

## *Fifth Grade*

### **ELA: Literature (A - Fiction) & Informational Text (B - Non-Fiction)**

#### **Standards Statement**

1. **(A) (B)** Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

Quote, word for word, from a text.

Tell what the text says and draw inferences from the text.

#### **Standards Statement**

2. **(A)** Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.

Use details from the text, tell the theme.

Summarize a text.

**(B)** Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.

Find two or more main ideas in a text.

Explain how the main idea is supported by key details.

Summarize the text.

#### **Standards Statement**

3. **(A)** Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).

Use specific details compare and contrast two or more characters, settings, or events in a story.

**(B)** Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

Explain the relationship between two or more individuals, events, ideas, or concepts in an informational text.

#### **Standards Statement**

4. **(A)** Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.

Identify metaphors and explain their meaning in the text.

Identify similes and explain their meaning in the text.

**(B)** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*.

Determine the meaning of words in grade 5 text materials.

## *Fifth Grade*

### **ELA: Literature (A - Fiction) & Informational Text (B - Non-Fiction) Cont.**

#### **Standards Statement**

5. (A) Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.

- Know that chapters are found in stories, scenes are found in plays and stanza are found in poems.

(B) Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.

- Compare the structures found in informational text in two or more texts.

- Contrast the structures found in informational text in two or more texts.

#### **Standards Statement**

6. (A) Describe how a narrator's or speaker's point of view influences how events are described.

- Determine a narrator's or speakers point of view and how it influences the text.

(B) Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

- Determine an author's point of view.

- Understand how different authors can write about the same event differently.

#### **Standards Statement**

7. (A) Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).

- Explain how visual elements can help with the meaning, tone, or beauty of a text.

(B) Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.

- Know how to access information from a variety of sources.

#### **Standards Statement**

8. (A) (Not applicable to literature).

(B) Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).

- Give reasons and evidence an author uses to support points in the text.

#### **Standards Statement**

9. (A) Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.

- Give examples of genre.

- Compare same genre stories on their approach to a similar theme.

- Contrast same genre stories on their approach to a similar theme.

## *Fifth Grade*

### **ELA: Literature (A - Fiction) & Informational Text (B - Non-Fiction) Cont.**

#### **Standards Statement**

**(B)** Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

- Find and use information from many texts on the same topic to prepare a presentation or writing.

#### **Standards Statement**

10. **(A)** By the end of the year, read and comprehend literature, including stories, dramas, and poetry at the high end of the grades 4-5 text-complexity band independently and proficiently.

- Read and comprehend literature appropriate to grades 4 – 5.

**(B)** By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.

- Read and comprehend informational texts appropriate to grades 4 – 5.

### **Reading Foundational Skills**

#### **Standards Statement**

1. N/A

2. N/A

#### **Standards Statement**

3. Know and apply grade-level phonics and word analysis skills in decoding words.  
a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

- Use my decoding skills to read unfamiliar words.

#### **Standards Statement**

4. Read with sufficient accuracy and fluency to support comprehension.  
a. Read grade-level text with purpose and understanding.  
b. Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression.  
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

- Read grade level text with purpose and understanding.

- Read aloud grade-level prose and poetry with accuracy and at an appropriate rate and expression.

- Use context to confirm or self-correct words and understanding.

## *Fifth Grade*

### **Writing**

#### **Standards Statement**

1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
  - a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer’s purpose.
  - b. Provide logically ordered reasons that are supported by facts and details.
  - c. Link opinion and reasons using words, phrases, and clauses (e.g., *consequently*, *specifically*).
  - d. Provide a concluding statement or section related to the opinion presented.

Introduce a topic and state an opinion using a logical structure and a conclusion.

Support and link my opinion with facts.

#### **Standard Statement**

2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
  - a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to adding comprehension.
  - b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
  - c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., *in contrast*, *especially*).
  - d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
  - e. Provide a concluding statement or section related to the information or explanation presented.

Write with clarity.

Introduce a topic clearly with facts, concrete details, multi-media (when appropriate) and a logical conclusion.

Identify a formatting structure that will allow me to organize my information best.

#### **Standards Statement**

3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
  - a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.
  - b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.
  - c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events.
  - d. Use concrete words and phrases and sensory details to convey experiences and events precisely.
  - e. Provide a conclusion that follows from the narrated experiences or events.

## *Fifth Grade*

### **Writing – Cont.**

- Write a narrative using a real or imagined event by introducing a narrator and/or character.
- Define and use narrative techniques that will show the response of the characters in my narrative.
- Provide a smooth transition in my sequence of events.
- Use sensory detail when appropriate.
- Have a logical conclusion.

#### **Standards Statement**

4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3.).

- Identify writing style that best fits the topic.
- Write clearly and coherently to the assigned purpose.

#### **Standards Statement**

5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

- Produce a better quality writing piece through planning, editing and rewriting.
- Know when I need to start over with a new approach.

#### **Standards Statement**

6. With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.

- Identify the technology available that will help me with my writing.
- Interact and collaborate with others using technology.
- Type a minimum of two pages at a single sitting.

#### **Standards Statement**

7. Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.

- Conduct a short research project using a variety of sources.

#### **Standards Statement**

8. Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.

- Recall important information and put it into my own words.

## *Fifth Grade*

### **Writing – Cont.**

Publish a list of resources.

#### **Standards Statement**

9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

- a. Apply *grade 5 Reading standards* to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text [e.g., how characters interact]”).
- b. Apply *grade 5 Reading standards* to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]”).

Compare two or more characters, settings or events in a text.

Contrast two or more characters, settings or events in a text.

Explain how an author uses reason and evidence to make a point.

#### **Standards Statement**

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Use the appropriate writing format for my assigned task.

Write over a short or extended period of time.

### **Speaking & Listening**

#### **Standards Statement**

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 5 topics and texts*, building on others’ ideas and expressing their own clearly.
  - a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
  - b. Follow agreed-upon rules for discussions and carry out assigned roles.
  - c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
  - d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

Prepare for discussion by studying material.

Follow rules for discussion.

Ask questions on discussion topic.

Answer questions from discussion topic.

## *Fifth Grade*

### **Speaking & Listening – Cont.**

Review discussion and come to a conclusion.

#### **Standards Statement**

2. Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Give a summary of a text read aloud or given through media.

#### **Standards Statement**

3. Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

Give a summary of a speaker's points and the reasons for the speaker's point of view.

#### **Standards Statement**

4. Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

Present a report on a topic or opinion, sequencing facts and using relevant information.

Speak clearly at an understandable pace.

#### **Standards Statement**

5. Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.

Use multimedia in my presentation when appropriate.

#### **Standards Statement**

6. Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.

Adapt my presentation to the appropriate situation.

Know when to use formal and informal English.

### **Language**

#### **Standards Statement**

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.

b. Form and use the perfect (e.g., *I had walked; I have walked; I will have walked*) verb tenses.

c. Use verb tense to convey various times, sequences, states, and conditions.

d. Recognize and correct inappropriate shifts in verb tense.

e. Use correlative conjunctions (e.g., *either/or, neither/nor*).

## *Fifth Grade*

### **Language – Cont.**

- Define conjunction and give an example.
- Define preposition and give an example.
- Define interjection and give an example.
- Form and use past, present, and perfect tenses of verbs correctly.
- Use the correct verb tense.
- Name and use correlative conjunctions correctly.

#### **Standards Statement**

2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
- a. Use punctuation to separate items in a series.
  - b. Use a comma to separate an introductory element from the rest of the sentence.
  - c. Use a comma to set off the words *yes* and *no* (e.g., *Yes, thank you*) to set off a tag question from the rest of the sentence (e.g., *It's true, isn't it?*) and to indicate direct address (e.g., *Is that you, Steve?*).
  - d. Use underlining, quotation marks, or italics to indicate titles of works.
  - e. Spell grade-appropriate words correctly, consulting references as needed.

- Use capitals correctly.
- Identify an introductory element and punctuate it correctly.
- Understand the rules for the uses of commas and use them correctly.
- Know when to use underlining, quotation marks or italics for titles.
- Spell my grade appropriate words correctly.

#### **Standards Statement**

3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.
  - b. Compare and contrast the varieties of English (e.g., *dialects, registers*) used in stories, dramas, or poems.

- Use a variety of sentence structures (simple, compound, complex) in my writing.
- Use a variety of sentence structures (simple, compound, complex) in my speaking.
- Compare and contrast the varieties of English used in stories, dramas or poems.

## *Fifth Grade*

### Language – Cont.

#### Standards Statement

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 5 reading and content*, choosing flexibly from a range of strategies.
- a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.
  - b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph*, *photosynthesis*).
  - c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

Use context to help me determine the meaning of a word or phrase.

Know common Greek and Latin affixes and root words that will help me determine the meaning of a word.

Use both printed and digital dictionaries, glossaries and thesauruses to me with the pronunciations and meaning of a word or phrase.

#### Standards Statement

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- a. Interpret figurative language, including similes and metaphors, in context.
  - b. Recognize and explain the meaning of common idioms, adages, and proverbs.
  - c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.

Define figurative language and give examples of figurative language.

Interpret figurative language.

Define idiom and give examples.

Define adage and give examples.

Define proverb and give examples.

Use relationships to help me understand words.

#### Standards Statement

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., *however*, *although*, *nevertheless*, *similarly*, *moreover*, *in addition*).

Recognize the difference between general academic and domain-specific words and phrases including those that signal contrast, addition and other logical relationships to increase comprehension and expression.

## *Fifth Grade*

### **Cycles and Patterns in the Solar System (ESS)**

#### **Content Statement**

1. The solar system includes the sun and all celestial bodies that orbit the sun. Each planet in the solar system has unique characteristics.

Recognize that the eight major planets in the solar system orbit the sun.

Describe characteristics of the eight major planets including:

- Whether or not they have a moon(s).
- General information regarding planetary positions and distance from the sun.
- General information about orbital patterns.
- Composition, and
- Recent discoveries and projects (e.g., missions to Mars, etc.).

Recognize the role that gravitational attraction plays in the planets' and moons' orbits.

Differentiate between an asteroid, a meteor, a meteoroid, a comet, and a dwarf planet based on their characteristics.

Identify tools and technologies used to study the solar system (e.g., telescope, satellite, etc.).

#### **Content Statement**

2. The sun is one of many stars that exist in the universe.

Recognize the sun appears large from Earth because it is the closest star to the Earth.

Identify a constellation as a pattern of stars that can be used for navigation.

Identify the sun as a medium-sized star and the only star in our solar system.

Recall that there are many other stars in the universe and that they are different sizes.

Differentiate between a red dwarf star, blue giant star, and the sun.

Build and use a scale model of the different planet sizes and orbits in relationship to the sun and the Earth.

Identify places on the Earth that receive direct sunlight and therefore can effectively collect solar energy.

Identify and describe current and new discoveries related to stars and the sun.

#### **Content Statement**

3. Most of the cycles and patterns of motion between the Earth and sun are predictable.

Use a three-dimensional model to demonstrate that the tilt of Earth's axis is related to the amount of direct sunlight received and seasonal temperature changes.

Use models, websites, and investigations to understand the cycle and pattern of day and night, seasons, years, and the amount of direct sunlight Earth receives.

Correlate the average daily temperature with the amount of direct sunlight received.

## *Fifth Grade*

### **Cycles and Patterns in the Solar System (ESS) – Cont.**

- Identify seasons as a change in average temperature throughout the year.
- Recognize that the rotation of Earth on its axis produces day and night, which is why the sun, stars, and moon appear to change position in the sky.
- Investigate the seasonal weather patterns around the world (e.g., hurricane season, monsoon season, rainy season, dry season).
- Represent the sun, moon and Earth and their orbits graphically and to scale.

### **Interconnections within Ecosystem (LS)**

#### **Content Statement**

4. Organisms perform a variety of roles in an ecosystem.

- Identify plants and some microorganisms as producers.
- Describe characteristics of producers including how they get energy and their role in an ecosystem.
- Identify animals as consumers and many form predator-prey relationships.
- Describe characteristics of consumers including how they get their energy and their role in an ecosystem.
- Identify decomposers as primarily bacteria and fungi.
- Describe the characteristics of decomposers including how they get their energy and their role in an ecosystem.
- Recognize that a food web is a representation of intertwining food chains within the same biological community.
- Create a food web of an ecosystem that includes producers, consumers, and decomposers.
- Explain how a member of a food web may occupy different positions during their lives.
- Differentiate between symbiotic relationships including: mutualism, commensalism, and parasitism.
- Conduct an investigation of locally threatened or endangered species and the effects of remediation programs, species loss and the introduction of a new species on the local environment over time.
- Classify a list of organisms and their interactions within an environment as producers, consumers, decomposers.
- Classify the symbiotic relationships between a given list of organisms and their interactions within an environment as mutualism, commensalism, or parasitism.

## *Fifth Grade*

### **Interconnections within Ecosystem (LS) – Cont.**

#### **Content Statement**

5. All of the processes that take place within organisms require energy.

- Understand that energy flows through an ecosystem in one direction: from photosynthetic organisms to consumers (herbivores, omnivores to carnivores) and decomposers.
- Create food webs using arrows to illustrate the flow of energy in order to represent the exchange of energy in an ecosystem.
- Properly identify the producers and consumers in a food web.
- Explain ways that humans can improve the health of ecosystems (e.g., recycling wastes, establishing rain gardens, planting native species).
- Understand that all processes of life for all organisms require a continual supply of energy.
- Use the information gained from satellite imaging, remote sensing or other digital-research formats to help visualize what happens in an ecosystem when new producers (e.g., Tamarisk plants) are introduced.
- Use the information gained from satellite imaging, remote sensing or other digital-research formats to determine the relationship between the producers and consumers within an ecosystem.
- Design experiments to observe what happens when one environmental factor of an ecosystem is changed.

### **Light, Sound and Motion (PS)**

#### **Content Statement**

6. The amount of change in movement of an object is based on the mass of the object and the amount of force exerted.

- Identify the 3 ways that forces can cause changes in the motion of an object: speed up, slow down or change direction.
- Investigate what happens to an object's speed when a force is applied in the same direction of an object's motion and in the opposite direction of an object's motion.
- Recognize that generally the greater the force acted on an object, the greater the change in motion.
- Recognize that generally the greater the mass an object has, the less influence a given force will have on its motion.
- Describe weight as a measure of the gravitational force between an object and the Earth.

## *Fifth Grade*

### **Light, Sound and Motion (PS) – Cont.**

- Recall that if no forces act on an object, the object does not change its motion and moves at constant speed in a given direction.
- Recall that an object will remain at rest if it is not moving and no force acts on it.
- Describe movement as a measure of speed (how fast or slow the movement is).
- Describe speed as a measurement of the time and distance traveled (how long it took the object to go a specific distance).
- Calculate speed as distance divided by time.
- Use real-world settings to investigate the speed of an object both inside and outside of the classroom (virtual investigations and simulations).
- Explain that an object that moves with constant speed travels the same distance in each successive unit of time and in the same amount of time, a faster object moves a greater distance than a slower object.
- Understand that when an object is speeding up, the distance it travels increases with each successive unit of time and when it is slowing down, the distance it travels decreases with each successive unit of time.
- Represent time, distance, and speed data graphically.

### **Content Statement**

#### 7. Light and sound are forms of energy that behave in predictable ways.

- Understand that light can travel through some materials such as glass, water, and empty space.
- Recall that light travels in a straight line until it interacts with another object or material.
- Describe when shadows are created.
- Investigate the differences between absorption, refraction and reflection.
- Determine if light is absorbed, refracted, reflected, traveled through or a combination of these when it hits different materials.
- Investigate how light can change the temperature of an object based on the material of the object, the intensity of and the angle at which the light strikes the surface, how long the light shines on the object, and how much light is absorbed.
- Experiment with prisms (bends white light and separates the different colors of it) and magnifying lenses (bends light and focuses it toward a single point) to observe the refraction of light.
- Understand that visible light can be emitted from an object or reflected by an object.

## *Fifth Grade*

### **Light, Sound and Motion (PS) – Cont.**

- |                          |   |
|--------------------------|---|
| <input type="checkbox"/> | Realize that reflected colors are the only colors visible when looking at an object (e.g., red apples look red because the red light that hits the apple is reflected while the other colors are absorbed). |
| <input type="checkbox"/> | Use an object to produce a low pitch (object vibrates slowly) and a high pitch (object vibrates quickly).   |
| <input type="checkbox"/> | Plan and implement an investigation to determine how the length of a tube affects the pitch it creates.   |
| <input type="checkbox"/> | Recognize that sound can travel through solids, liquids or gases at different speeds.   |
| <input type="checkbox"/> | Recognize that sound can be absorbed, travel through, reflected, or a combination of these when it hits a new material.   |
| <input type="checkbox"/> | Recall that light travels faster than sound.  |
| <input type="checkbox"/> | Experiment, test, and investigate the properties of light and sound.  |
| <input type="checkbox"/> | Recognize that sound must travel through a material (medium) to move from place to place.   |

## *Fifth Grade*

### **History**

#### **Content Statement & Elaborations**

1. Multiple-tier timelines can be used to show relationships among events and places

- Construct a multiple-tier timeline and analyze the relationships among events.

#### **Content Statement & Elaborations**

2. Early Indian civilizations (Maya, Inca, Aztec, Mississippian) existed in the Western Hemisphere prior to the arrival of Europeans. These civilizations had developed unique governments, social structures, religions, technologies, and agricultural practices and products.

- Compare characteristics of early Indian civilizations (governments, social structures, religions, technologies, and agricultural practices and products).

#### **Content Statement & Elaborations**

3. European exploration and colonization had lasting effects, which can be used to understand the Western Hemisphere today.

- Describe lasting effects of European exploration and colonization on the cultural practices and products of the Western Hemisphere. (Examples of the impact of European exploration of colonization include:
- Place names (e.g., La Paz, Costa Rica);
  - Languages (e.g., English, Spanish, Portuguese, French);
  - Religions (e.g., Catholicism, Protestantism);
  - Agricultural practices (e.g., domestication of animals, move from subsistence farming to commercial agriculture); and
  - Agricultural products (e.g., chickens, horses, apples, coffee, soybeans).

### **Geography**

#### **Content Statement & Elaborations**

4. Globes and other geographic tools can be used to gather, process and report information about people, places and environments. Cartographers decide which information to include in maps.

- Use appropriate maps, globes, aerial diagrams, photographs and other geographic tools to gather, process and report information about people, places and environments.

#### **Content Statement & Elaborations**

5. Latitude and longitude can be used to make observations about location and generalizations about climate.

- Use longitude and latitude to find a location and tell about its climate.

## *Fifth Grade*

### **Geography – Cont.**

#### **Content Statement & Elaborations**

6. Regions can be determined using various criteria (e.g., landform, climate, population, culture, economic).

- Identify and describe regions within the Western Hemisphere using criteria related to landform, climate, population, culture and economics.

#### **Content Statement & Elaborations**

7. Variations among physical environments within the Western Hemisphere influence human activities. Human activities also alter physical environment.

- Explain how variations among physical environments in the Western Hemisphere influence human activities.
- Explain how human activities have altered the physical environments of the Western Hemisphere.

#### **Content Statement & Elaborations**

8. American Indians developed unique cultures with many different ways of life. American Indian tribes and nations can be classified into cultural groups based on geographic and cultural similarities.

- Make generalizations about the cultural ways of life among American Indian cultural groups in North and South America.

#### **Content Statement & Elaborations**

9. Political, environmental, social and economic factors cause people, products and ideas to move from place to place in the Western Hemisphere today.

- Explain political, environmental, social and economic factors that cause the movement of people, products and ideas in the Western Hemisphere.

#### **Content Statement & Elaborations**

10. The Western Hemisphere is culturally diverse due to American Indian, European, Asian and African influences and interactions, as evidenced by artistic expression, language, religion and food.

- Describe the cultural diversity of the Western Hemisphere (as a result of contributions and interactions among American Indian, European, Asian and African people) as evidenced by artistic expression, language, religion and food.

## *Fifth Grade*

### **Government**

#### **Content Statement & Elaborations**

11. Individuals can better understand public issues by gathering and interpreting information from multiple sources. Data can be displayed graphically to effectively and efficiently communicate information.

- Use multiple sources and appropriate communication tools to locate, investigate, organize and communicate information (word processing document, multimedia resources, presentation software) on a public issue.

#### **Content Statement & Elaborations**

12. Democracies, dictatorships and monarchies are categories for understanding the relationship between those in power or authority and citizens.

- Explain the relationship between those in power and individual citizens in a democracy, a dictatorship and a monarchy.

### **Economics**

#### **Content Statement & Elaborations**

13. Information displayed in circle graphs can be used to show relative proportions of segments of data to an entire body of data.

- Construct a circle graph that displays information on part-to-whole relationships of data.

#### **Content Statement & Elaborations**

14. The choices people make have both present and future consequences.

- Explain the present and future consequences of an economic decision – both at a personal and national level

#### **Content Statement & Elaborations**

15. The availability of productive resources (i.e., human resources, capital goods and natural resources) promotes specialization that leads to trade.

- Explain how the availability of productive resources in a specific region promotes specialization and results in trade.

#### **Content Statement & Elaborations**

16. The availability of productive resources and the division of labor impact productive capacity.

- Explain how the availability of productive resources and the division of labor influence productive capacity.

## *Fifth Grade*

### **Economics – Cont.**

#### **Content Statement & Elaborations**

17. Regions and countries become interdependent when they specialize in what they produce best and then trade with other regions to increase the amount and variety of goods and services available.

- Explain how specialization and trade lead to interdependency among countries of the Western Hemisphere.

#### **Content Statement & Elaborations**

18. Workers can improve their ability to earn income by gaining new knowledge, skills and experiences.

- Identify a career of personal interest and research the knowledge, skills and experiences required to be successful.

## Fifth Grade

### Operations & Algebraic Thinking

#### Cluster

#### 1. Write and interpret numerical expressions.

- Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation “add 8 and 7, then multiply by 2” as  $2 \times (8 + 7)$ .*
- Recognize that  $3 \times (18932 + 921)$  is three times as large as  $18932 + 921$ , without having to calculate the indicated sum or product

#### Cluster

#### 2. Analyze patterns and relationships.

- Generate two numerical patterns using two given rules.
- Identify apparent relationships between corresponding terms.
- Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*

### Number & Operations in Base Ten

#### Cluster

#### 3. Understand the place value system.

- Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and  $1/10$  of what it represents in the place to its left.
- Explain patterns in the number of zeros of the product when multiplying a number by powers of 10.
- Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.
- Use whole-number exponents to denote powers of 10.
- Read, write, and compare decimals to thousandths.
  - a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, *e.g.*,  $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$ .
  - b. Compare two decimals to thousandths based on meanings of the digits in each place, using  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.
- Use place value understanding to round decimals to any place.

## *Fifth Grade*

### **Number & Operations in Base Ten – Cont.**

#### **Cluster**

4. Perform operations with multi-digit whole numbers and with decimals to hundredths.

- Fluently multiply multi-digit whole numbers using the standard process (algorithm).
- Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.
- Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
  - Relate the strategy to a written method and explain the reasoning used.

### **Number & Operations - Fractions**

#### **Cluster**

5. Use equivalent fractions as a strategy to add and subtract fractions.

- Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example,  $2/3 + 5/4 = 8/12 + 15/12 = 23/12$ .*
- Solve word problems involving addition and subtraction of fractions, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem.
- Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result  $2/5 + 1/2 = 3/7$ , by observing that  $3/7 < 1/2$ .*

#### **Cluster**

6. Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

- Interpret a fraction as division of the numerator by the denominator ( $a/b = a \div b$ ).
- Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers *For example, interpret  $3/4$  as the result of dividing 3 by 4, noting that  $3/4$  multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size  $3/4$ . If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*

## Fifth Grade

### Number & Operations – Fractions – Cont.

- Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
  - a. Interpret the product  $(a/b) \times q$  as  $a$  parts of a partition of  $q$  into  $b$  equal parts; equivalently, as the result of a sequence of operations  $a \times q \div b$ . *For example, use a visual fraction model to show  $(2/3) \times 4 = 8/3$ , and create a story context for this equation. Do the same with  $(2/3) \times (4/5) = 8/15$ . (In general,  $(a/b) \times (c/d) = ac/bd$ .)*
  - b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths.
- Show that the area found by tiling with unit squares is the same as would be found by multiplying the side lengths.
- Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- Interpret multiplication as scaling (resizing), by:
  - a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
  - b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number.
  - c. Explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number.
- Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.
  - a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for  $(1/3) \div 4$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that  $(1/3) \div 4 = 1/12$  because  $(1/12) \times 4 = 1/3$ .*
  - b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for  $4 \div (1/5)$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that  $4 \div (1/5) = 20$  because  $20 \times (1/5) = 4$ .*
  - c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share  $1/2$  lb of chocolate equally? How many  $1/3$ -cup servings are in 2 cups of raisins?*

## *Fifth Grade*

### Measurement & Data – Cont.

#### Cluster

7. Convert like measurement units within a given measurement system.

- Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m). Use different sized standard measurement unit conversions in solving multi-step, real world problems.

#### Cluster

8. Represent and interpret data.

- Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ).
- Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.*

#### Cluster

9. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

- Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
  - a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.
  - b. A solid figure which can be packed without gaps or overlaps using  $n$  unit cubes is said to have a volume of  $n$  cubic units.
- Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
- Relate volume to the operations of multiplication and addition.
  - a. Solve real world and mathematical problems involving volume.
  - b. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base.
  - c. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.
  - d. Apply the formulas  $V = l \times w \times h$  and  $V = b \times h$  for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems.
  - e. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

## *Fifth Grade*

### **Geometry**

#### **Cluster**

10. Graph points on the coordinate plane to solve real-world and mathematical problems.

- Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates.
- Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g.,  $x$ -axis and  $x$ -coordinate,  $y$ -axis and  $y$ -coordinate).
- Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane.
- Interpret coordinate values of points in the context of the situation.

#### **Cluster**

11. Classify two-dimensional figures into categories based on their properties.

- Understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.*
- Classify two-dimensional figures in a hierarchy based on properties.