

Fourth Grade

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

Standards Statement

1. (A) (B) Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

Define explicit.

Define inference.

Refer to details and examples in a story that support inferences.

Refer to details and examples in a story that support the author's inferences.

Standards Statement

2. (A) Determine a theme of a story, drama, or poem from details in the text; summarize the text.

Define theme.

Tell the theme using details from the story.

Tell or write a summary of the story.

(B) Determine the main idea of a text and explain how it is supported by key details; summarize the text.

Determine the main idea of a text using supporting details.

Tell or write a summary of the text.

Standards Statement

3. (A) Describe in depth a character, setting or event in a story or drama, drawing on specific details in the text (e.g., a characters thoughts, words, or actions).

Using details from a text describe with detail a character, setting or event.

(B) Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why based on specific information in the text.

Tell what happened and why in a non-fiction text.

Standards Statement

4. (A) Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).

Identify words that refer to characters found in mythology.

(B) Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*.

Tell the meaning of a word using a text.

Standards Statement

5. (A) Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.

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

Tell the differences in poems, drama and prose.

Explain the structure of a text.

Explain the structural elements of drama when writing or speaking.

(B) Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

Explain the structural elements of a drama when writing or speaking..

Standards Statement

6. **(A)** Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narration.

Compare points of view from different stories.

Contrast points of view from different stories.

Explain the difference between first and third person narration.

(B) Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

Compare firsthand and secondhand -accounts of the same event.

Contrast firsthand and secondhand accounts of the same topic.

Describe the differences in focus and the information given.

Standards Statement

7. **(A)** Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

Link the connections between text and pictures or oral presentations.

Talk about the differences and similarities between written pages and pictures or oral reading.

(B) Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

Tell the meaning of information that is presented other than in word format.

Show how information presented other than in writing can help me better understand the text.

Standards Statement

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

(B) Explain how an author uses reasons and evidence to support particular points in a text.

Explain how an author uses reasons and evident to support points in a text.

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

Standards Statement

9. (A) Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.

Compare similar themes, topics and patterns of events from stories, myths and literature from other cultures.

Contrast similar themes, topics and patterns of events from stories, myths and literature from other cultures.

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

Find information from two texts on the same subject.

Put information together from two texts.

Standards Statement

10. (A) By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Read and comprehend grade appropriate literature.

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

Read and comprehend grade appropriate text.

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, a 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 of more than one syllable.

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.

Fourth Grade

Reading Foundational Skills

- Read with purpose and understanding.
- Use context of sentence or story to help with word recognition and understanding.

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 related ideas are grouped to support the writer's purpose.
 - b. Provide reasons that are supported by facts and details.
 - c. Link opinion and reasons using words and phrases (e.g., *for instance, in order to, in addition*).
 - d. Provide a concluding statement

- Write an opinion supporting my point of view with reasons and facts and end with a concluding statement.

Standards Statement

2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
 - a. Introduce a topic clearly and group related information in paragraphs and sections; including formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
 - b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
 - c. Link ideas within categories of information using words and phrases (e.g., *another, For example, also, because*).
 - 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.

- Choose a topic.

- Define formatting.

- Write an informative text that includes an introduction, paragraphs with proper formatting (when appropriate), words specific to the topic and a concluding statement.

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 dialogue and description to develop experiences and events or show the responses of characters to situations.
 - c. Use a variety of transitional words and phrases to manage the sequence of events.

Fourth Grade

Writing – Cont.

- d. Use concrete words and phrases and sensory details to convey experiences and events precisely.
- e. Provide a conclusion that follows from narrated experiences or events.

Define a narrative.

Identify a situation, introduce a narrator, sequence an event showing how characters respond, use transitional words, provides sensory details, and have a 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 above.)

Produce a writing the follows the appropriate guidelines (opinion, informational, narrative).

Standards Statement

5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 4.)

Plan my writing.

Revise and edit my writing.

Produce a final writing piece.

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 one page in a single sitting.

Use technology to write and publish my writing.

Use my keyboarding skills to write, at a minimum, a one-page writing assignment in one sitting.

Standards Statement

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

Define research.

Complete a small research project.

Standards Statement

8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

Fourth Grade

Writing – Cont.

Recall information from experience or reading.

Take notes.

Sort my information.

List my sources

Standards Statement

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

a. 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]”).

b. 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”).

Describe evidence from a text that supports analysis, reflection and research.

Explain an author’s reasons to support points in a story.

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.

Write about a topic over long periods of time.

Write about a topic over short periods of time.

Write for a variety of tasks.

Write for a variety of audiences.

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 4 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 to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.

d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

Fourth Grade

Speaking & Listening – Cont.

Participate in group discussions with diverse partner.

Participate in one-on-one discussions.

Participate in teacher-led discussions.

Follow rules for discussions.

Follow assigned role.

Contribute to discussions.

Review and explain main ideas from the discussion.

Standards Statement

2. Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

Put into my own words the information presented orally, visually, or in writing.

Standards Statement

3. Identify the reasons and evidence a speaker provides to support particular points.

Retell the reasons and evidence a speaker has given.

Standards Statement

4. 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 theme; speak clearly at an understandable pace.

Present on a topic in logical order using relevant facts and details.

Speak clearly at an understandable pace.

Standards Statement

5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.

Add audio recordings and visual displays to my presentation when appropriate.

Standards Statement

6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small group discussion); use formal English when appropriate to task and situation.

Explain when a presentation needs to use formal or informal English.

Fourth Grade

Language

Standards Statement

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - a. Use relative pronouns (*who, whose, whom, which, that*) and relative adverbs (*where, when, why*).
 - b. Form and use the progressive (e.g., *I was walking; I am walking; I will be walking*) verb tenses.
 - c. Use modal auxiliaries (e.g., *can, may, must*) to convey various conditions.
 - d. Order adjective within sentences according to conventional patterns (e.g., *a small red bag* rather than *a red small bag*).
 - e. Form and use prepositional phrases.
 - f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.
 - g. Correctly use frequently confused words (e.g., *to, too, two; there, their*).

Use relative pronouns correctly.

Use relative adverbs correctly.

Form progressive verbs correctly.

Use progressive verbs correctly.

Place a series of adjectives in a conventional order.

Identify prepositional phrases.

Use prepositional phrases correctly.

Write complete sentences.

Identify fragment and run-ons.

Identify words that sound alike but are spelled differently.

Standards Statement

2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Use correct capitalization.
 - b. Use commas and quotation marks to mark direct speech and quotations from a text.
 - c. Use a comma before a coordinating conjunction in a compound sentence.
 - d. Spell grade-appropriate words correctly, consulting references as needed.

Capitalize words correctly.

Use commas with quotation marks correctly.

Identify coordinating conjunctions.

Identify compound sentences correctly.

Use a comma before a coordinating conjunction in a compound sentence.

Fourth Grade

Language – Cont.

Spell 4th grade words correctly.

Standards Statement

3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- Choose words and phrases to convey ideas precisely.
 - Choose punctuation for effect.
 - Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).

Use words that explain my ideas.

Use punctuation for effect.

Explain when writing, speaking, reading or listening is using formal or informal English.

Standards Statement

4. 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.
 - Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *telegraph*, *photograph*, *autograph*).
 - 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.

Recognize context clues that will help me with the meaning of a word or phrase.

Name common Greek affixes and roots that will help me with the meaning of a word.

Name common Latin affixes and roots that will help me with the meaning of a word.

Use reference materials to help with the meanings of words or phrases.

Standards Statement

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*) in context.
 - Recognize and explain the meaning of common idioms, adages, and proverbs.
 - Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).

Define figurative language and give an example.

Give the meaning of a simile.

Identify a simple simile..

Fourth Grade

Language – Cont.

- Give the meaning of a metaphor.
- Recognize and give the meaning of common idioms.
- Recognize and give the meaning of common adages.
- Recognize and give the meaning of common proverbs.
- Explain the difference between antonyms and synonyms.
- Give examples of antonyms and synonyms.

Standards Statement

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., *wildlife*, *conservation*, and *endangered* when discussing animal preservation).

- Use grade 4 level words and phrases that signal precise actions, emotions or states of being that are relevant to the topic.

Fourth Grade

Earth's Surfaces (ESS)

Content Statement

1. Earth's surface has specific characteristics and landforms that can be identified.

Differentiate between where fresh and salt water are on Earth and how much there is of each.

Explain why planet Earth is called the Blue Planet.

Identify common landforms from maps or graphics.

Use a variety of sources (topographic maps, aerial photographs, physical geography maps, etc.) to identify common landforms and features including streams, deltas, floodplains, hills, mountains/mountain ranges, valleys, sinkholes, caves, canyons, glacial features, dunes, springs, volcanoes and islands.

Explain how the surface of the Earth can change through erosion, deposition, volcanic activity, earthquakes, glacial movement and flooding and weathering.

Connect the process that occurred with the resulting landform, feature, or characteristic.

Use technology to study events that are not found locally or to demonstrate change that has occurred (e.g., satellite photos of an event such as flooding).

Content Statement

2. The surface of the Earth changes due to weathering.

Identify weathering as processes that change rock at or near Earth's surface through the breakdown of large rock into smaller pieces of rock.

Differentiate between weathering and erosion.

Recognize that weathering can occur at different rates due to specific characteristics of the rocks and the exposure to weathering factors (e.g., freezing/thawing, wind, water).

Observe weathering processes in nature (e.g., rocks fracturing bedrock or the effects of years of precipitation on a marble statue).

Use classroom simulations, laboratory testing and field observations to study weathering.

Explain how rocks can change shape, size and/or form due to water or ice movement, freezing and thawing, wind plant growth, gases in the air, pollution and catastrophic events such as earthquakes, mass wasting, flooding and volcanic activity.

Content Statement

3. The surface of Earth changes due to erosion and deposition.

Identify erosion as a process in which water, wind, and ice transports rock, soil or sediment to a new location.

Identify deposition as the settling or coming to rest of transported rock, soil or sediment.

Fourth Grade

Earth's Surfaces (ESS) – Cont.

Differentiate between weathering, erosion (destructive) and deposition (constructive).

Explain how gravity affects erosion through catastrophic events (e.g., mass wasting, mudslides, avalanches, landslides, or flooding).

Use topographical maps, surficial geology maps and aerial photographs to locate erosional areas and depositional areas in Ohio.

Content Statement

4. Changes in an organism's environment are sometimes beneficial to its survival and sometimes harmful.

Describe the immediate consequences of rapid ecosystem change for organisms within an ecosystem and describe the consequences this change will have on an ecosystem a decade or more later (e.g., flooding, wind storms, snowfall, volcanic eruptions).

Describe major changes in Ohio's environments over time and the organisms supported in each (e.g., oceanic, glacial, wetlands, forests).

Research and investigate areas in Ohio (e.g., Cedar Bog, Lake Erie, Hocking Hills, Ceasar Creek, Kelleys Island) to explore the relationships between previous environments, changes that have occurred in the environments and the species that lived there.

Use the fossil record to provide evidence for changes in populations of species.

Understand how changes that occur in plant and animal populations can impact access to resources for the remaining organisms, which may result in migration or death.

Explain how an animal's patterns of behavior are related to the environment (including the kinds and numbers of other organisms present, the availability of food and resources, and the physical attributes of the environment).

Content Statement

5. Fossils can be compared to one another and to present-day organisms according to their similarities and differences.

Use fossils to provide evidence that many plant and animal species are extinct and that many species have changed over time.

Use fossils to provide evidence about the nature of the environment at that time to prove that as the environment changed so did the types of organisms that could survive in that environment.

Investigate a variety of living organisms, both familiar and exotic.

Compare and contrast observable external characteristics of organisms.

Use a hand lens and microscope to explore a variety of organisms that cannot be seen by the unaided eye.

Fourth Grade

Earth's Surfaces (ESS) – Cont.

- Create a classification system that focuses on the anatomy, behavioral patterns, habitats and other features of organisms.
- Recognize that most types of organisms that have lived on Earth no longer exist.

Electricity, Heat and Matter (PS)

Content Statement

6. The total amount of matter is conserved when it undergoes a change.

- Recognize that the amount of matter stays constant during any change.
- Investigate what happens to the total amount of mass during many types of changes (e.g., ice melting, salt dissolving, paper tearing, candle burning, Alka-Seltzer® in water).
- Draw conclusions about what happens to mass when it does not appear to stay constant during an investigation (e.g., fizzing tablets in water).
- Recognize that the sum of all of the parts in an object equals the mass of the object (e.g., when a solid is dissolved in a liquid, the mass of the mixture is equal to the sum of the masses of the liquid and solid).

Content Statement

7. Energy can be transformed from one form to another or can be transferred from one location to another.

- Understand that adding or taking heat away can change the temperature of an object.
- Recognize that there are materials in which the entire object becomes hot when one part of the object is heated (e.g., in a metal pan, heat flows through the pan on the stove transferring the heat from the burner outside the pan to the food in the pan).
- Recognize that there are other objects in which parts of the object remain cool even when another part of the object is heated (e.g., in a Styrofoam® cup, very little of the warmth from hot liquid inside the cup is transferred to the hand holding the cup).
- Investigate all aspects of an electrical circuit including the conductor, insulator, energy source, light bulb, switch, continuous loop.
- Compare and contrast electrical conductors with electrical insulators.
- Test common materials to determine their conductive properties.
- Identify different types of energy conversions within an electrical circuit (light, sound, heat or magnetic energy).
- Recognize that electrical devices in a working circuit often get warmer.

Fourth Grade

Electricity, Heat and Matter (PS)

- Conduct an experiment that explores the connections between electricity and magnetism (e.g., when a magnet moves in relation to a coil of wire, electricity can flow through the coil, when a wire conducts electricity, the wire has magnetic properties and can push and/or pull magnets).

Fourth Grade

History

Content Statement & Elaborations

1. The order of significant events in Ohio and the United States can be shown on a timeline.

Construct a timeline of significant events in Ohio and the United States to demonstrate an understanding of units of time and chronological order.

Construct a timeline with appropriate titles and evenly spaced intervals for years, decades and centuries.

Content Statement & Elaborations

2. Primary and secondary sources can be used to create historical narratives.

Research, organize and evaluate information from primary and secondary sources to create an historical narrative.

Differentiate between primary and secondary sources.

Locate, evaluate and organize a variety of sources to reconstruct an historical event.

Use primary and secondary sources to provide background information and support for the accounts of historical events.

Content Statement & Elaborations

3. Various groups of people have lived in Ohio over time including prehistoric and historic American Indians, migrating settlers and immigrants. Interactions among these groups have resulted in both cooperation and conflict.

Explain how interactions among prehistoric Indians and between historic American Indians and European settlers resulted in both cooperation and conflict, including:

- Prehistoric American Indians
- Historic American Indians
- European settlers:
 - French
 - English
 - Scotch-Irish
 - Germans

Content Statement & Elaborations

4. The 13 colonies came together around a common cause of liberty and justice, uniting to fight for independence during the American Revolution and to form a new nation.

Explain why the American colonists united to fight for independence from Great Britain and form a new nation.

Understand the role of the Articles of Confederation, Constitution, Bill of Rights and the Declaration of Independence played in forming a new nation.

Fourth Grade

History – Cont.

Content Statement & Elaborations

5. The Northwest Ordinance established a process for the creation of new states and specified democratic ideals to be incorporated in the states of the Northwest Territory.

Explain how Ohio progressed from territory to statehood, including the terms of the Northwest Ordinance.

Explain how the Northwest Ordinance influenced the incorporation of democratic ideals in the states formed from the Northwest Territory.

Content Statement & Elaborations

6. The inability to resolve standing issues with Great Britain and ongoing conflicts with American Indians led the United States into the War of 1812. Victory in the Battle of Lake Erie contributed to American success in the war.

Explain how the inability to resolve standing issues with Great Britain and ongoing conflicts with American Indians led to the War of 1812.

Explain the significance of the Battle of Lake Erie to American success in the War of 1812.

Content Statement & Elaborations

7. Sectional issues divided the United States after the War of 1812. Ohio played a key role in these issues, particularly with the anti-slavery movement and the Underground Railroad.

Describe the sectional issues that divided the United States after the War of 1812.

Explain the role Ohio played with the anti-slavery movement, its abolitionists, and the Underground Railroad.

Content Statement & Elaborations

8. Many technological innovations that originated in Ohio benefitted the United States.

Identify important inventions in communication, technology and transportation that began in Ohio (e.g., light bulb, telephone, phonograph, traffic signal, gas mask, airplane, automobile self-starter, air brake and steam boiler).

Explain how technological innovations that originated in Ohio benefitted the United States.

Fourth Grade

Geography

Content Statement & Elaborations

9. A map scale and cardinal and intermediate directions can be used to describe the relative location of physical and human characteristics of Ohio and the United States.

- Use a map scale and cardinal and intermediate directions to describe the relative location of physical and human characteristics of Ohio and the United States.

Content Statement & Elaborations

10. The economic development of the United States continues to influence and be influenced by agriculture, industry and natural resources in Ohio.

- Explain how Ohio's agriculture, industry and natural resources continue to both influence and be influenced by the economic development of the United States.

Content Statement & Elaborations

11. The regions which became known as the North, South and West of the United States developed in the early 1800s largely based on their physical environments and economies.

- Describe physical and economic characteristics of the northern, southern and western regions of the United States in the early 1800s.

Content Statement & Elaborations

12. People have modified the environment since prehistoric times. There are both positive and negative consequences for modifying the environment in Ohio and the United States.

- Describe ways humans have modified the environment and explain the positive and negative consequences resulting from those modifications (e.g., construction of farms, towns, transportation systems and dams; use of fertilizers, herbicides and pesticides; and destruction of wetlands and forests).
- Describe how the modifications positively or negatively affected the common good of all.

Content Statement & Elaborations

13. The population of the United States has changed over time, becoming more diverse (e.g., racial, ethnic, linguistic, religious). Ohio's population has become increasingly reflective of the cultural diversity of the United States.

- Explain how Ohio's population is increasingly reflective of the cultural diversity of the United States.

Content Statement & Elaborations

14. Ohio's location in the United States and its transportation systems continue to influence the movement of people, products and ideas.

Fourth Grade

Government

- Explain how Ohio's location and its transportation systems have influenced the movement of people, products and ideas.

Content Statement & Elaborations

15. Individuals have a variety of opportunities to participate in and influence their state and national government. Citizens have both rights and responsibilities in Ohio and the United States.

- Describe the ways citizens participate in and influence their state and national government.

- Explain the rights and responsibilities of citizens in a democratic government. (including freedom of religion, speech, and press, rights of petition, right of assembly, and right to trial by jury).

Content Statement & Elaborations

16. Civic participation requires individuals to make informed and reasoned decisions by accessing and using information effectively.

- Use information effectively to make an informed decision, including:
- Identify possible cause and effect relationships;
 - Identify main ideas and supporting details from factual information;
 - Distinguish between fact and opinion;
 - Read and interpret pictographs, bar graphs, line graphs and tables;
 - Recognize perspective and purpose; and
 - Compare points of agreement and disagreement.

Content Statement & Elaborations

17. Effective participants in a democratic society engage in compromise.

- Describe a strategy for compromise in a situation where there are differences of opinion on a matter.

Content Statement & Elaborations

18. Laws can protect rights, provide benefits and assign responsibilities.

- Describe ways in which laws protect rights, provide benefits and assign responsibilities to citizens, including:
- Providing order in daily life (e.g., traffic laws);
 - Protecting property (e.g., outlawing theft);
 - Providing public education (e.g., school laws);
 - Protecting rights (e.g., freedom of speech);
 - Obligations (paying taxes, serving on juries and obtaining licenses).

Fourth Grade

Government – Cont.

Content Statement & Elaborations

19. The U.S. Constitution and the First Amendment establishes a system of limited government and protects citizens' rights; five of these rights are addressed in the First Amendment.

Explain how the U.S. Constitution limits the power of government and protects the rights of citizens.

Understand that the people are the source of authority in a democratic government.

Understand the citizens choose representatives and decide on issues through the process of voting.

Content Statement & Elaborations

20. A constitution is a written plan for government. Democratic constitutions provide the framework for government in Ohio and the United States.

Describe the purpose of democratic constitutions in Ohio and the United States.

Content Statement & Elaborations

21. The Ohio Constitution and the U.S. Constitution separate the major responsibilities of government among three branches.

Explain major responsibilities of each of the three branches of government in Ohio and the United States.

Economics

Content Statement & Elaborations

22. Tables and charts help people to understand information and issues. Tables organize information in columns and rows. Charts organize information in a variety of visual formats (pictures, diagrams, graphs).

Use tables and charts to interpret information.

Content Statement & Elaborations

23. Entrepreneurs in Ohio and the United States organize productive resources and take risks to make a profit and compete with other producers.

Explain characteristics of entrepreneurship, including the risks and benefits

Content Statement & Elaborations

24. Saving a portion of income contributes to an individual's financial well-being. Individuals can reduce spending to save more of their income.

Demonstrate how saving a portion of income contributes to an individual's financial well-being.

Fourth Grade

Economics Cont.

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Explain how individuals can save more of their income by reducing spending. |
| <input type="checkbox"/> | Explain the advantage of saving money (a temporary sacrifice to meet a short-term goal). |

Fourth Grade

Operations & Algebraic Thinking

Cluster

1. Use the four operations with whole numbers to solve problems.

- Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5.
- Represent verbal statements of multiplicative comparisons as multiplication equations.
- Can determine when to multiply or divide to solve word problems.
- Can solve word problems involving multiplicative comparison (e.g., by using drawings and equations).
- Distinguish between multiplicative comparison from additive comparison.
- Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted.
- Represent these problems using equations with a letter standing for the unknown quantity.
- Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Cluster

2. Gain familiarity with factors and multiples.

- Find all factor pairs for a whole number in the range 1-100.
- Recognize that a whole number is a multiple of each of its factors.
- Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number.
- Determine whether a given whole number in the range 1-100 is prime or composite.

Cluster

3. Generate and analyze patterns.

- 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. *For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.*

Fourth Grade

Number & Operations in Base Ten

Cluster

4. Generalize place value understanding for multi-digit whole numbers.

- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.*
- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.
- Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- Use place value understanding to round multi-digit whole numbers to any place.

Cluster

5. Use place value understanding and properties of operations to perform multi-digit arithmetic.

- Fluently add and subtract multi-digit whole numbers using the standard algorithm.
- Multiply a whole number of up to four digits by a one-digit whole number.
- Multiply two two-digit numbers, using strategies based on place value and the properties of operations.
- Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors.
- Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Number & Operations - Fractions

Cluster

6. Extend understanding of fractions equivalence and ordering.

- Explain why fractions are equivalent using models.
- Use this principle to recognize and generate equivalent fractions.
- 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.

Fourth Grade

Number & Operations – Fractions – Cont.

- Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Cluster

7. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

- Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.
- a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples:* $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.
- c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- d. Solve word problems involving addition and subtraction of fractions having like denominators, e.g., by using visual fraction models and equations to represent the problem.

- Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
- a. Understand a fraction a/b as a multiple of $1/b$. *For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.*
- b. Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. *For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$.*
- c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. *For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?*

Cluster

8. Understand decimal notations for fractions, and compare decimal fractions.

- Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. *For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.*
- Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.*

Fourth Grade

Measurement & Data

- Compare two decimals to hundredths by reasoning about their size.
- Recognize that comparisons are valid only when the two decimals refer to the same whole
- Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Cluster

9. Solve problems involving measurement and conversion of measurement from a larger unit to a smaller unit.

- Describe 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.
- Record measurement equivalents in a two column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...*
- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and 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.
- Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
- Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

Cluster

10. Represent and interpret data.

- Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$).
- Solve problems involving addition and subtraction of fractions by using information presented in line plots. *For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*

Cluster

11. Geometric measurement: understand concepts of angle and measure angles.

- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint.

Fourth Grade

Measurement & Data – Cont.

- Understand concepts of angle measurement:
 - a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $1/360$ of a circle is called a “one-degree angle,” and can be used to measure angles.
 - b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.
- Measure angles in whole-number degrees using a protractor.
- Sketch angles of specified measure.
- Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts.
- Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Geometry

Cluster

12. Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines.
- Identify these in two-dimensional figures.
- 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.
- 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 matching parts.
- Identify line-symmetric figures and draw lines of symmetry.