

# Academic Content Standards

## I Can Statements

### **Fourth Grade**

# Language Arts

#### Acquisition of Vocabulary

- 1. I can determine the meaning of unknown words by using a variety-of context clues, including word, sentence and paragraph clues.
- 2. I can use context clues to determine the meaning of synonyms, antonyms, homophones, homonyms and homographs.
- 3. I can recognize the difference between the meaning of connotation and denotation.
- 4. I can identify and apply the meaning of the terms: synonym, antonym, homophone and homograph.
- 5. I can identify and understand new uses of words and phrases in text, such as similes and metaphors.
- 6. I can identify word origins to determine the meaning of unknown words and phrases.
- 7. I can identify the meanings of prefixes, suffixes and root words to determine the meanings of words.
- 8. I can identify the meanings of abbreviations.
- 9. I can use dictionaries, glossaries, technology, footnotes or sidebars to define new words.

#### Reading Processes: Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies

- 1. I can create and build purposes for reading; such as to learn, to understand, to have fun, to interpret, and to solve problems.
- 2. I can make predictions and support them using new vocabulary, text materials and plot patterns.
- 3. I can compare and contrast information on a topic using a variety of resources.
- 4. I can write a summary of important information.
- 5. I can make inferences, draw conclusions and support them with details from the text.
- 6. I can interpret a story by creating and using graphic organizers.
- 7. I can answer three types of question: literal (word by word), inferential (read between the lines), and evaluative (on my own) from different sources.
- 8. I can check my understanding by looking back, skimming, or reading on.
- 9. I can develop my own questions and answers from a story to build understanding.
- 10. I can choose my own book based on my interest, background knowledge of authors or genres.
- 11. I can read for fun or for information.

#### Reading Applications: Informational, Technical and Persuasive Text

- 1. I can infer meanings of informational text from the title page, table of contents and chapter headings.
- 2. I can use details to summarize the main idea in informational text.
- 3. I can use books, magazines, newspaper and online resources to locate important details.
- 4. I can identify examples of cause and effect used in informational text.
- 5. I can draw conclusions from maps, charts, graphs and diagrams.
- 6. I can explain, with details, complete instructions or procedures.
- 7. I can explain the difference between fact and opinion.

Reading Applications: Literary Text

- 1. I can describe the thoughts, words and interactions of characters.
- 2. I can tell how the setting influences the story.
- 3. I can explain in detail, the plot, the conflict and the resolution.
- 4. I can tell whether the narrator of a story is in first or third person.
- 5. I can find the theme, and state whether it is implied or direct.
- 6. I can identify the different characteristics found in poetry, drama, fables, fantasies, chapter books, fiction and nonfiction.
- 7. I can explain how an author's words appeal to the senses and suggest mood.
- 8. I can identify idioms, similes and metaphors.

Writing Process

- 1. I can develop ideas for writing.
- 2. I can state and develop a clear main idea for writing.
- 3. I can express my ideas, thoughts and information clearly.
- 4. I can support my main idea with details.
- 5. I can identify my purpose and audience for writing, and I can vary my language and style to fit my audience and purpose.
- 6. I can use different strategies for organizing my writing (brainstorming, webs, lists, diagrams, etc.).
- 7. I can organize my writing by using an introduction, body, and/or a solution, closing statement or summary.
- 8. I can use a variety of sentence structure and word choices.
- 9. I can create paragraphs with topic sentence and supporting sentences.
- 10. I can indent my paragraphs.
- 11. I can use transitional words and phrases.
- 12. I can show that I made thoughtful revisions.
- 13. I can add descriptive words and details, leave out unimportant items, rearrange words, sentences and paragraphs, and use resources to help me choose better words.
- 14. I can proofread and edit my own work.
- 15. I can use checklists and rubrics to help me judge the quality of my writing.
- 16. I can prepare my writing to be published.

Writing Applications

- 1. I can use details and descriptive words to create plot, characters, setting and point of view to write a narrative.
- 2. I can use my background knowledge and context clues to respond to novels, stories and poems, and support my thoughts from the readings.
- 3. I can write a letter (formal or informal) which could also be thank you notes, and letter of request, with a beginning, middle and end, which also includes a heading, greeting, body, closing and signature.
- 4. I can write an informational report using facts, examples and details in logical order.
- 5. I can write messages, journals, notes and poems.

Writing Conventions

- 1. I can write legibly using cursive writing.
- 2. I can spell core words and priority words correctly (high frequency words, plurals, roots, suffixes and prefixes).
- 3. I can spell plural and inflectional words.
- 4. I can spell root words, suffixes and prefixes.
- 5. I can use commas, end marks, apostrophes and quotation marks correctly.
- 6. I can use correct capitalization.
- 7. I can use nouns, pronouns and verbs.
- 8. I can use conjunctions and interjections.
- 9. I can use adverbs correctly.
- 10. I can use prepositions and prepositional phrases.
- 11. I can use objective and nominative pronouns.
- 12. I can use subjects and verbs that agree.
- 13. I can use irregular plural nouns.

Research

- 1. I can choose a topic and develop a plan for getting information.
- 2. I can gather and use information from many sources.
- 3. I can identify and summarize important information.
- 4. I can sort and organize information using charts, tables and graphic organizers.
- 5. I can understand the meaning of plagiarism (copy another's work) and create a list of sources I used to get my information.
- 6. I can communicate information using oral, visual, written or multimedia reports.

Communication: Oral and Visual

- 1. I can use questions, responses and direct eye contact to show that I am listening.
- 2. I can recall the main idea, details and identify the purpose of a presentation.
- 3. I can tell the difference between a speaker's opinion and facts.
- 4. I can use the rules of English language.
- 5. I can use appropriate language for the audience.
- 6. I can vary my tone, volume and speed to stress important ideas.
- 7. I can use speaking content appropriate to my audience.
- 8. I can present information that:
  - a. Presents information clearly and in sequential order;
  - b. Demonstrates an understanding of the topic;

**Language Arts**

Communication: Oral and Visual, *continued*

- c. Includes facts, details, examples, quotes, stats and stories;
  - d. Organizes information to include an introduction, body and conclusion;
  - e. Uses visual aid and technology; and
  - f. Uses several sources and identifies sources used.
9. I can give a detailed and descriptive presentation using personal experience.

**Mathematics**

Number, Number Sense and Operations

- 1. I can identify equivalent (equal) fractions and decimals using number, words and pictures (e.g.,  $1/2$ ,  $5/10$ ,  $0.5$ ,  $1/10$ ,  $0.1$ ).
- 2. I can read, write and compare whole numbers through millions and decimals through thousandths.
- 3. I can round whole numbers to a given place value.
- 4. I can identify factors and multiples of whole numbers through 100 and identify prime and composite numbers.
- 5. I can use number lines, fraction bars and pictures to compare fractions.
- 6. I can use associative and distributive properties to add, subtract, multiply and divide (e.g.,  $5 \times 47 = (5 \times 40) + (5 \times 7) = 200 + 35 = 235$ ).
- 7. I can decide when to use division each time I am problem-solving and also know the meaning of remainder.
- 8. I can solve problems such as counting money and making change using both coins and bills.
- 9. I can estimate answers to problems that use whole numbers, fractions and decimals.
- 10. I can use numbers, words and pictures to add and subtract decimal and fractions.
- 11. I can explain why, when and how I use mental math.
- 12. I can solve multiple step problems and check and explain results.
- 13. I can mental math, paper and pencil and calculator to solve problems.
- 14. I can add, subtract, multiply and divide two digit numbers and numbers that are multiples of ten.

Measurement

- 1. I can compare all units of measurement (liquid and linear).
- 2. I can define perimeter, area and volume.
- 3. I can identify and select appropriate units to measure perimeter, area and volume.
- 4. I can find perimeter, area and volume.
- 5. I can convert all units of measurement.
- 6. I can solve multiple step problem involving measurement, then solve it, check it, and explain my answer.

Geometry and Spatial Sense

- 1. I can define, describe and show what parallel, perpendicular and intersecting lines and line segments.
- 2. I can describe, classify and compare two- and three-dimensional objects by their characteristics.
- 3. I can state similarities and differences of quadrilaterals.
- 4. I can identify and describe right, acute, obtuse, and equiangular (all angles are equal) triangles and isosceles, equilateral and scalene triangles.
- 5. I can describe points, lines and planes, and identify examples in the environment.
- 6. I can plot points on a graph using ordered pairs.
- 7. I can identify, describe and draw figures involving flips (reflections), slides (translations), and turns (rotations).
- 8. I can use geometric models to solve all types of math problems.

Patterns, Functions and Algebra

- 1. I can use words, pictures and numbers to describe patterns and relationships in addition, subtraction, multiplication, division, geometry, and graphs.
- 2. I can interpret and describe patterns using words, tables and graphs.
- 3. I can make a table using addition, subtraction, multiplication, and division to solve problems.
- 4. I can use rules to and variables to describe patterns.
- 5. I can show math number relationship with equations and in equalities (numbers that are not equal).
- 6. I can describe how a change in one number affects the value of another number in the same problem (e.g., as one number increases the other number increases too).

Data Analysis and Probability

- 1. I can create a plan to collect data or information.
- 2. I can show and interpret data using tables, bar graphs, line plots and line graphs.
- 3. I can draw a Venn diagram to explain data.
- 4. I can use a variety of ways to show data in different forms and compare the ways to choose the appropriate one.
- 5. I can explain and make predictions based on data in tables, charts and graphs.
- 6. I can describe data from a table or graph and explain the range, clumps (groupings) and holes (missing information).
- 7. I can identify and define the median (middle number) of data.
- 8. I can compare data using range, median (middle number) and mode (occurring most often).
- 9. I can perform simple probability experiments and draw conclusion from results ( e.g., rolling dice or flipping a coin).
- 10. I can represent the outcomes of a probability experiments (e.g., probability of selecting a red marble from a bag containing 3 red and 5 white marbles).
- 11. I can compare impossible-to-happen and certain-to-happen events with 0 as impossible and 1 as certain-to-happen.
- 12. I can use words or pictures to compare and show the order of possible outcomes (e.g., impossible, unlikely, equal, likely or certain).
- 13. I can list and count all possible combinations (e.g., number of possible outfits from 3 shirts, 2 shorts, and 2 pair of shoes).

Earth and Space Sciences

- 1. I can explain that air surrounds us, takes up space, moves around us as wind, and may be measured using a barometer.
- 2. I can identify how water is in the air in different forms (e.g., in clouds, fog, rain, snow and hail).
- 3. I can investigate how water changes from one state to another (e.g., freezing, melting, condensation and evaporation).
- 4. I can explain the weather using temperature, wind direction, wind speed, precipitation and barometric pressure.
- 5. I can record local weather information on a calendar or map and describe changes over a period of time (e.g., barometric pressure, temperature, precipitation symbols and cloud conditions).
- 6. I can explain how weather patterns move from west to east in the United States.
- 7. I can explain how the different clouds affect the weather.
  - a. Cumulus – fair weather;
  - b. Cumulonimbus – cause rain and thunderstorms;
  - c. Cirrus – freezing rain;
  - d. Stratus – rain or snow.
- 8. I can describe how wind, water and ice shape and reshape the Earth's land surface by eroding or wearing away rock and soil and depositing them in other areas forming landforms (dunes, deltas and glacial moraines).
- 9. I can describe how freezing, thawing and plant growth reshape the land surface by causing the weathering of rocks.
- 10. I can explain the difference between slow processes (weathering, mountain building, deposition) and rapid processes (volcanic eruptions, earthquakes, landslides) to describe changes on the earth's surface.

Life Sciences

- 1. I can describe the life cycle of different plants.
- 2. I can match plant structures with their functions.
- 3. I can classify common plants according to their characteristics.
- 4. I can observe plant fossils and describe what the environment was like when the plant was alive.
- 5. I can describe how plants and animals interact with other plants and animals.

Physical Sciences

- 1. I can describe the simple characteristics of a simple physical change (e.g., water freezing, ice melting).
- 2. I can describe a simple chemical change (e.g., burning paper, vinegar and baking soda).
- 3. I can categorize or sort objects into groups by looking at the materials from which they are made (e.g., sorting paper, glass, plastic and metal).
- 4. I can describe the three states of matter: solid, liquid and gas.
- 5. I can identify the similarities and differences between ways to change the temperature of an object (e.g., rubbing, heating and bending of metal).

**Science**

Science and Technology

- 1. I can explain how technology has improved our lives through better transportation, communication, nutrition, healthcare, agriculture, entertainment and manufacturing.
- 2. I can investigate how technology and inventions change to meet peoples' needs and wants.
- 3. I can describe a problem, draw pictures to explain the problem, list solutions and then find a correct solution to solve the problem.

Scientific Inquiry

- 1. I can choose the correct tools and safety guidelines to measure and record length, weight, volume, temperature and area using metric and standard units.
- 2. I can examine a series of events or cycles by describing their patterns and by predicting their next steps.
- 3. I can develop and conduct safe simple experiments to answer questions.
- 4. I can explain that conditions of an experiment must be kept the same.
- 5. I can describe why it is not fair to compare experiments when conditions are not kept the same.
- 6. I can write directions and explain data to help others understand and repeat an experiment.

Scientific Ways of Knowing

- 1. I can explain the difference between fact and opinion and explain that scientists do not accept results without evidence.
- 2. I can record and explain the results and data from an experiment.
- 3. I can explain differences in an experiment using facts for support.
- 4. I can explain why keeping records of an experiment are important.

**Social Studies**

History

- 1. I can construct time lines using periods (decades—10 years or centuries—one hundred years) to show the order of important events in Ohio history.
- 2. I can describe the earliest settlements in Ohio including those of prehistoric peoples.
- 3. I can explain the causes and effects of the frontier wars of the 1790's, including the Battle of Fallen Timbers, on American Indians in Ohio and the United States.
- 4. I can explain how Ohio went from a territory to a state, including the terms of the Northwest Ordinance.
- 5. I can explain how canals and railroads affected Ohio's growth, economy and political position in the United States.
- 6. I can explain the importance of inventors such as the Wright Brothers, Charles Kettering, Garret Morgan, Granville Woods and Thomas Edison.

People in Societies

- 1. I can describe the customs, culture and products of various groups who have settled in Ohio:
  - a. The Paleo Indians, Archaic Indians, Woodland Indians (Hopewell and Adena) and Late Prehistoric Indians (Fort Ancient);
  - b. Historic Indians of Ohio (Ottawa, Wyandot, Mingo, Miami, Shawnee and Delaware);
  - c. European – immigrants;
  - d. Amish and Appalachian populations;
  - e. African-Americans;
  - f. Recent immigrants from Africa, Asia and Latin America.
- 2. I can describe the influence of the growth of European settlements on American Indians in Ohio.
- 3. I can explain the reasons people came to Ohio including:
  - a. Opportunities in agriculture, mining and manufacturing;
  - b. Family ties;
  - c. Freedom from political and religious oppression (control).

Geography

- 1. I can use a map scale to measure the distance between places on a map.
- 2. I can use cardinal (N, S, E, W) and Intermediate (NE, NW, SE, SW) directions to describe the exact location of places.
- 3. I can describe the location of Ohio in relationship to other states and countries.
- 4. I can use maps to identify natural features and human features (cities and states) of Ohio including:
  - a. Lake Erie;
  - b. Rivers;
  - c. Plains;
  - d. The Appalachian Plateau;
  - e. Bordering states;
  - f. The capital city;
  - g. Other major cities.
- 5. I can describe and compare the landforms, climates, populations, vegetation and economic characteristics of places and regions in Ohio.
- 6. I can identify manufacturing, agricultural, mining and forestry regions in Ohio.
- 7. I can explain how resources, transportation and location affected the growth of cities and industries in Ohio including major industries such as oil, steel, rubber and glass.
- 8. I can identify how environmental processes (glaciation and weathering) and characteristics (landforms, bodies of water, climate, vegetation) affected human settlement and activity in Ohio.

**Fourth Grade****Social Studies**Geography, continued

- 9. I can identify the ways that people have affected the physical environment of Ohio including:
  - a. Use of wetlands;
  - b. Use of forests;
  - c. Building farms, towns and transportation systems;
  - d. Using fertilizers, herbicides and pesticides;
  - e. Building dams.
- 10. I can use elevations, natural resources and road maps to answer questions about patterns of settlements, economic activity and movement.

Economics

- 1. I can identify the resources needed to produce a good or service and costs for these resources.
- 2. I can explain how available resources in Ohio promote specialization in production of goods and services and leads to trade.
- 3. I can explain how entrepreneurs (business owners) use resources to produce goods and services to make profits by taking risks.
- 4. I can explain ways in which individuals and households obtain and use income.
- 5. I can explain why people in Ohio specialize in what they produce and then trade with others, which then increases the amount of goods and services available.
- 6. I can explain why many jobs in Ohio create products that are sold in other countries and why products from other countries are sold in Ohio.

Government

- 1. I can explain major responsibilities of the three branches of government in Ohio.
  - a. Legislative Branch (General Assembly) makes the laws.
  - b. Branch (Governor) carries out and enforces the laws.
  - c. Judicial Branch (Ohio Supreme Court) interprets and applies the law.
- 2. I can explain why elections are used to select leaders and decide issues.
- 3. I can explain the purpose of a democratic constitution:
  - a. To provide a framework for a government;
  - b. To limit the power of government;
  - c. To define the authority of elected officials.
- 4. I can explain that the Ohio Constitution tells how the state government should be organized and guarantees the rights of individuals.

Citizenship Rights and Responsibilities

- 1. I can describe the ways in which citizens can promote the common good and influence their government including:
  - a. Voting;
  - b. Communicating with officials (Mayor, Governor);
  - c. Participating in civic and service organizations (Boy Scouts or Girl Scouts);
  - d. Doing voluntary work.
- 2. I can explain why personal responsibilities (taking advantage of the opportunity to be educated) and the civic responsibilities (obeying the law and respecting the rights of others) are important.
- 3. I can explain the importance of leadership and public service.
- 4. I can explain why characteristics such as respect for the rights of others, fairness, reliability, honesty, wisdom and courage are desirable qualities in the people citizens select as their leaders.

Social Studies Skills and Methods

- 1. I can gather information from a variety of sources and determine the usefulness:
  - a. Atlases;
  - b. Encyclopedias;
  - c. Dictionaries;
  - d. Newspapers;
  - e. Multimedia/Electronic sources.
- 2. I can use a glossary and index to locate information.
- 3. I can use primary (journal) and secondary (textbook) sources to answer questions about Ohio history.
- 4. I can describe how archaeologists and historians study and explain the past.
- 5. I can identify main ideas and supporting details from facts.
- 6. I can explain the difference between fact and opinion.
- 7. I can read and explain pictographs, bar graphs, line graphs and tables.
- 8. I can create a question on a topic to research.
- 9. I can create a written report with important information and include my sources.
- 10. I can use problem-solving and decision-making processes to:
  - a. Identify a problem;
  - b. Gather information;
  - c. List and consider choices;
  - d. Consider advantages and disadvantages of choices;
  - e. Choose and use a solution;
  - f. Create a checklist for grading its value.