼ = 6

Student 3
3 ¾ = 1 5/4 and 2 ¼ = 9/4 so
15/4 + 9/4 = 24/4 = 6

Example:

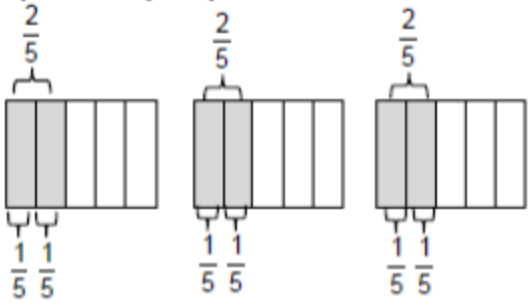
A cake recipe calls for you to use ¾ cup of milk, ¼ cup of oil, and 2/4 cup of water. How much liquid was needed to make the cake? Use an area model to solve.



milk oil water 6/4 or 1 whole cup and ½ more

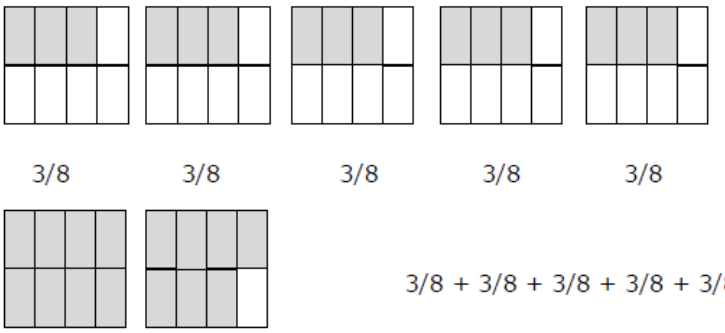
Students need many opportunities to work with problems in context to understand the connections between models and corresponding equations. Contexts involving a whole number times a fraction lend themselves to modeling and examining patterns. This standard builds on students' work of adding fractions and extending that work into multiplication. (4.NF.4a)
Examples:

- 3 x (2/5) = 6 x (1/5) = 6/5



- If each person at a party eats $^{3}/_{8}$ of a pound of roast beef, and there are 5 people at the party, how many pounds of roast beef are needed? Between what two whole numbers does your answer lie?

A student may build a fraction model to represent this problem:



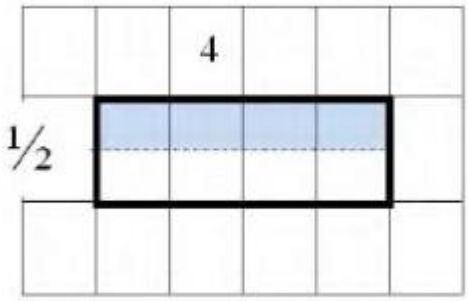
3/8 + 3/8 + 3/8 + 3/8 + 3/8 = 15/8 = 1 7/8

This standard extends the idea of multiplication as repeated addition (4.NF.4b) For example, 3 x (2/5) = 2/5 + 2/5 + 2/5= 6/5 = 6 X (1/5). Students are expected to use and create visual fraction models to multiply a whole number by a fraction.
This standard calls for students to use visual fraction models (Area, Linear and Set Models) to solve word problems related to multiplying a whole number by a fraction. (4.NF.4c)

Student 1
Draws a number line to show 4 jumps of ½.

Student 2
Draws and area model showing 4 pieces of ½ joined together to equal 2.

Student 3
Draws an area model representing 4 X ½ on a grid, dividing each row into ½ to represent the multiplier.



Common Misconceptions
Students think that it does not matter which model to use when finding the sum or difference of fractions. They may represent one fraction with a rectangle and the other fraction with a circle. They need to know that the models need to represent the same whole.

Big Idea(s)	**Essential Question(s)**
Fractions with like Denominators Mixed Numbers with like Denominators Multiply Fractions and Whole Numbers	• How can unit fractions be used to build other fractions • How can you compare unit fractions? • How can you add and subtract fractions with like denominators? • What are the steps when multiplying a whole number by a fraction?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.A-F.2 Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	**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).
	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: 2 1/12 = 1 + 1 + 1/12 = 12/12 + 12/12 + 1/12
	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 x (1/4) = 5/4
	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 x (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).

Concepts (what students need to know)	**Skills** (what students must be able to do)
Unit fractions	Build fractions from unit fractions

I Can Statements

- I can add and subtract fraction with a common denominator.
- I can break apart a fraction into smaller fractions with the same denominator.
- I can add and subtract mixed numbers with the same denominator.
- I can solve word problems using addition and subtraction of fraction with like denominators.
- I can multiply a whole number by a unit fraction.
- I can multiply a whole number by a non-unit fraction.

CVSD Math Curriculum Map ~ 4th Grade

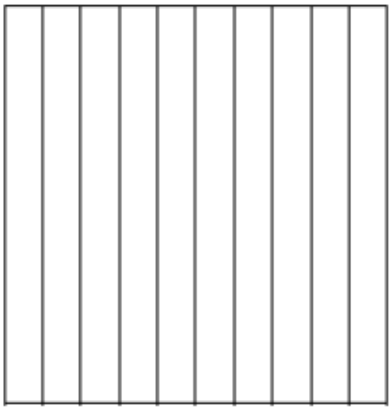
Common Core State Standard	PA Core Standard
4.NF.5, 4.NF.6, 4.NF.7	**CC.2.1.4.C.3** Connect decimal notation to fractions, and compare decimal fractions (base 10 denominator, e.g., 19/100).
Taught in Unit(s)	
Unit 7	
Explanation/Example of Standard	

Use operations to solve problems involving decimals, including converting between fractions and decimals (may include word problems).

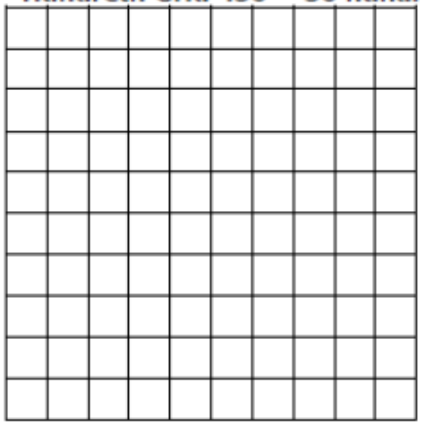
This standard continues the work of equivalent fractions by having students change fractions with a 10 in the denominator into equivalent fractions that have a 100 in the denominator. In order to prepare for work with decimals (4.NF.6 and 4.NF.7), experiences that allow students to shade decimal grids (10x10 grids) can support this work. **Student experiences should focus on working with grids rather than algorithms.** Students can also use base ten blocks and other place value models to explore the relationship between fractions with denominators of 10 and denominators of 100. This work in fourth grade lays the foundation for performing operations with decimal numbers in fifth grade.

Ones	.	Tenths	Hundreths

Tenths Grid .3 = 3 tenths = 3/10

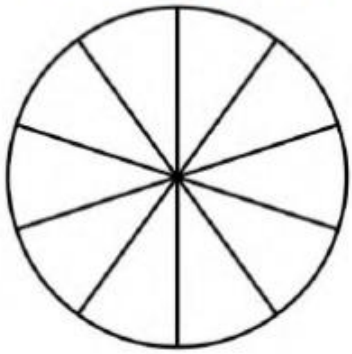


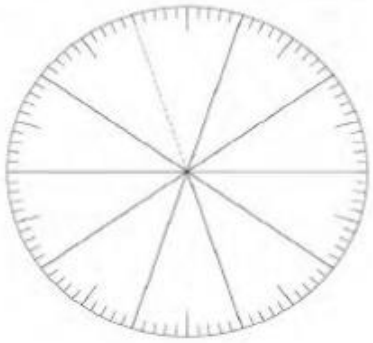
Hundreth Grid .30 = 30 hundreths = 30/100



Example:

Represent 3 tenths and 30 hundreths on the models shown below:





10ths circle **100ths circles**

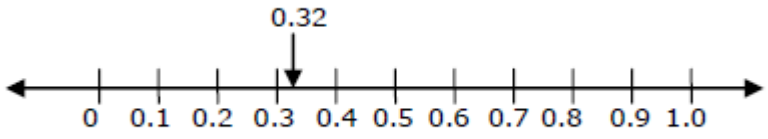
Students can use base ten blocks, graph paper, and other place value models to explore the relationship between fractions with denominators of 10 and denominators of 100.

Base Ten Blocks: students may represent 3/10 with 3 longs and may also write the fraction as 30/100 with the whole in this case being the flat (the flat represents one hundred units with each unit equal to one hundredth). Students begin to make connections to the place value chart as shown in 4.NF.6.

Students make connections between fractions with denominators of 10 and 100 and the place value chart. By reading fraction names, students say 32/100 as thirty-two hundredths and rewrite this as 0.32 or represent it on a place value model as shown below.

Hundreds	Tens	Ones	.	Tenths	Hundreths
			.	3	2

Students use the representations explored in 4.NF.5 to understand 32/100 can be expanded to 3/10 and 2/100. Students represent values such as 0.32 or 32/100 on a number line. 32/100 is more than 30/100 (or 3/10) and less than 40/100 (or 4/10). It is closer to 30/100 so it would be placed on the number line near that value.



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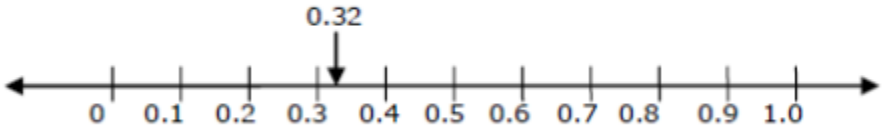
Hundreds	Tens	Ones	•	Tenths	Hundredths
			•	3	2

Students use the representations explored in 4.NF.5 to understand 32/100 can be expanded to 3/10 and 2/100.

Students represent values such as 0.32 or 32/100 on a number line. 32/100 is more than 30/100 (or 3/10) and less than 40/100 (or 4/10). It is closer to 30/100 so it would be placed on the number line near that value.



Common Misconceptions

Students treat decimals as whole numbers when making comparison of two decimals. They think the longer the number, the greater the value. For example, they think that .03 is greater than 0.3.

Big Idea(s)	Essential Question(s)
• Comparing Fractions • Equivalent Fractions • Understanding Fractions • Understanding Decimals	• How can you compare fractions with the same denominator and different numerators? • How can you compare fractions with unlike denominators and the same numerators? • How can you write a fraction as a decimal? (using tenths and hundredths) • How can you order decimals greatest to least?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.A-F.3 Understand decimal notation for fractions and compare decimal fractions.	**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.
	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.
	M04.A-F.3.1.3	Compare two decimals to hundredths using the symbols >, = , or <, and justify the conclusions.

Concepts (what students need to know)	Skills (what students must be able to do)
Fractions Decimal fractions	Connect decimal notation to fractions Compare decimal fractions

I Can Statements

- I can identify equivalent fractions and decimals using numbers, words, and pictures.
- I can compare two decimals to hundredths using the symbols >, <, or =.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.OA.1, 4.OA.2, 4.OA.3	**CC.2.2.4.A.1** Represent and solve problems involving the four operations.

Taught in Unit(s)

Unit 1, Unit 2, Unit 3, Unit 4

Explanation/Example of Standard

Explanation: Use numbers and symbols to model the concepts of expressions and equations.

Examples:

- A *multiplicative comparison* is a situation in which one quantity is multiplied by a specified number to get another quantity (e.g., "*a* is *n* times as much as *b*"). Students should be able to identify and verbalize which quantity is being multiplied and which number tells how many times. Students should be given many opportunities to write and identify equations and statements for multiplicative comparisons. It is essential that students are provided many opportunities to solve contextual problems.
  - **Unknown Product**: A blue scarf costs $3. A red scarf costs 6 times as much. How much does the red scarf cost? (3 x 6 = p).
  - **Group Size Unknown**: A book costs $18. That is 3 times more than a DVD. How much does a DVD cost? (18 ÷ p = 3 or 3 x p = 18).
  - **Number of Groups Unknown**: A red scarf costs $18. A blue scarf costs $6. How many times as much does the red scarf cost compared to the blue scarf? (18 ÷ 6 = p or 6 x p = 18).
- In division problems, the remainder is the whole number left over when as large a multiple of the divisor as possible has been subtracted.
  - Kim is making candy bags. There will be 5 pieces of candy in each bag. She had 53 pieces of candy. She ate 14 pieces of candy. How many candy bags can Kim make now? (7 bags with 4 leftover)

Common Misconceptions

1. **Students have difficulty devising a number model to solve a given word problem task.**
2. **Students are not able to distinguish whether a word problem involves multiplicative comparison or additive comparison.**
3. **Students have difficulty or experience frustration with solving story problems.**

Big Idea(s)	Essential Question(s)
Reasoning and Solving Problems Comparison Word Problems Problems with More Than One Step	How does finding patterns in word problems help with computation? How is an equation like a balance scale? How can relationships be expressed symbolically? Why are variables used? What strategies can be used to solve for unknowns?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content
M04.B-O.1 Use the four operations with whole numbers to solve problems.	**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 x 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 x 8 or 24= 8 x 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 x 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.
	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.
	M04.B-O.1.1.4	Identify the missing symbol (+, -, x, ÷, =, <, and >) that makes a number sentence true (single-digit divisor only).

Concepts (what students need to know)	**Skills** (what students must be able to do)
Addition Subtraction Multiplication Division	Represent addition problems Solve addition problems Represent subtraction problems Solve subtraction problems Represent multiplication problems Solve multiplication problems Represent division problems Solve division problems

I Can Statements

I can perform multi-digit arithmetic.
I can represent and solve problems verbally as equations.
I can decide when to use division each time I am problem-solving and also know the meaning of the remainder.
I can solve multi-step word problems and check and explain my results.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.OA.4	**CC.2.2.4.A.2** Develop and/or apply number theory concepts to find factors and multiples.

Taught in Unit(s)

Unit 4

Explanation/Example of Standard

Explanation: Develop and apply number theory concepts to represent numbers in various ways.

Examples:

- This standard requires students to demonstrate understanding of factors and multiples of whole numbers. This standard also refers to prime and composite numbers. Prime numbers have exactly two factors, the number one and their own number. For example, the number 17 has the factors of 1 and 17. Composite numbers have more than two factors. For example, 8 has the factors 1, 2, 4, and 8.
- Students investigate whether numbers are prime or composite by:
  -Building rectangles (arrays) with the given area and finding which numbers have more than two rectangles (e.g. 7 can be made into only 2 rectangles, 1 x 7 and 7 x 1, therefore it is a prime number)
  -Finding factors of the number
- Factor pairs for 96: 1 and 96, 2 and 48, 3 and 32, 4 and 24, 6 and 16, 8 and 12.
- Multiples can be thought of as the result of skip counting by each of the factors. When skip counting, students should be able to identify the number of factors counted e.g., 5, 10, 15, 20 (there are 4 fives in 20).

Common Misconceptions

- **When listing multiples of numbers, students may not list the number itself. Emphasize that the smallest multiple is the number itself.**
- **Some students may think that larger numbers have more factors. Having students share all factor pairs and how they found them will clear up this misconception.**

Big Idea(s)	Essential Question(s)
Analyzing Patterns Fluency with Multiplication Relationships among Whole Numbers	What are properties of whole numbers? How are numbers alike and different?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content
M04.B-O.2 Gain familiarity with factors and multiples.	**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.

Concepts (what students need to know)	Skills (what students must be able to do)
Number theory concepts Factors Multiples	Find factors Find multiples

I Can Statements

I can use factors to represent numbers in various ways.
I can recognize that a whole number is a multiple of each of its factors.
I can identify factors and multiples of whole numbers through 100 and identify prime and composite numbers.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.OA.5	**CC.2.2.4.A.4** Generate and analyze patterns using one rule.

Taught in Unit(s)

Unit 4, Unit 8

Explanation/Example of Standard

Explanation: Recognize, describe, extend, create, and replicate a variety of patterns.

Examples:

- Patterns involving numbers or symbols either repeat or grow. Students need multiple opportunities creating and extending number and shape patterns. Numerical patterns allow students to reinforce facts and develop fluency with operations.
- Patterns and rules are related. A pattern is a sequence that repeats the same process over and over. A rule dictates what that process will look like. Students investigate different patterns to find rules, identify features in the patterns, and justify the reason for those features.
- After students have identified rules and features from patterns, they need to generate a numerical or shape pattern from a given rule.
- Rule: Starting at 1, create a pattern that starts at 1 and multiplies each number by 3. Stop when you have 6 numbers. Students write 1, 3, 9, 27, 81, 243. Students notice that all the numbers are odd and that the sums of the digits of the 2 digit numbers are each 9. Some students might investigate this beyond 6 numbers. Another feature to investigate is the patterns in the differences of the numbers (3 - 1 = 2, 9 - 3 = 6, 27 - 9 = 18, etc.)
- Students describe features of an arithmetic number pattern or shape pattern by identifying the rule, and features that are not explicit in the rule. A t-chart is a tool to help students see number patterns.

Common Misconceptions

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Big Idea(s)	Essential Question(s)
Analyzing Patterns	Where are patterns in nature, architecture, music, words, and numbers? What is the repeating and/or increasing unit in the pattern? What strategies can be used to continue a sequence?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.B-O.3 Generate and analyze 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.
	M04.B-O.3.1.2	Determine the missing elements in a function table (limit to +, -, or x and to whole numbers or money).
	M04.B-O.3.1.3	Determine the rule for a function given a table (limit to +, -, or x and to whole numbers).

Concepts	Skills

(what students need to know)	(what students must be able to do)
Patterns	Generate patterns using one rule Analyze patterns using one rule
I Can Statements	
I can use words, pictures and numbers to describe patterns and relationships in addition, subtraction, multiplication, and division. I can interpret and describe patterns using words, tables and graphs. I can make a table using addition, subtraction, multiplication, and division to solve problems. I can use rules and variables to describe patterns. I can describe how a change in one number affects the value of another number in the same problem.	

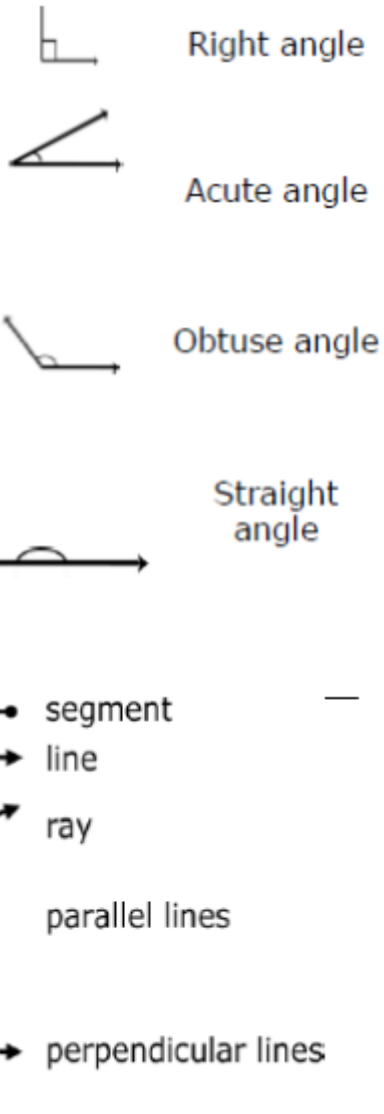
CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.G.1	**CC.2.3.4.A.1** Draw lines and angles and identify these in two-dimensional figures.
Taught in Unit(s)	
Unit 8	
Explanation/Example of Standard	

List properties, classify, draw, and identify geometric figures in two dimensions.

This standard asks students to draw two-dimensional geometric objects and to also identify them in two- dimensional figures. This is the first time that students are exposed to rays, angles, and perpendicular and parallel lines.
Examples of points, line segments, lines, angles, parallelism, and perpendicularity can be seen daily. Students do not easily identify lines and rays because they are more abstract.

Examples of points, line segments, lines, angles, parallelism, and perpendicularity can be seen daily. Students do not easily identify lines and rays because they are more abstract.



Example:
Draw two different types of quadrilaterals that have two pairs of parallel sides?
Is it possible to have an acute right triangle? Justify your reasoning using pictures and words.

Example:
How many acute, obtuse and right angles are in this shape?

Draw and list the properties of a parallelogram. Draw and list the properties of a rectangle. How are your drawings and lists alike? How are they different? Be ready to share your thinking with the class.

Common Misconceptions

Students believe a wide angle with short sides may seem smaller than a narrow angle with long sides. Students can compare two angles by tracing one and placing it over the other. Students will then realize that the length of the sides does not determine whether one angle is larger or smaller than another angle. The measure of the angle does not change.

Big Idea(s)	Essential Question(s)
Measuring and drawing angles	• How can you identify and draw points, line segments, lines, rays, perpendicular and parallel lines? • How can you identify a line of symmetry in a two dimensional figure?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.C-G.1 Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	**M04.C-G.1.1.1**	Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel line. 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.
	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).

Concepts (what students need to know)	Skills (what students must be able to do)
Lines Angles Two-dimensional figures	Draw lines in two-dimensional figures Draw angles in two-dimensional figures Identify lines in two-dimensional figures Identify angles in two-dimensional figures

I Can Statements

- I can identify and draw points, line segments, lines, rays, perpendicular and parallel lines

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.G.2	**CC.2.3.4.A.2** Classify two-dimensional figures by properties of their lines and angles.
Taught in Unit(s)	
Unit 8	
Explanation/Example of Standard	

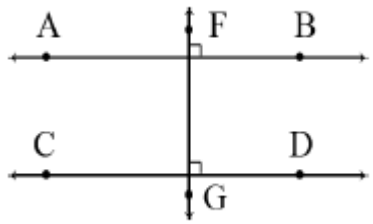
List properties, classify, draw, and identify geometric figures in two dimensions.

Two-dimensional figures may be classified using different characteristics such as, parallel or perpendicular lines or by angle measurement.

Parallel or Perpendicular Lines:
Students should become familiar with the concept of parallel and perpendicular lines. Two lines are parallel if they never intersect and are always equidistant. Two lines are perpendicular if they intersect in right angles (90º).

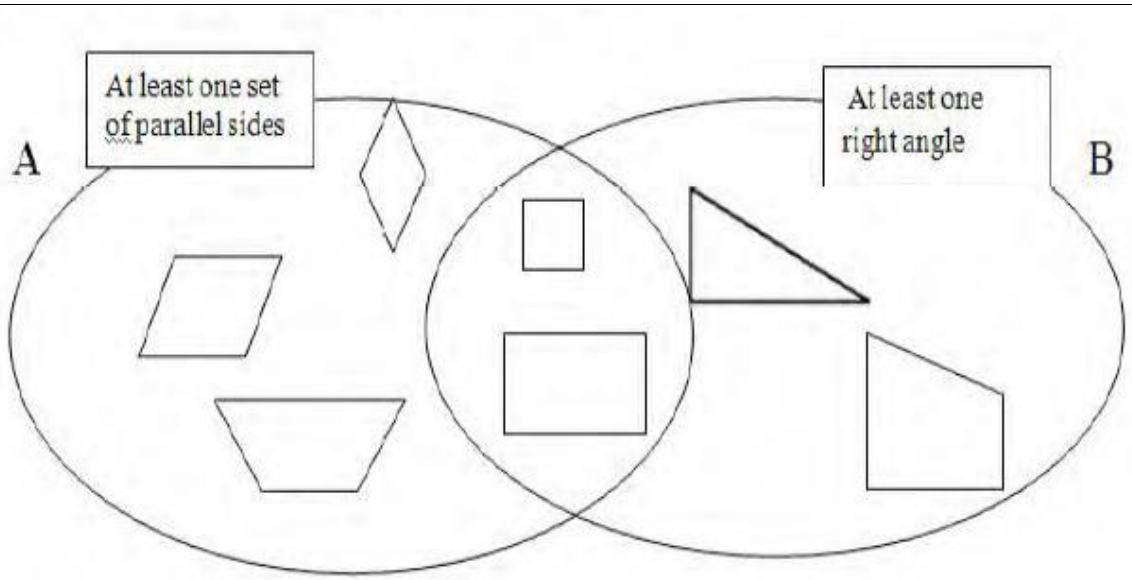
Students may use transparencies with lines to arrange two lines in different ways to determine that the 2 lines might intersect in one point or may never intersect. Further investigations may be initiated using geometry software. These types of explorations may lead to a discussion on angles.

Parallel and perpendicular lines are shown below:



This standard calls for students to sort objects based on parallelism, perpendicularity and angle types.

Example:



Do you agree with the label on each of the circles in the Venn diagram above? Describe why some shapes fall in the overlapping sections of the circles.

Example:

Draw and name a figure that has two parallel sides and exactly 2 right angles.

Example:

For each of the following, sketch an example if it is possible. If it is impossible, say so, and explain why or show counter example.

- A parallelogram with exactly one right angle.
- An isosceles right triangle.
- A rectangle that is *not* a parallelogram. *(impossible)*
- Every square is a quadrilateral.
- Every trapezoid is a parallelogram.

Example:

- Identify which of these shapes have perpendicular or parallel sides and justify your selection.

A possible justification that students might give is:
The square has perpendicular lines because the sides meet at a corner, forming right angles.

Angle Measurement:
This expectation is closely connected to 4.MD.5, 4.MD.6, and 4.G.1. Students' experiences with drawing and identifying right, acute, and obtuse angles support them in classifying two-dimensional figures based on specified angle measurements. They use the benchmark angles of 90°, 180°, and 360° to approximate the measurement of angles.
Right triangles can be a category for classification. A right triangle has one right angle. There are different types of right triangles. An isosceles right triangle has two or more congruent sides and a scalene right triangle has no congruent sides.

Common Misconceptions
Students often confuse parallel and perpendicular. To help students remember the differences explain that the word parallel has parallel lines in it.

Big Idea(s)	**Essential Question(s)**
Analyzing two-dimensional figures	• How can you classify two-dimensional figures by their angles? • How can you classify two-dimensional

	figures by their lines?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.C-G.1 Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	**M04.C-G.1.1.1**	Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel line. 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.
	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).

Concepts (what students need to know)	**Skills** (what students must be able to do)
Two-dimensional figures Properties of lines Properties of angles	Classify two-dimensional figure by properties

I Can Statements

- I can describe, classify and compare two-dimensional objects by their characteristics
- I can state similarities and differences of quadrilaterals

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.G.3	**CC.2.3.4.A.3** Recognize symmetric shapes and draw lines of symmetry.

Taught in Unit(s)

Unit 8

Explanation/Example of Standard

List properties, classify, draw, and identify geometric figures in two dimensions.

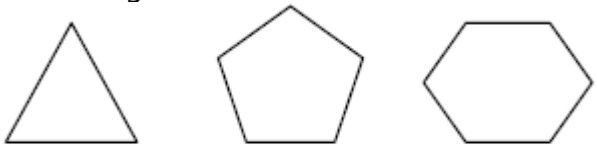
Students need experiences with figures which are symmetrical and non-symmetrical. Figures include both regular and non-regular polygons. Folding cut-out figures will help students determine whether a figure has one or more lines of symmetry.

This standard only includes line symmetry not rotational symmetry.

Example:

For each figure, draw all of the lines of symmetry. What pattern do you notice? How many lines of symmetry do you think there would be for regular polygons with 9 and 11 sides. Sketch each figure and check your predictions.

Polygons with an odd number of sides have lines of symmetry that go from a midpoint of a side through a vertex.



Common Misconceptions

Big Idea(s)	Essential Question(s)
Line Symmetry	• How can you identify and draw lines of symmetry in shapes?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.C-G.1 Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	**M04.C-G.1.1.1**	Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel line. 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.
	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).

Concepts (what students need to know)	Skills (what students must be able to do)

Symmetric shapes Lines of symmetry	Identify symmetric shapes Draw line of symmetry
I Can Statements	
• I can identify symmetric shapes • I can draw lines of symmetry	

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.MD.1, 4.MD.2, 4.MD.3	**CC.2.4.4.A.1** Solve problems involving measurement and conversions from a larger unit to a smaller unit.

Taught in Unit(s)

Unit 5

Explanation/Example of Standard

Explanation: Solve problems involving length, weight (mass), liquid volume, time, area, and perimeter.

Examples:

- Students developed understanding of area and perimeter in 3rd grade by using **visual** models.

While students are expected to use formulas to calculate area and perimeter of rectangles, they need to **understand and be able to communicate their understanding of why the formulas work**. The formula for area is *l* x *w* and the answer will always be in square units. The formula for perimeter can be 2 *l* + 2 *w* or 2 (*l* + *w*) and the answer will be in linear units. This standard calls for students to generalize their understanding of area and perimeter by connecting the concepts to mathematical formulas. These formulas should be developed through experience not just memorization.

- This standard includes multi-step word problems related to expressing measurements from a larger unit in terms of a smaller unit (e.g., feet to inches, meters to centimeter, and dollars to cents). **Students should have ample opportunities to use number line diagrams to solve word problems.**

- The units of measure that have not been addressed in prior years are pounds, ounces, kilometers, milliliters, and seconds. Students' prior experiences were limited to measuring length, mass, liquid volume, and elapsed time. Students did not convert measurements. Students need ample opportunities to become familiar with these new units of measure. Students may use a two-column chart to convert from larger to smaller units and record equivalent measurements. They make statements such as, if one foot is 12 inches, then 3 feet has to be 36 inches because there are 3 groups of 12.

Common Misconceptions

1. **Students believe that larger units will give the larger measure. Students should be given multiple opportunities to measure the same object with different measuring units. For example, have the students measure the length of a room with one-inch tiles, with one-foot rulers, and with yard sticks. Students should notice that it takes fewer yard sticks to measure the room than rulers or tiles and explain their reasoning.**
2. **When solving problems that require renaming of units of time, students revert to the base 10 system of renaming. For example, when subtracting 25 minutes from 2 hours, students fail to convert 1 hour to 60 minutes and instead write 2:00 – 0:25 and 1:75.**
3. **When measuring length with a ruler, students fail to interpret interval markings appropriately. For example, when measuring to the nearest ⅛", students fail to equate ¼" with 2/8" or ½" with 4/8".**

Big Idea(s)	Essential Question(s)
Converting Measurements Units of Time Customary Measures of Length Perimeter and Area Customary Measures of Weight and Liquid Volume Solve Measurement Problems	• What types of problems are solved with measurement? • What are tools of measurement and how are they used? • How do units within a system relate to each other?

Assessments		
See unit map for specific unit common assessments		
Assessment Anchor	**Eligible Content**	
M04.D-M.1 Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	**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.
	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	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.

Concepts (what students need to know)	**Skills** (what students must be able to do)
Measurement Conversions from larger unit to smaller units Formulas: A=LxW and P=2L+2W Relative sizes of measurement units (km, cm, kg, ,g, lb, oz., liter, ml, min. sec. Hour) Equivalent measurements within a measurement system can be used to solve problems. Ex: 4m = 400cm, and 24in = 2 ft.	Solve problems involving measurement Solve problems involving conversions from a larger unit to a smaller unit Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*

I Can Statements
I can compare all units of measurement. I can define perimeter, area, and volume. I can identify and select appropriate units to measure perimeter, area, and volume. I can find perimeter, area, and volume. I can convert all units of measurement. I can solve multiple step problems involving measurement. Then I can solve it, check it, and explain my answer.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.MD.4	**CC.2.4.4.A.4** Represent and interpret data involving fractions using information provided in a line plot.

Taught in Unit(s)

Unit 6, Unit 7

Explanation/Example of Standard

Organize, display, and answer questions based on data.

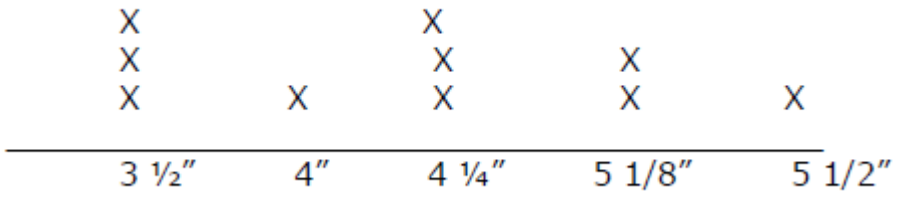
This standard provides a context for students to work with fractions by measuring objects to an eighth of an inch.

Students are making a line plot of this data and then adding and subtracting fractions based on data in the line plot.

Example:

Students measured objects in their desk to the nearest ½, ¼, or 1/8 inch. They displayed their data collected on a line plot. How many object measured ¼ inch? ½ inch? If you put all the objects together end to end what would be the total length of **all** the objects.

Ten students in Room 31 measured their pencils at the end of the day. They recorded their results on the line plot below.



Possible questions:

☐ What is the difference in length from the longest to the shortest pencil?
☐ If you were to line up all the pencils, what would the total length be?
☐ If the 5 1/8" pencils are placed end to end, what would be their total length?

Common Misconceptions

Students use whole-number names when counting fractional parts on a number line. The fraction name should be used instead. For example, if two-fourths is represented on the line plot three times, then there would be six-fourths.

Students also count the tick marks on the number line to determine the fraction, rather than looking at the "distance" or "space" between the marks.

Big Idea(s)	Essential Question(s)
Using a line plot	• When and how could you use a line plot? • How can you interpret a line plot that displays measurements in fractions of a unit? • How can you draw a line plot?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.D-M.2 Represent and interpret 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 ½, ¼, or 1/8).
	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 ¼, 2/4, ¾).
	M04.D-M.2.1.3	Translate information from one type of display to another (table, chart, bar graph, or pictograph).

Concepts (what students need to know)	**Skills** (what students must be able to do)
Visual Fraction model: Line Plot	Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

I Can Statements

- I can make a line plot to display a data set of measurements in fractions of a unit.
- I can solve problems involving addition and subtraction of fractions by using information presented in line plots.
- I can translate information from one type of display to another.

CVSD Math Curriculum Map ~ 4th Grade

Common Core State Standard	PA Core Standard
4.MD.6. 4.MD.7, 4.MD.5	**CC.2.4.4.A.6** Measure angles and use properties of adjacent angles to solve problems.

Taught in Unit(s)

Unit 8

Explanation/Example of Standard

Explanation: Use appropriate tools and units to sketch an angle and determine angle measurements.

Examples:

- Before students begin measuring angles with protractors, they need to have some experiences with benchmark angles. They transfer their understanding that a 360º rotation about a point makes a complete circle to recognize and sketch angles that measure approximately 90º and 180º. They extend this understanding and recognize and sketch angles that measure approximately 45º and 30º. They use appropriate terminology (acute, right, and obtuse) to describe angles and rays (perpendicular). Students should estimate angles, measure angles and sketch angles. They need to experience measuring angles using an *angle ruler* as well as a *protractor. (The angle ruler allows them to "see" the turns or rotations).*

Common Misconceptions

1. **Students are confused as to which number to use when determining the measure of an angle using a protractor because most protractors have a double set of numbers. Students should have multiple experiences estimating and comparing angles to the Benchmark 90° or right angle. They should explain their reasoning by deciding first if the angle appears to be an angle that is less than the measure of a right angle (90°) or greater than the measure of a right angle (90°). If the angle appears to be less than 90°, it is an acute angle and its measure ranges from 0° to 89°. If the angle appears to be an angle that is greater than 90°, it is an obtuse angle and its measures range from 91° to 179°. Ask questions about the appearance of the angle to help students in deciding which number to use.**

Big Idea(s)	Essential Question(s)
Measuring and Drawing Angles Triangles and Angle Measurements	How are geometric properties used to solve problems in everyday life? How can plane and solid shapes be described and measured?

Assessments

See unit map for specific unit common assessments

Assessment Anchor	Eligible Content	
M04.D-M.3 Geometric measurement: understand concepts of angle; measure and create angles.	**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.
	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.)

Concepts (what students need to know)	Skills (what students must be able to do)
Angles Adjacent angles	Measure angles Use properties of adjacent angles to solve problems.

I Can Statements

I can identify and measure angles using a protractor.

CVSD Science Scope and Sequence

4th Grade		Nature of Science	Physical Sciences	Earth and Space Sciences
Unit	**Time Line**	**Priority Standards**	**Priority Standards**	**Priority Standards**
Sun, Moon, and Planets	Trimester 1 (9 weeks)	Inquiry		3.3.4.B1
				3.3.4.B2
Energy and Electromagnetism	Trimester 2 (5 weeks) Trimester 3 (4 weeks)	Inquiry	3.2.4.B2	
			3.2.4.B4	

CVSD Priority Standards for FOSS Science - Grade 4
(Kits: Energy and Electronmagnetism and Sun, Moon and Planets)

3.2.B. Physics	
3.2.4.B2 Energy Storage and Transformations: Conservation Laws	Identify types of energy and their ability to be stored and changed from one form to another.
3.2.4.B4 Electrical and Magnetic Energy	Apply knowledge of basic electrical circuits to the design and construction of simple direct current circuits. Compare and contrast series and parallel circuits. Demonstrate that magnets have poles that repel and attract each other. Demonstrate how electromagnets can be made and used.
3.3.B. Origin and Evolution of the Universe	
3.3.4.B1 Composition and Structure	Identify planets in our **solar system** and their basic characteristics. Describe the earth's place in the **solar sytem** that includes the sun (a star), planets, and many moons. Relate the rotation of the earth and day/night, to the apparent movement of the sun, moon and stars across the sky. (shadows) Gravity keeps the planets and other objects in orbit around the sun. Describe how the planets change their position relative to the background of the stars.
3.3.4.B2 Unifying Themes	Know the basic characteristics and uses of telescopes. Identify major lunar phases.
Inquiry	
Inquiry	Inquiry - Observing Scientific and Engineering Practices

CVSD Science Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
3.2.4.B2 – Identify types of energy and their ability to be stored and changed from one form to another.

Taught in Unit(s)
Energy and Electromagnetism

Explanation/Example of Standard
Energy is present whenever there is motion, electric current, sound, light, or heat. Electrical energy in circuits can be changed to other forms of energy, including light, head, sound, and motion. Electricity transfers energy that can produce heat, light, sound, and motion. Light also transfers energy from place to place (ex. sunlight radiates to the Earth).

Common Misconceptions
Students believe that less energy returns to the battery than leaves the battery. Actually, energy does not get used up, but rather moves or is transferred from place to place.

Big Idea(s)	Essential Question(s)
Energy comes in many forms such as light, heat, sound, magnetic, chemical, and electrical Energy can be moved from place to place by moving objects or through sound, light or electric currents.	• What are the forms of energy? • What does energy do in a circuit with a motor? • What do we observe that provides evidence that energy is present? • How are different forms of energy conserved and transferred?

Assessments
See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
S4.C.2.1	Recognize basic energy types and sources, or describe how energy can be changed from one form to another.	S4.C.2.1.1	Identify energy forms, energy transfer and energy examples (e.g., light, heat, electrical).
		S4.C.2.1.2	Describe the flow of energy through an object or system (e.g., feeling radiant heat from a light bulb, eating food to get energy, using a battery to light a bulb or run a fan.)

Concepts (what students need to know)	Skills (what students must be able to do)
Energy Energy forms Transferred Conserved	Identify forms of energy and observe evidence that energy is present. Explain how different forms of energy are conserved and transferred. Name the different forms of energy in an electric circuit Describe how energy is transferred through an electric circuit

	Carry out investigations to provide evidence that energy is transferred from place to place by sound, light, heat and electric current,
I Can Statements	
I can identify the forms of energy. I can provide examples of how energy is stored and changed from one form to another (magnetism, electricity, light). I can explain energy concepts. I can explain the flow of energy.	

CVSD Science Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
3.2.4.B4 – Apply knowledge of basic electrical circuits to the design and construction of simple direct current circuits. Compare and contrast series and parallel circuits. Demonstrate that magnets have poles that repel and attract each other. Demonstrate how electromagnets can be made and used.
Taught in Unit(s)
Energy and Electromagnetism
Explanation/Example of Standard
An electric circuit is a complete pathway through which electric current flows from a source of electric energy to components. Conductors are materials through which electric current can flow; all metal are conductors. In series circuits, there is a single pathway from the energy source to the components; in parallel circuits each component has its own direct pathway to the energy source. Magnets interact with each other and with some materials, and stick to objects that contain iron. Magnets have two poles. Like poles of magnets repel each other and opposite poles attract. The magnetic force acting between magnets declines as the distance between them increases. An electromagnet is made by sending electric current through an insulated wire wrapped around an iron core. The number of winds of wire in an electromagnet coil affects the strength of the magnetism induced in the core. The amount of electric current flowing in an electromagnet circuit affects the strength of the magnetism in the core. A telegraph system is an electromagnet-based technology used for long-distance communication.
Common Misconceptions
Electricity A misconception is that electricity is a form of energy. Electricity is really the effect of the apparent motion by an electric current. Many students believe that batteries have electricity inside. However, a battery or generator is like your heart: it moves blood, but it does not create blood. Electric currents in copper wires are a flow of electrons, but these electrons are not supplied by batteries. Generators do not 'generate' them. Instead the electrons come from the wire. In copper wire, copper atoms supply the flowing electrons. The electrons in a circuit were already there before the battery was connected. They were even there before the copper was mined and made into wires! Batteries and generators do not create these electrons, they merely pump them, and the electrons act like a pre-existing fluid which is always found within all wires. **Magnetism** • *All metals are attracted to a magnet.* There are only three naturally occurring metals that are magnetic: iron, cobalt, and nickel. • *All silver colored items are attracted to a magnet.* It is important to stress to students that the color or amount of shine an object has is in no way related to whether or not it is magnetic. For instance, aluminum foil is shiny and it is NOT magnetic. • *All magnets are made of iron.* Until 1821, only one kind of magnetism was known, the one produced by iron magnets. Then a Danish scientist, Hans Christian Oersted, while demonstrating to friends the flow of an electric current in a wire, noticed that the current caused a nearby compass needle to move. In nature, magnetic fields are produced in the rarefied gas of space, in the glowing heat of sunspots and in the molten core of the Earth. Such magnetism is produced by electric currents. • *Larger magnets are stronger than smaller magnets.* The size of the magnet is not necessarily directly related to the strength of the magnet. Neodynium magnets, made of a combination of neodymium, iron, and boron — $Nd_2Fe_{14}B$, are much stronger than the same sized iron magnet.

- *The magnetic and geographic poles of the earth are located at the same place.* The Earth's magnetic field can be modeled as a simple bar magnet, tilted about 11° with respect to the Earth's rotation axis and centered at the Earth's center. Earth's magnetic field is changing in size and position. The two poles wander of each other and are not at directly opposite positions on the globe. Currently the magnetic south pole is farther from the geographic south pole than the magnetic north pole is from the geographic north pole. Over geological timescales, the orientation of Earth's magnetic field (and that of other planets) can flip over, so that magnetic north becomes magnetic south and vice versa – an event known as a geomagnetic reversal. The Earth's magnetic field has done this repeatedly throughout history. Although the North Magnetic Pole's motion on any given day is irregular, the average path forms a well-defined oval. The diagram shows the average path on disturbed days.
- *An electromagnet must have an iron nail*. An electromagnet is a wire coiled around a cylinder such as a nail. It may or may not have an iron core.
- *The only way to affect the strength of an electromagnet is the number of coils***.** However, there are various ways to strengthen or weaken an electromagnet, including the number of coils, additional electric current, etc.

Big Idea(s)	Essential Question(s)
An electrical circuit is a closed looped pathway for the flow of electricity. Magnets either attract or repel one another, depending on their orientation. An electromagnet is made by sending electric current through an insulated wire wrapped around an iron core.	• What materials conduct electricity? • What makes a circuit? • What is needed to light a bulb? • What is needed to make a complete pathway for current to flow in a circuit? • What are the characteristics of a series circuit? • What are the characteristics of a parallel circuit? • Which design is better for manufacturing long strings of lights --- series or parallel? • What materials stick to magnets? • What happens when two or more magnets interact? • What happens to the force of attraction between two magnets when the distance between them changes? • How can you use electricity to make an electromagnet? • How can you reinvent the telegraph using your knowledge of energy and electromagnetism?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
S4.A.3.1	Identify systems and describe relationships among parts of a familiar system (e.g., digestive system, simple machines, water cycle)	S4.A.3.1.1	Categorize systems as either natural or human-made (e.g., ballpoint pens, simple electrical circuits, plant anatomy, water cycle)
S.4.C.1.1	Describe observable physical properties of matter.	S4.C.1.1.1	Use physical properties [e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid and gas), conductivity (i.e., electrical and heat)] to describe matter.

S4.C.2.1	Recognize basic energy types and sources, or describe how energy can be changed from one form to another.	S4.C.2.1.3	Recognize or illustrate simple direct current series and parallel circuits composed of batteries, light bulbs (or other common loads), wire, and on/off switches
S4.C.3.1	Identify and describe different types of force and motion resulting from these forces,	S4.C.3.1.1	Describe changes in motion caused by forces (e.g., magnetic, pushes or pulls, gravity, friction)

Concepts (what students need to know)	**Skills** (what students must be able to do)
Circuit Current Conductors Insulators Series Circuit Parallel Circuit Magnet Magnetic Force Poles Repel Attract Electromagnetism Telegraph	• Investigate electric currents and circuits • Build a simple circuit with battery, light bulb and wire • List the essential elements of an electrical circuit • Identify materials that are conductors and insulators • Explore series and parallel circuits • Compare the functioning of the components in series and parallel circuits • Investigate the properties of magnets and their interaction with materials and each other. • Recognize that magnets have poles that repel and attract each other. • Investigate the strength of the force of attraction between two magnets • Plan and conduct investigations about electromagnetism • Conduct an experiment to determine how the number of winds in an electromagnet coil affects the strength of the magnetism • Design and build a model telegraph system.

I Can Statements

I can design and construct a simple direct current circuit.
I can differentiate between a series and a parallel circuit.
I can sort materials based on their properties in relation to magnetism.
I can describe how magnets interact with each other and other materials.
I can explain how to use electricity to make an electromagnet.
I can explain what three parts are needed to make an electromagnet.
I can state common uses of electromagnets.

CVSD Science Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
3.3.4.B1 - Identify planets in our solar system and their basic characteristics. Describe the earth's place in the solar system that includes the sun (a star), planets, and many moons. Relate the rotation of the earth and day/night, to the apparent movement of the sun, moon and stars across the sky (shadows). Gravity keeps the planets and other objects in orbit around the sun. Describe how the planets change their position relative to the background of the stars.
Taught in Unit(s)
Sun, Moon and Planets
Explanation/Example of Standard
Earth is part of the solar system, which includes the Sun, Moon, and other bodies that orbit the Sun in predictable patterns that lead to observable paths of objects in the sky as seen from Earth. Gravity is the force that pulls on the planets to change their direction of travel to produce circular orbits. Shadows are the dark areas where light is blocked. The length and direction of a shadow depends on the Sun's position in the sky. The cyclical change between day and night is the result of a rotating Earth near a stationary Sun. Groups of stars form patterns called constellations. They appear to move together across the night sky because the Earth rotates. Different constellations can be observed in the night sky during different seasons because the Earth revolves around the Sun.
Common Misconceptions
1. Stars and constellations appear in the same place in the sky every night. 2. The sun rises exactly in the east and sets exactly in the west every day. 3. The tip of a shadow always moves along an east-west line. 4. The earth is the center of the solar system. (The planets, sun and moon revolve around the earth.) 5. The earth is the largest object in the solar system. 6. The solar system is very crowded. 7. The solar system contains only the sun, planets and the moon. 8. Meteors are falling stars. 9. Comets and meteors are out in space and do not reach the ground. 10. All the stars in a constellation are near each other. 11. All the stars are the same distance from the earth. 12. The galaxy is very crowded. 13. Stars are evenly distributed throughout the universe. 14. All stars are the same size. 15. The brightness of a star depends only on its distance from the earth. 16. Stars are evenly distributed throughout the galaxy. 17. The constellations form patterns clearly resembling people, animals or objects.

Big Idea(s)	Essential Question(s)
The solar system includes the Sun and the objects that orbit it, including Earth, the Moon, seven other planets, their satellites, asteroids and comets. Gravity keeps the planets and other objects in orbit around the sun. Objects in the night sky include the moon, stars and planets.	What are the interacting parts of the solar system? Why do planets orbit the Sun? What natural objects can be seen in the night sky? How does the moon and Earth move in relation to the sun? How and why does your shadow change during the day? What can be learned by studying the length and direction of shadows? What causes day and night?

Earth and several other planets orbit the Sun and the Moon orbits the Earth. Shadows change during the day because the position of the Sun changes in the day. The rotation of Earth produces day and night. A constellation is a stable, predictable pattern of stars.	Why do stars appear to move across the night sky? What is a constellation?

Assessments

See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
S4.A.2.1	Apply skills necessary to conduct an experiment or design a solution to solve a problem.	S4.A.2.1.3	Observe a natural phenomenon (e.g. weather changes, length of daylight/night, movement of shadows, animal migrations, growth of plants), record observations and then make a prediction based on those observations.
S4.A.3.2	Use models to illustrate simple concepts and compare the models to what they represent.	S4.A.3.2.2	Use models to make observations to explain how systems work (e.g., water cycle, Sun-Earth-Moon system)
S4.A.3.3	Identify and make observations about patterns that regularly occur and reoccur in nature.	S4.A.3.3.2	Predict future conditions/events based on observable patterns (e.g., day/night, seasons, sunrise/sunset, lunar phases)
S4.D.3.1	Describe Earth's relationship to the Sun and the Moon.	S4.D.3.1.1	Describe motions of the Sun-Earth-Moon system
		S4.D.3.1.2	Explain how the motion of the Sun-Earth-Moon system relates to time (e.g., days, months, years).

Concepts (what students need to know)	**Skills** (what students must be able to do)
Solar System Planet Moon Satellites Asteroids Comets Orbit Gravity Shadows Day Night Rotation Constellation	• Create a model of the solar system • Classify planets by their various properties • Record observations of the night sky • Build a model of the Earth-Sun-Moon relationship • Describe the motions of the sun, moon and Earth • Trace shadows in the morning and afternoon • Use physical models to explain day and night • Identify several constellations

I Can Statements
I can recognize that the Earth rotates once every 24 hours and revolves around the Sun once every 365 ¼ days. I can describe effects of the rotation of the Earth on its axis as it revolves around the Sun. (days, months, years, seasons) I can relate changes in the length and position of a shadow to the time of day and apparent position of the Sun in the sky, as determined by Earth's rotation. I can describe effects of the rotation of the Moon on its axis as it revolves around the Earth. (phases). I can identify and sequence the phases of the Moon seen from Earth as it cycles day-to-day in about a month. I can generally describe the interacting parts of the solar system and why planets orbit the sun. I can identify several constellations as stable, predictable patterns of stars that appear during different seasons.

CVSD Science Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
3.3.4.B2 – Know the basic characteristics and uses of telescopes. Identify major lunar phases.
Taught in Unit(s)
Sun, Moon and Planets
Explanation/Example of Standard
The moon can appear in the night or day sky. The moon is smaller than the Earth and orbits at a distance equal to about 30 Earth diameters. The moon changes its appearance in a regular 4-weeks pattern. Moon phases is the portion of the illuminated half of the moon that is visible from Earth.
Common Misconceptions
1. The moon can only be seen during the night. 2. The moon does not rotate on its axis as it revolves around the earth. 3. The phases of the moon are caused by shadows cast on its surface by other objects in the solar system. 4. The phases of the moon are caused by the shadow of the earth on the moon. 5. The phases of the moon are caused by the moon moving into the sun's shadow. 6. The shape of the moon always appears the same.

Big Idea(s)	Essential Question(s)
The moon changes its phase (appearance) in a regular pattern every 4 weeks. Telescopes are instruments that magnify distant objects, making them look closer and larger.	• How does the shape of the moon change over 4 weeks? • How do telescopes help us learn the stars?

Assessments
See unit map for specific unit common assessments

Assessment Anchor		Eligible Content	
S4.A.2.2	Identify appropriate instruments for a specific task and describe the information the instrument can provide.	S4.A.2.2.1	Identify appropriate tools or instruments for specific tasks and describe the information they can provide (e.g., measuring: length-ruler, mass-balance scale, volume-beaker, temperature-thermometer; making observations: hands lens, binoculars, telescope).
S4.A.3.3	Identify and make observations about patterns that regularly occur and reoccur in nature.	S4.A.3.3.2	Predict future conditions/events based on observable patterns (e.g., day/night, seasons, sunrise/sunset, lunar phases)

Concepts (what students need to know)	Skills (what students must be able to do)
Lunar phases First Quarter Waxing Crescent New Waning Crescent Third Quarter Waning Gibbous	Create a moon calendar – observe and record changes in the Moon's appearance every day for a month. Explain why telescopes are important

Full Waxing Gibbous Telescope	

I Can Statements
I can identify and sequence the phases of the Moon seen from Earth as it cycles day-to-day in about a month. I can describe effects of the rotation of the Moon on its axis as it revolves around the Earth. (phases). I can identify the characteristics and uses of a telescope.

CVSD Science Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
Inquiry - Observing Scientific and Engineering Practices
Taught in Unit(s)
Sun, Moon & Planets Energy & Electromagnetism
Explanation/Example of the Standard
In addition to the science content development, every module provides opportunities for students to engage in and understand the importance of scientific practices, and many modules explore issues related to engineering practices and the use of natural resources. **Asking questions and defining problems** • Ask questions about objects, organisms, systems, and events in the natural and human-made world (science). • Ask questions to define and clarify a problem, determine criteria for solutions, and identify constraints (engineering). **Planning and carrying out investigations** • Plan and conduct investigations in the laboratory and in the field to gather appropriate data (describe procedures, determine observations to record, decide which variables to control) or to gather data essential for specifying and testing engineering designs. **Analyzing and interpreting data** • Use a range of media (numbers, words, tables, graphs, images, diagrams, equations) to represent and organize observations (data) in order to identify significant features and patterns. **Developing and using models** • Use models to help develop explanations, make predictions, and analyze existing systems, and recognize strengths and limitations of proposed solutions to problems. **Using mathematics and computational thinking** • Use mathematics and computation to represent physical variables and their relationships and to draw conclusions. **Constructing explanations and designing solutions** • Construct logical explanations of phenomena, or propose solutions that incorporate current understanding or a model that represents it and is consistent with available evidence. **Engaging in argumentation from evidence** • Defend explanations, develop evidence based on data, examine one's own understanding in light of the evidence offered by others, and challenge peers while searching for explanations. **Obtaining, evaluating, and communicating information** • Communicate ideas and the results of inquiry—orally and in writing—with tables, diagrams, graphs, and equations, in collaboration with peers.
Common Misconceptions
• *Science is a collection of facts.* Correction: Because science classes sometimes revolve around dense textbooks, it's easy to think that's all there is to science: facts in a textbook. But that's only part of the picture. Science *is* a body of knowledge that one can learn about in textbooks, but it is also a process.

Science is an exciting and dynamic process for discovering how the world works and building that knowledge into powerful and coherent frameworks.

- *Science is complete.* Correction: Since much of what is taught in introductory science courses is knowledge that was constructed in the 19th and 20th centuries, it's easy to think that science is finished — that we've already discovered most of what there is to know about the natural world. This is far from accurate. Science is an ongoing process, and there is much more yet to learn about the world. In fact, in science, making a key discovery often leads to many new questions ripe for investigation. Furthermore, scientists are constantly elaborating, refining, and revising established scientific ideas based on new evidence and perspectives.
- *There is a single Scientific Method that all scientists follow.* Correction: "The Scientific Method" is often taught in science courses as a simple way to understand the basics of scientific testing. In fact, the Scientific Method represents how scientists usually write up the results of their studies (and how a few investigations are actually done), but it is a grossly oversimplified representation of how scientists generally build knowledge. The process of science is exciting, complex, and unpredictable. It involves many different people, engaged in many different activities, in many different orders.
- *The process of science is purely analytic and does not involve creativity.* Correction: Perhaps because the Scientific Method presents a linear and rigid representation of the process of science, many people think that doing science involves closely following a series of steps, with no room for creativity and inspiration. In fact, many scientists recognize that creative thinking is one of the most important skills they have — whether that creativity is used to come up with an alternative hypothesis, to devise a new way of testing an idea, or to look at old data in a new light. Creativity is critical to science!
- *When scientists analyze a problem, they must use either inductive or deductive reasoning.* Correction: Scientists use all sorts of different reasoning modes at different times — and sometimes at the same time — when analyzing a problem. They also use their creativity to come up with new ideas, explanations, and tests. This isn't an either/or choice between induction and deduction. Scientific analysis often involves jumping back and forth among different modes of reasoning and creative brainstorming! What's important about scientific reasoning is not what all the different modes of reasoning are called, but the fact that the process relies on careful, logical consideration of how evidence supports or does not support an idea, of how different scientific ideas are related to one another, and of what sorts of things we can expect to observe if a particular idea is true.
- *Experiments are a necessary part of the scientific process. Without an experiment, a study is not rigorous or scientific.* Correction: Perhaps because the Scientific Method and popular portrayals of science emphasize experiments many people think that science can't be done *without* an experiment. In fact, there are *many* ways to test almost any scientific idea; experimentation is only one approach. Some ideas are best tested by setting up a controlled experiment in a lab, some by making detailed observations of the natural world, and some with a combination of strategies.
- *Scientific ideas are absolute and unchanging.* Correction: Because science textbooks change very little from year to year, it's easy to imagine that scientific ideas don't change at all. It's true that some scientific ideas are so well established and supported by so many lines of evidence, they are unlikely to be completely overturned. However, even these established ideas are subject to modification based on new evidence and perspectives. Furthermore, at the cutting edge of scientific research — areas of knowledge that are difficult to represent in introductory textbooks — scientific ideas may change rapidly as scientists test out many different possible explanations trying to figure out which are the most accurate
- *If evidence supports a hypothesis, it is upgraded to a theory. If the theory then garners even more support, it may be upgraded to a law.* Correction: This misconception may be reinforced by introductory science courses that treat hypotheses as "things we're not sure about yet" and that only explore established and accepted theories. In fact, hypotheses, theories, and laws are rather like apples, oranges, and kumquats: one cannot grow into another, no matter how much fertilizer and water are offered. Hypotheses, theories, and laws are all scientific explanations that differ in breadth — not in level of support. Hypotheses are explanations that are limited in scope, applying to fairly narrow range of phenomena. The term *law* is sometimes used to refer to an idea about how observable phenomena are related — but the term is also used in other ways within science.

Theories are deep explanations that apply to a broad range of phenomena and that may integrate many hypotheses and laws.

Big Idea(s)	Essential Question(s)
• Scientific inquiry is a multifaceted activity. • The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation. • The processes of science frequently do not correspond to the traditional portrayal of "the scientific method." • Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge. • Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.	• What makes a good scientific question? • Why did that happen? • How do scientific questions drive the inquiry process? • What would happen if I did this differently? • What is a fair test? • What steps do I need to take to test my question? • How does my data answer my questions? • How can I prove my conclusion is accurate? • What tools do I use to collect data? • What data will I collect during the investigation? • Can I explain the process used to read my conclusion? • Can I use my data to explain conclusions to others effectively?

Assessments

See unit maps for specific unit common assessments.

Concepts (what students need to know)	Skills (what students must be able to do)
Scientific Questions Variables Inquiry Data Valid Reliable Conclusion Errors Communicate Evidence	• Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations. • Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups. • Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence. • Attempt reasonable answers to scientific questions and cite evidence in support.

	• Compare the methods and results of investigations done by other classmates. • Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations. • Recognize and explain that scientists base their explanations on evidence. • Recognize that science involves creativity in designing experiments.
I Can Statements	
I can select the appropriate tools and safety procedures to measure and record length, weight, volume, temperature and area using metric and standard units. I can analyze a series of events or cycles by describing their patterns and inferring their next likely occurrence daily and seasonal. I can develop, design and conduct safe simple experiments to answer questions. I can explain that conditions of an experiment must be kept the same. I can describe why it is not fair to compare experiments when conditions are not kept the same. I can formulate directions and explain data to help others understand and repeat an experiment.	

CVSD Social Studies Scope and Sequence ~ Grade 4

4th Grade		Geography	History	Civics & Government
Unit	**Timeline**	**Priority Standards**	**Priority Standards**	**Priority Standards**
Pennsylvania Government	Trimester 1 (3 weeks) Trimester 2 (1 week)		8.2.4.C.	5.1.4.D.
				5.3.4.A.
				5.3.4.C.
				5.3.4.D.
				5.3.4.E.
Colony of Pennsylvania	Trimester 2 (4 weeks)		8.1.4.C.	
			8.2.4.A.	
			8.2.4.B.	
			8.2.4.C.	
			8.2.4.D.	
US Regions	Trimester 3 (10 weeks)	7.1.4.A.		
		7.1.4.B.		
		7.2.4.A.		
		7.2.4.B.		
		7.3.4.A.		
		7.4.4.B.		

CVSD Priority Standards for Social Studies ~ 4th Grade

Civics and Government	
5.1.4.D	Identify key ideas about government found in significant documents: • Declaration of Independence • United States Constitution • Bill of Rights • Pennsylvania Constitution
5.3.4.A	Identify the roles of the three branches of government.
5.3.4.C	Identify the services performed by the local government.
5.3.4.D	Identify positions of authority at the local, state and national level.
5.3.4.E	Explain the voting process.
Geography	
7.1.4.A	Describe how common geographic tools are used to organize and interpret information about people, places and environment.
7.1.4.B	Describe and locate places and regions as defined by physical and human features.
7.2.4.A	Identify physical characteristics of places and regions.
7.2.4.B	Identify the basic physical processes that affect the physical characteristics of places and regions.
7.3.4.A	Identify the human characteristics of places and regions using the following criteria: • Population • Culture • Settlement • Economic Activities • Political Activities
7.4.4.B	Identify the effect of people on the physical systems of a community.
History	
8.1.4.C	Identify a specific research topic and develop questions relating to the research topic.
8.2.4.A	Differentiate common characteristics of the social, political, cultural and economic groups from PA.
8.2.4.B	Locate historical documents, artifacts and places critical to Pennsylvania history.
8.2.4.C.	Explain how continuity and change in PA history have influenced personal development and identity. • Belief Systems and Religion • Commerce and Industry • Technology • Politics and Government • Physical and Human Geography • Social Organizations
8.2.4.D	Distinguish between conflict and cooperation among groups and organizations that impacted development of the history and development of PA. • Ethnicity and race • Working conditions • Immigration • Military conflict • Economic stability

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
5.1.4.D. – Identify key ideas about government found in significant documents: • Declaration of Independence • United States Constitution • Bill of Rights • Pennsylvania Constitution
Taught in Unit(s)
Pennsylvania Government
Explanation/Example of the Standard
Important documents that articulate civic ideals have served as milestones in the development of government ideals. The civic ideals that are present in our society today were first outlined in these fundamental documents. Each of these documents contain key ideals about the fundamental basics of our government. Students need to consider the time periods these documents were written in order to fully understand the development of our fundamental rights.

Big Idea(s)	Essential Question(s)
Through studying significant documents students can learn about the fundamental rights of our country and state.	• What key ideals can be found in the Declaration of Independence? • What key ideals can be found in the US Constitution? • What key ideals can be found in the Bill of Rights? • What key ideals can be found in the PA Constitution?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• Declaration of Independence • US Constitution • Bill of Rights • PA Constitution	• Read documents that have been significant to our government. • Interpret the key ideals present in these documents.

I Can Statements
I can read and interpret documents that were key in the development of our country and state.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
5.3.4.A- Identify the roles of the three branches of government
Taught in Unit(s)
Pennsylvania Government
Explanation/Example of the Standard
The three branches of government each have an important role in our government. The executive branch carries out and enforces the laws, the legislative branch makes the laws and the judicial branch interprets that laws. No one branch has more power than the others.

Big Idea(s)	Essential Question(s)
• Our government is made up of three branches which each have equal power. • The executive branch carries out and enforces the laws. • The legislative branch makes the laws. • The judicial branch interprets the laws.	• How do the three branches of government work together? • Why is there a balance of power? • What is the role of the executive branch? • What is the role of the legislative branch? • What is the role of the judicial branch?
Assessments	
See unit maps for specific common assessments	
Concepts (what students need to know)	**Skills (what students must be able to do)**
• Government • Power • Legislative branch • Executive branch • Judicial branch	• Explain how the three branches of government work together and have a balance of power. • Explain the role of the executive branch. • Explain the role of the legislative branch. • Explain the role of the judicial branch.
I Can Statements	
I can explain the roles of the three branches of government.	

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
5.3.4.C. – Identify the services performed by the local government.
Taught in Unit(s)
Pennsylvania Government
Explanation/Example of the Standard
The local government provides their residents with key services. These services are paid for by tax dollars that the government collects. Government services are essential to a well-functioning society. These services can include welfare, health services, schools, public services, and infrastructure.

Big Idea(s)	Essential Question(s)
There are key services performed by the local government. These services ensure a well-functioning community. These services are essential to keep members of the community safe and provide them with what they need.	• What services are performed by the local government? • What is it important for the government to provide services to the community?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• services • local government	• List services performed by the local government. • Explain why it is important for the government to perform these services.

I Can Statements
I can identify services performed by the local government.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
5.3.4.D. – Identify positions of authority at the local, state and national level.
Taught in Unit(s)
Pennsylvania Government
Explanation/Example of the Standard
There are many important people in positions of authority in our society. These people include Mayors, Governors, President and Vice President just to name a few. People in these positions are elected by the members of their community. It is important to understand the different levels of responsibility in our society. It is also important for students to understand how people in positions of authority should be treated.

Big Idea(s)	Essential Question(s)
There are key people in positions of authority at the local, state and national level. Each person at each of these levels has an important role in order to help our government run smoothly. People in these positions should be respected.	• Who are some people in positions of authority at the local, state, and national level? • What are the responsibilities of these people? • How should people in positions of authority be treated?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• authority • mayor • governor • president • vice president • respect	• Identify positions of authority at the local, state and national levels. • List the responsibilities of people in positions of authority. • Describe the way people in positions of authority should be treated.

I Can Statements
I can identify positions of authority at the local, state and national level.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
5.3.4.E. – Explain the voting process.
Taught in Unit(s)
Pennsylvania Government
Explanation/Example of the Standard
Voting is the process by which individuals are elected into positions in our society. The individual who receives the most votes will be awarded the position they are running for. In order to vote, citizens must meet certain age and residency requirements. They then proceed to their polling place on election day and place their vote in secret.

Big Idea(s)	Essential Question(s)
The right to vote is a fundamental right in our society. It is the responsibility of voters to understand the voting process.	• What is the voting process? • Why is it important for people to vote?
Assessments	
See unit maps for specific common assessments	
Concepts (what students need to know)	**Skills (what students must be able to do)**
• voting process • fundamental right • responsibility	• Explain the voting process. • Explain why it is important for people to vote.
I Can Statements	
I can explain the voting process and participate in a mock election.	

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
7.1.4.A. – Describe how common geographic tools are used to organize and interpret information about people, places and environment.
Taught in Unit(s)
United States Regions
Explanation/Example of the Standard
People locate, organize, and interpret information about a place or region by using maps. How people live is affected by where they live.

Big Idea(s)	Essential Question(s)
Maps are used to organize and interpret information. Information on maps can be used to learn about history, resources and economics, and the government.	• How can we use maps to organize and interpret information? • What can we learn from maps?
Assessments	
See unit map for specific unit common assessments	

Concepts (what students need to know)	Skills (what students must be able to do)
• Place • Region • Map	• Students will use geographic tools to locate and represent the physical and human features of places.
I Can Statements	
I can use maps and map tools to locate places and answer questions about a place.	

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
7.1.4.B. – Describe and locate places and regions as defined by physical and human features.

Taught in Unit(s)
United States Regions

Explanation/Example of the Standard
Places and regions in the United States can be defined by unique physical and human features. Being able to describe and locate these places can help students have a better understanding of the United States. Understanding the geography of places and regions can help the students better understand the history, government and economics of these places and regions.

Big Idea(s)	Essential Question(s)
Each region of the United States has unique physical and human features. It is important for students to be able to describe and locate the regions of the United States.	• What are the unique physical and human features of each region of the United States? • Why is important to be able to describe and locate the regions of the United States? • What are the different parts of the Northeast like? • How do people live in the Northeast? • What factors have shaped the culture of the Southeast? • How has geography helped shape daily life in the Southeast? • Why do we call the Midwest "America's Breadbasket"? • How has farming impacted this region and the United States? • How have geography and history shaped life in the Southwest? • How do people depend on the Colorado River and share its water? • What are the features that have drawn people to the West? • What attracts people to the cities of the West?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• places • regions • physical features • human features	• Identify the physical and human features of the regions of the United States. • Explain why it is important to be able to describe and locate the regions of the United States.

I Can Statements
I can describe places and regions of the United States. I can locate places and regions of the United States.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
7.2.4.A. – Identify physical characteristics of places and regions.
Taught in Unit(s)
United States Regions
Explanation/Example of the Standard
The physical characteristics of places and regions include landforms, bodies of water, soil, vegetation, and weather and climate. Students should be able to use maps in order to identify these physical characteristics of places and regions.

Big Idea(s)	Essential Question(s)
There are various types of maps that show the physical characteristics of places and regions. It is important to be able to read various types of physical maps in order to learn about places and regions.	• How can various places and regions be identified on maps? • What are the physical characteristics of places and regions? • Why is it important to be able to read various types of maps?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• physical characteristics • places • regions	• Label the different places and regions on maps. • Label various physical characteristics on maps. • Explain why it is important to be able to read different types of maps.

I Can Statements
I can label physical characteristics, place and regions on a map.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
7.2.4.B. – Identify the basic physical processes that affect the physical characteristics of places and regions.
Taught in Unit(s)
United States Regions
Explanation/Example of the Standard
The physical processes of places and regions include water distribution, agriculture, wildlife, and natural resources. Students should be able to use maps in order to identify these physical processes of places and regions.

Big Idea(s)	Essential Question(s)
Water is distributed to areas of need to further develop those regions. It is important to describe the physical processes of specific regions.	• How does the Hoover Dam influence the development of desert cities such as Phoenix and Las Vegas? (West and Southwest) • How does the Everglades affect environment and habitats in surrounding areas? (Southeast) • How does erosion and the geological process underground affect the hot springs and geysers? (West) • How are weather patterns affected by the moisture and warmth of the Gulf of Mexico? (Southeast)

Assessments
See unit map for specific unit common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• Physical Processes • Hoover Dam • Everglades • Old Faithful • Gulf of Mexico/Hurricanes	• Describe how the warmth and moisture of the Gulf of Mexico creates Hurricanes that influence the Southeast. • Describe how the Everglades influence the habitats of regional wildlife. • Describe how the Hoover Dam supports the development of cities in dry, desert regions • Describe how nature's physical processes influence hot springs and geysers in Yellowstone National Park

I Can Statements
I can name some physical processes that affect the physical characteristics of places and regions.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
7.3.4.A. – Identify the human characteristics of places and regions using the following criteria: • Population • Culture • Settlement • Economic Activities • Political Activities
Taught in Unit(s)
United States Regions
Explanation/Example of the Standard
The study of people, places, and environments enables us to understand the relationship between human populations and the physical world. Students study the causes, patterns and effects of human settlement and migration, learn the roles of different kinds of population centers in a society, and investigate the impact of human activities on the environment.

Big Idea(s)	Essential Question(s)
To learn about the human characteristics of places and regions students will learn about population, culture, settlement, economic activities, and political activities.	What can we learn about a place by studying the population, culture, settlement patterns, economic activities, and political activities?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• human characteristics • population • culture • settlement • economic activities • political activities	Investigate relationships among people, places and environments in the United States through the use of atlases, data bases, charts, graphs and maps.

I Can Statements
I can investigate the human characteristics of places and regions.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
7.4.4.B. – Identify the effect of the people on physical systems of a community.
Taught in Unit(s)
United States Regions
Explanation/Example of the Standard
People affect the physical systems within their communities. People can affect their physical systems in many ways, both positive and negative. People in communities use their physical systems to support their existence.

Big Idea(s)	Essential Question(s)
Humans can positively change the environment and physical features in a community but can also have a negative impact on the environment and its natural resources.	• What impact do people have on the physical systems and natural resources of a community as they strive to support their existence?

Assessments
See unit map for specific unit common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• Physical systems • Natural resources • Existence • Utilized • Modified • Geographical features • Human activity	• Compare how people have utilized or modified environmental and geographical features to support their existence. • Examine how geographical features change over time because of human activity.

I Can Statements
I can name ways that the environment (landforms, bodies of water, climate, and vegetation) have been changed by the local community.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
8.1.4.C. – Identify a specific research topic and develop questions relating to the research topic.
Taught in Unit(s)
Colony of Pennsylvania
Explanation/Example of the Standard
Students will learn how to investigate their state's history. Primary and secondary sources will be used in this research. It is impossible to know everything about our state's history, so it is important for students to develop their research skills so they can learn more on their own.

Big Idea(s)	Essential Question(s)
Primary and secondary resources have different purposes, but both can be used while researching. Research skills help students learn more about the communities they live in and allow for them to investigate areas of interest.	• What is a primary source and how can it help in research? • What is a secondary source and how can it help in research? • What questions are important to ask when researching a topic? • What can be learned about our state's history through research?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• research • state • research question • research topic	• Identify a primary source and its purpose. • Identify a secondary source and its purpose. • Ask questions about a topic. • Develop research questions about a topic.

I Can Statements
I can learn about my state's history by doing research. I can use primary and secondary sources to help me learn about a topic.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard	
8.2.4.A. – Differentiate common characteristics of the social, political, cultural and economic groups from PA.	
Taught in Unit(s)	
Colony of Pennsylvania	
Explanation/Example of the Standard	
Various cultural groups have impacted Pennsylvania in terms of social, political, cultural, and economic importance.	
Big Idea(s)	**Essential Question(s)**
Cultural groups influence the way a region develops People come to the new colony for religious, economic, and political freedom.	• What factors brought European immigrants to the colonies? • How did the diverse immigrant groups impact the development of Pennsylvania?
Assessments	
See unit maps for specific common assessments	
Concepts (what students need to know)	**Skills (what students must be able to do)**
• Quakers • William Penn • Germans • Scots-Irish • Amish • Mennonites • Swedish and Dutch	• Explain the factors that brought European immigrants to the colonies. • Explain the benefit of living in William Penn's developing colony • Explain how diverse immigrant groups impact the development of Pennsylvania.
I Can Statements	
I can identify different cultural groups and the ways they have impacted Pennsylvania.	

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
8.2.4.B. – Locate historical documents, artifacts, and places critical to Pennsylvania history.
Taught in Unit(s)
Colony of Pennsylvania
Explanation/Example of the Standard
There are a number of important historical documents, artifacts, and places that are critical to Pennsylvania history. By studying these items students can learn more about their heritage and those who settled our state. As the Keystone State, Pennsylvania has played a key role in the development of our nation.

Big Idea(s)	Essential Question(s)
Historical documents can be viewed and interpreted by students to learn more about our past. Artifacts can be viewed and interpreted by students to learn more about our past. By studying and visiting historical places students can learn first-hand about what life was like in our state's past.	• Where can historical documents, artifacts, and places be found in our state? • What can historical documents teach us about our past? • What can artifacts teach us about our past? • What can vising historical places teach us about our past?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• historical documents • historical artifacts • historical places • interpret	• Locate historical documents, artifacts and places in our state. • Explain what historical documents, artifacts and places can tell us about our past.

I Can Statements
I can learn about my state's past by looking at historical documents and artifacts. I can visit historical places in order to learn more about my state's past.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
8.2.4.C. – Explain how continuity and change in PA history have influenced personal development and identity. • Belief Systems and Religion • Commerce and Industry • Technology • Politics and Government • Physical and Human Geography • Social Organizations
Taught in Unit(s)
Colony of Pennsylvania & PA Government
Explanation/Example of the Standard
The historical experiences of societies, peoples and nations reveal patterns of continuity and change. Students will learn to offer explanations for why views differ, and develop the ability to develop their own views. Personal identify is shaped by an individual's culture, by groups, and by lived and shared experiences. Continuity and change can be found in many aspects of the social sciences.

Big Idea(s)	Essential Question(s)
Continuity allows us to see how things have continued or developed over time. Change allows us to see how things have changed over time. By looking back at our past we can learn about ourselves and how we have changed over time.	• What are some examples of continuity in our state's past? • What are some examples of change in our state's past? • What can you learn about yourself by looking back at our state's past?

Assessments
See unit maps for specific common assessments

Concepts (what students need to know)	Skills (what students must be able to do)
• continuity • change • personal development • personal identity • belief systems • commerce • industry • technology • politics • physical geography • human geography	• Provide examples of continuity in our state's past by looking at various features in our society. • Provide examples of change in our state's past by looking at various features in our society. • Explain what you have learned about yourself and your development by studying our state's past.

I Can Statements
I can understand continuity and change in our state's history.

CVSD SS Curriculum Map ~ 4th Grade

CV Priority Standard/PA Academic Standard
8.2.4.D. – Distinguish between conflict and cooperation among groups and organizations that impacted the history and development of Pennsylvania. • Ethnicity and race • Working conditions • Immigration • Military conflict • Economic stability
Taught in Unit(s)
Colony of Pennsylvania
Explanation/Example of the Standard
Throughout history conflict and cooperation have impacted our development as a state. There are various groups and organizations that have contributed to the development of our state. While conflict is often seen as negative, the results of that conflict could contribute to the development of our state.

Big Idea(s)	Essential Question(s)
Conflict can be a disagreement between two or more groups. Cooperation is when two or more groups work together towards a common goal. Both conflict and cooperation have impacted the history and development of Pennsylvania.	• What conflicts have groups in Pennsylvania experiences? • In what ways have groups in Pennsylvania cooperated?
Assessments	
See unit maps for specific common assessments	

Concepts (what students need to know)	Skills (what students must be able to do)
• conflict • cooperation • ethnicity • race • working conditions • immigration • military conflict • economic stability	• Explain conflicts among groups and organizations that impacted our history and development. • Explain the cooperation between groups and organizations that impacted our history and development.
I Can Statements	
I can identify conflict and cooperation among groups and organizations.	