

Oklahoma School Testing Program

Oklahoma Modified Alternate Assessment Program (OMAAP)

Grade 5 Mathematics, Reading, and Science

PARENT, STUDENT, AND TEACHER GUIDE



2012–2013

Oklahoma State Department of Education

2704595-W

**Spring Testing Dates
2013 School Year**

**Multiple-Choice Tests
Grades 3–8 Paper/Pencil
April 10–24, 2013**



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**STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
STATE OF OKLAHOMA**

Dear Parent/Guardian and Student:

Soon students will be participating in the Oklahoma Modified Alternate Assessment Program. These tests are designed to measure knowledge in Mathematics, Reading, and Science.

Parents/guardians will receive a report on their child's performance on the tests. This report will indicate your child's areas of strength as well as areas needing improvement.

This guide provides practice questions, objectives covered in the tests, and a list of test-taking tips. Parents/guardians are encouraged to discuss these materials with their child to help prepare them for the tests. During the test week, it is very important for students to get plenty of sleep, eat a good breakfast, and arrive at school on time.

If you have any questions about the Oklahoma Modified Alternate Assessment Program, please contact your local school or the State Department of Education.

Sincerely,

Your State Superintendent of Public Instruction

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About This Guide

This guide is designed to help Grade 5 students prepare for the tests in Mathematics, Reading, and Science that they will take this year as part of the Oklahoma Modified Alternate Assessment Program (OMAAP). It provides an opportunity for parents, students, and teachers to become familiar with OMAAP and to understand how Mathematics, Reading, and Science skills will be assessed.

This guide presents general test-taking tips, lists the standards and objectives that are eligible for assessment in a statewide testing program, presents the blueprint for each test, and provides sample test directions and a sample test for each subject.

The Oklahoma Modified Alternate Assessment Program

The Governor, state legislators, and other Oklahoma elected officials have committed themselves to ensuring that all Oklahoma students receive the opportunity to learn the skills required to succeed in school and in the workplace. To achieve this goal, schools must prepare every Oklahoma student for colleges, universities, and jobs that require new and different skills.

Under the direction of the Legislature, Oklahoma teachers, parents, and community leaders met to agree upon the skills that students are expected to master by the end of each grade. The results of their efforts, *Oklahoma C³ Standards*, provide the basis for Oklahoma's core curriculum.

In addition, the Legislature established the criterion-referenced test component of the Oklahoma School Testing Program (OSTP) to measure students' progress in mastering the *Oklahoma C³ Standards*. Tests have been developed by national test publishers that specifically measure the *Oklahoma C³ Standards*. Teachers from throughout Oklahoma have been involved in the review, revision, and approval of the questions that are included in the tests.

The Oklahoma Modified Alternate Assessment Program (OMAAP) is a criterion-referenced testing program that compares a student's performance with performance standards established by the State Board of Education. The performance standards are based upon recommendations from groups of Oklahoma educators who evaluated the test and recommended the performance standards for the different levels of performance for each test. The Oklahoma Performance Index, or OPI, is a scaled score earned by a student that places the student into one of the four performance levels (Advanced, Satisfactory, Limited Knowledge, Unsatisfactory).

The Modified assessments have been developed for students with disabilities who can make significant progress but may not reach grade-level achievement standards within the same time frame as other students, even after receiving the best-designed instructional interventions from highly qualified teachers. The Modified assessments are intended for those students for whom both the Oklahoma Alternate Assessment

Program (OAAP) or portfolio, and the Oklahoma Core Curriculum Tests (OCCT) general assessments are inappropriate.

The Modified assessments provide information about subject-level student academic performance in Mathematics, Reading, and Science in relation to *Oklahoma C³ Standards* based on modified achievement standards. For Science, the 2012–2013 blueprint is the same as 2011–2012.

- Grades 3–8 Mathematics and Reading
- Grades 5 & 8 Science

These assessments provide informative data that educators can use to make instructional decisions, based on student performance in relation to *Oklahoma C³ Standards*. District and school reports included detailed diagnostic information.

Items from the OCCT were modified and reviewed by committees of educators to be used on the OMAAP. For Spring 2013, seven items for Science were also developed specifically for the OMAAP tests, reviewed by Oklahoma educators, and included on the test as field test items. The following table illustrates the modification rules that were used for each subject area.

Subject Area	Modification Rules
Universal	<ul style="list-style-type: none"> • Minimize the number of questions on the page (limit to 2 or 3). • Provide only three answer options instead of four. • Highlight the main points in the question or passage by underlining and using bold font. • Avoid questions that require students to select the better/best answer. • Be consistent in wording of directions across grades and subjects. • Minimize the use of pronouns and prepositional phrases. • Avoid the use of multiple-meaning words and words that can function as more than one part of speech. • Enlarge art when possible. • Simplify art when possible (i.e., remove unnecessary labels, use less gray scale, use thicker lines when outlining, etc.). • Box informational text in an item. • Bullet information when possible (e.g., bullet detailed information or processes). • Reduce reading load of stem, stimuli, and answer options when possible. • Revise answer options to address parallelism and minimize outliers.

Subject Area	Modification Rules
Math	<ul style="list-style-type: none"> • For lower grades, display numbers on all sides of figures for questions about perimeter. • Unless required by standard, avoid items with negative and positive answer choices that use the same number. • Place any items with coordinate grids on one page. • For lower grades, use grids for questions. • Be consistent with qualifiers in the stem and answer choices. • Avoid questions that use best or closest. • Avoid complicated art. • List coordinate grids in answer options vertically with plenty of space between the answer options to make the grid more accessible to the visually impaired (however, avoid spanning item over two pages). • Simplify reading load, including vocabulary, when possible. • Eliminate stimuli sets. • Delete one part of a compound answer choice when possible. • Delete griddable items, negative items, and items that cannot be modified based on guidelines. • Delete extraneous information including irrelevant material and unnecessary words in items or graphics. • Simplify complex sentence structure and vocabulary in item and answer choices without eliminating math vocabulary. • Change passive voice to active voice when appropriate. • Add precise language to provide additional context for clarification. • Use consistent language within an item in order to focus student attention on what is being asked. • Revise text as necessary to maintain the authenticity and logic of the item due to modifications. • Use bullets to clearly organize complex items into smaller, meaningful parts. • Direct student attention to graphics. • Simplify visual complexity of graphics. • Provide new text and/or reorganize existing text within the question to explain or clarify the graphic. • Provide additional graphics to support text, emphasize ideas, and facilitate comprehension. • Reduce the number of variables and simplify digits in item when appropriate. • Limit the number of steps and/or operations in multi-step problems. • Provide appropriate formula and/or conversion near the item. • Provide explicit directions to explain a process such as measuring (as long as it does not impact reading load).

Subject Area	Modification Rules
<p style="text-align: center;">Reading</p>	<ul style="list-style-type: none"> • Break passages into smaller portions. • Place the questions that pertain to the smaller portion underneath or on a page facing that section. • Add a word bank as needed for grades 3–5. • Use footnotes for grades 6–8. • Put items in order of appearance in the passage. • Delete extraneous information including irrelevant material and unnecessary words in items or graphics (e.g., remove “most likely”). • Delete one part of a compound answer choice when possible. • Change passive voice to active voice when appropriate. • Eliminate answer choices that give students the option of making no changes to the item. • Direct student attention to graphics. • Simplify visual complexity of graphics.
<p style="text-align: center;">Science</p>	<ul style="list-style-type: none"> • Reduce the amount of reading. • Avoid complicated art. • Simplify tables and charts by removing irrelevant rows or columns. • Box formulas to make them stand out. • Answer options align to content and process. • Simplify reading load, including vocabulary, when possible. • Eliminate stimuli sets. • Delete cluster items, negative items, and items that cannot be modified based on guidelines. • Delete extraneous information including irrelevant material and unnecessary words in items or graphics. • Simplify complex sentence structure and vocabulary in item and answer choices without eliminating science vocabulary. • Change passive voice to active voice when appropriate. • Change item from an open-ended statement to a direct question or vice versa, as necessary, for clarification. • Add precise language to provide additional context for clarification. • Use consistent language within an item in order to focus student attention on what is being asked. • Revise text as necessary to maintain the authenticity and logic of the item due to modifications. • Use bullets to clearly organize complex items into smaller, meaningful parts. • Direct student attention to graphics. • Simplify visual complexity of graphics. • Provide new text and/or reorganize existing text within the question to explain or clarify the graphic; science content must remain accurate. • Provide additional graphics to support text, emphasize ideas, and facilitate comprehension. • Reduce the number of variables and simplify digits in item when appropriate. • Limit the number of steps and/or operations in multi-step problems. • Provide appropriate formula and/or conversion near the item.

Test-Taking Tips

The following tips provide effective strategies for taking the Oklahoma Modified Alternate Assessment. Test-taking skills cannot replace studying based on the *Oklahoma C³* standards and objectives, which serve as the foundation for the tests.

General Test-Taking Tips:

- DO...** read this guide carefully and review the sample items.
- DO...** make sure you understand all test directions. If you are uncertain about any of the directions, raise your hand to ask questions before testing has started.
- DON'T...** wait until the last minute to study for the test. These tests cover a lot of material, and you cannot learn it all in a short amount of time.
- DON'T...** worry about the tests. Students who are calm and sure of themselves do better on tests.

Tips for the Multiple-Choice Tests:

- DO...** read each question and every answer choice carefully. Choose the best answer for each question.
- DO...** check your work if you finish your test early. Use the extra time to answer any questions that you skipped.
- DO...** read the selections on the Reading Test carefully.
- DO...** remember that if you cannot finish the test within the time allotted, you will be given additional time to complete the test.
- DO...** mark all your answers in the test book.
- DON'T...** allow any stray pencil marks to go inside of the question boxes from working problems or making notes in your test book.
- DON'T...** spend too much time on any one question. If a question takes too long to answer, skip it and answer the other questions. You can return to any skipped questions after you have finished all other questions.

The Multiple-Choice Tests

Each year, students in Grade 5 take Multiple-Choice tests in Mathematics, Reading, and Science.

Each subject-area test is given in a separate session. Each test takes about 60–90 minutes to complete. However, the tests are not strictly timed. Additional time is available to every student as an immediate extension of the testing session; it is not available as a separate session at another time.

Students who finish early should make sure their work is complete and are encouraged to check and verify their answers prior to closing their test books. Students will not be allowed to reopen their test books once they have been closed for a given test session.

For each Grade 5 subject that is tested as part of OMAAP, this guide provides the following:

- the *Oklahoma C³* standards and objectives eligible for testing
- a test blueprint that describes the distribution of *Oklahoma C³* standards and objectives
- an original OCCT sample test item
- the modified OMAAP sample test item
- a sample test with directions
- an answer key showing the correct answer choices and the assessed *Oklahoma C³* standards and objectives

Oklahoma C³ Standards

The *Oklahoma C³ Standards* that are eligible for testing in the Grade 5 Multiple-Choice tests for each subject area are presented below. They represent the portion of the Oklahoma core curriculum in these subject areas that is assessed on the Oklahoma Core Curriculum Tests. The skills are grouped into standards with specific objectives listed under each one. For the OMAAP assessment, student performance on the Multiple-Choice tests is reported at the standard level in all subject areas. In Mathematics, student performance is reported by the content standards. In Science, student performance is reported by both the process and content standards.

Please note that not all *Oklahoma C³* standards and objectives are appropriate for the statewide assessment. This guide includes only the *Oklahoma C³* standards and objectives that are assessed and are based on the 2002 revision for Science, the 2009 revision for Mathematics, and the 2010 revision for Reading.

Mathematics (Content)—Grade 5

Standard 1: Patterns and Algebraic Reasoning—The student will use algebraic methods to describe patterns and solve problems in a variety of contexts.

1. Describe rules that produce patterns found in tables, graphs, and models, and use variables (e.g., boxes, letters, pawns, number cubes, or other symbols) to solve problems or to describe general rules in algebraic expression or equation form.
2. Use algebraic problem-solving techniques (e.g., use a balance to model an equation and show how subtracting a number from one side requires subtracting the same amount from the other side) to solve problems.
3. Recognize and apply the commutative, associative, and distributive properties to solve problems (e.g., $3 \times (2 + 4) = (3 \times 2) + (3 \times 4)$).

Standard 2: Number Sense and Operation—The student will use numbers and number relationships to acquire basic facts. The student will estimate and compute with whole numbers, fractions, and decimals.

1. Number Sense
 - a. Apply the concept of place value of whole numbers through hundred millions (9 digits) and model, read, and write decimal numbers through thousandths.
 - b. Represent with models the connection between fractions and decimals compare and order fractions and decimals, and be able to convert from one representation to the other to solve problems (e.g., use 10-by-10 grids, base 10 blocks).

- c. Identify and compare integers using real world situations (e.g., owing money, temperature, or measuring elevations above and below sea level).

2. Number Operations

- a. Estimate, add, or subtract decimal numbers with the same and different place values to solve problems (e.g., $3.72 + 1.4$, $\$4.56 - \2.12).
- b. Estimate, add, or subtract fractions (including mixed numbers) to solve problems using a variety of methods (e.g., use fraction strips, use area models, find a common denominator).
- c. Estimate and find the quotient (with and without remainders) with two-digit divisors and a two- or three-digit dividend to solve problems.

Standard 3: Geometry—The student will apply geometric properties and relationships.

1. Compare and contrast the basic characteristics of circle and polygons (triangles, quadrilaterals, pentagons, hexagons, heptagons, octagons).
2. Classify angles (e.g., acute, right, obtuse, straight).

Standard 4: Measurement—The student will use appropriate units of measure to solve problems in a variety of contexts.

1. Measurement
 - a. Compare, estimate, and determine the measurement of angles.
 - b. Develop and use the formula for perimeter and area of a square and rectangle to solve application problems.
 - c. Convert basic measurements of volume, mass, and distance within the same system for metric and customary units (e.g., inches to feet, hours to minutes, centimeters to meters).
2. Money: Solve a variety of problems involving money.

Standard 5: Data Analysis—The student will use data analysis, statistics, and probability to interpret data in a variety of contexts.

1. Data Analysis
 - a. Compare and translate displays of data and justify the selection of the type of table or graph (e.g., charts, tables, bar graphs, pictographs, line graphs, circle graphs, Venn diagrams).

2. Probability
 - a. Determine the probability of events occurring in familiar contexts or experiments and express probabilities as fractions from zero to one (e.g., find the fractional probability of an event given a biased spinner).
 - b. Use the fundamental counting principle on sets with up to four items to determine the number of possible combinations (e.g., create a tree diagram to see possible combinations).
3. Central Tendency: Determine the range (spread), mode (most often), and median (middle) of a set of data.

**Oklahoma School Testing Program
Oklahoma Modified Alternative Assessment Program
Grade 5 Mathematics
Test Blueprint
School Year 2012–2013**

The test blueprint reflects the degree to which each *Oklahoma C³* standard and objective is represented on the test. The overall distribution of operational items in a test form is intended to look as follows:

<i>Oklahoma C³</i> Standards and Objectives	Ideal Number of Items	Ideal ¹ Percentage of Items
Algebraic Reasoning: Patterns and Relationships	10–11	23%–26%
Algebra Patterns (1.1)	3–5	
Equations (1.2)	2–4	
Number Properties (1.3)	2–4	
Number Sense and Operation	12–13	28%–30%
Number Sense (2.1)	5–7	
Number Operations (2.2)	5–7	
Geometry	6–7	14%–16%
Circles and Polygons (3.1)	3–4	
Angles (3.2)	2–3	
Measurement	6–7	14%–16%
Measurement (4.1)	3–4	
Money (4.2)	2–3	
Data Analysis	6–7	14%–16%
Data Analysis (5.1)	1–3	
Probability (5.2)	1–3	
Central Tendency (5.3)	1–3	
Total Test	40–43²	100%

¹ Percentages are approximations and may result in a sum other than 100 due to rounding.

² The actual number of items scored for a student may be slightly lower pending a review of item statistics.

- Student performance on the Multiple-Choice test will be reported at the standard level. A minimum of six items is required to report a standard. While the actual numbers of items on the test may not match the blueprint exactly, each future test will move toward closer alignment with the ideal blueprint.
- The *Oklahoma C³ Standards* correspond to the *PASS* standards. In 2014–2015 the Common Core State Standards will be assessed.

Reading—Grade 5

Reading/Literature: The student will apply a wide range of strategies to comprehend, interpret, evaluate, appreciate, and respond to a wide variety of texts.

Standard 1: Vocabulary—The student will develop and expand knowledge of words and word meanings to increase vocabulary.

1. Words in Context
 - a. Use knowledge of word parts and word relationships, as well as context clues (the meaning of the text around a word), to determine the meaning of specialized vocabulary and to understand the precise meaning of grade-level-appropriate words.
 - b. Use prior experience and context to understand and explain the figurative use of words and similes (comparisons that use like or as: *His feet were as big as boats*), and metaphors (implied comparisons: *The giant's steps were thunderous*).
2. Affixes, Roots, and Stems
 - a. Interpret new words by analyzing the meaning of prefixes and suffixes.
 - b. Apply knowledge of root words to determine the meaning of unknown words within a passage.
 - c. Use word origins, including knowledge of less common roots (*graph* = writing, *terras* = earth) and word parts (*hemi* = half, *bio* = life) from Greek and Latin to analyze the meaning of complex words (*terrain, hemisphere, biography*).
3. Synonyms, Antonyms, and Homonyms/Homophones. Apply knowledge of fifth grade level synonyms, antonyms, homonyms/homophones, and multiple meaning words to determine the meaning of words and phrases.

Standard 3: Comprehension/Critical Literacy—The student will interact with the words and concepts in the text to construct an appropriate meaning.

1. Literal Understanding
 - a. Use prereading strategies independently (to preview, activate prior knowledge, predict content of text, formulate questions that might be answered by the text, and establish purpose for reading).

- b. Read and comprehend both fiction and nonfiction that is appropriately designed for fifth grade.
 - c. Recognize main ideas presented in a particular segment of text; identify and assess evidence that supports those ideas.
 - d. Use the text’s structure or progression of ideas such as cause and effect or chronology to organize or recall information.
2. Inferences and Interpretation
- a. Apply prior knowledge and experience to make inferences and respond to new information presented in text.
 - b. Draw inferences and conclusions about text and support them with textual evidence and prior knowledge.
 - c. Describe elements of character development in written works (e.g., differences between main and minor characters; changes that characters undergo; the importance of a character’s actions, motives, stereotypes and appearance to plot and theme).
 - d. Make inferences or draw conclusions about characters’ qualities and actions (e.g., based on knowledge of plot, setting, characters’ motives, characters’ appearances, stereotypes and other characters’ responses to a character).
3. Summary and Generalization
- a. Summarize and paraphrase information from entire reading selection including the main idea and significant supporting details.
 - b. Make generalizations with information gleaned from text.
 - c. Support ideas and arguments by reference to relevant aspects of text and issues across texts.
 - d. Organize text information in different ways (e.g., timeline, outline, graphic organizer) to support and explain ideas.
4. Analysis and Evaluation
- a. Identify and analyze the characteristics of poetry, drama, fiction, and nonfiction and explain the appropriateness of the literary form chosen by an author for a specific purpose.
 - b. Identify the main problem or conflict of the plot and explain how it is resolved.
 - c. Contrast the actions, motives, and appearances of characters in a work of fiction and discuss the importance of the contrasts to the plot or theme.

- d. Make observations and connections, react, speculate, interpret, and raise questions in analysis of texts.
- e. Recognize structural patterns found in information text (e.g., cause and effect, problem/solution, sequential order).
- f. Distinguish among facts/inferences supported by evidence and opinions in text.

Standard 4: Literature—The student will read to contrast meaning and respond to a wide variety of literary forms.

1. Literary Genres—Demonstrate knowledge of and appreciation for various forms (genres) of literature.
 - a. Recognize characteristics of literary genres and forms (e.g., contemporary realistic fiction, historical fiction, nonfiction, modern fantasy, poetry, drama, and traditional stories such as fairy tales, fables, myths, and legends).
 - b. Read and construct meaning from a variety of genres.
 - c. Demonstrate an understanding of similarities and differences within and among literary works of various genres and cultures (e.g., in terms of settings, character types, events, and role of natural phenomena).
2. Literary Elements—Demonstrate knowledge of literary elements and techniques and how they affect the development of a literary work.
 - a. Develop a knowledge of the literary elements of fiction (plot, problems, attempts to resolve conflicts, resolution, etc.) and the text structure of nonfiction (compare/contrast, cause/effect, sequence, main idea, and details).
 - b. Compare/contrast genres, themes, ideas, and story elements across texts read, listened to, or viewed.
 - c. Identify the author’s purpose (persuade, inform, or entertain).
 - d. Recognize and identify the writer’s perspective or point of view in a literary selection (e.g., first person, second person, etc.) and how it affects the text.
3. Figurative Language and Sound Devices—Identify figurative language and sound devices in writing and how they affect the development of a literary work.
 - a. Identify and discuss certain words and rhythmic patterns that can be used in a selection to imitate sounds (e.g., rhythm, rhyme, alliteration).

- b. Evaluate and identify figurative language, such as simile, metaphors, hyperbole, personification, and idioms.
 - Simile: a comparison that uses *like* or *as*.
 - Metaphor: an implied comparison.
 - Hyperbole: an exaggeration for effect.
 - Personification: a description that represents a thing as a person.
 - Idiom: an expression that does not mean what it literally says.
- c. Identify the function and effect of common literary devices, such as imagery, metaphor, and symbolism.
 - Symbolism: the use of an object to represent something else; for example, a dove might symbolize peace.
 - Imagery: the use of language to create vivid pictures in the reader’s mind.
 - Metaphor: an implied comparison in which a word or phrase is used in place of another, such as *He was drowning in money*.
- d. Interpret poetry and recognize poetic styles (e.g., rhymed, free verse, and patterned [cinquain, diamante]).

Standard 5: Research and Information—The student will conduct research and organize information.

1. Accessing Information—Select the best source for a given purpose.
 - a. Determine and use appropriate sources for accessing information including, dictionaries, thesaurus, electronic library catalogs and databases, magazines, newspapers, technology/Internet, encyclopedias, atlases, almanacs, tables of contents, glossaries, and indexes.
 - b. Identify and credit the sources used to gain information.
 - c. Use text features to access information (e.g., format, italics, heading, subheadings, graphics, sequence, diagrams, illustrations, charts, and maps).
 - d. Use reference features of printed text, such as citations, endnotes, and bibliographies to locate relevant information about a topic.
 - e. Use the features of informational texts, such as formats, graphics, diagrams, illustrations, charts, maps, and organization, to find information and support understanding.

Example: Locate specific information in a social studies textbook by using its organization, sections on different world regions, and textual features, such as headers, maps, and charts.

- f. Recognize and apply test-taking strategies by answering different levels of questions, such as literal, as well as multiple choice, true/false, short answer, inferential, evaluative, or open-ended.
2. Interpreting Information—Analyze and evaluate information from a variety of sources.
 - a. Follow multi-step directions to accomplish a task (e.g., video games, computer programs, recipes).
 - b. Select a topic, formulate questions, and synthesize information from a variety of print, nonprint, and technological resources (e.g., dictionaries, reference books, atlases, magazines, informational texts, thesaurus, and technology/Internet).
 - c. Develop notes that include important information on a selected topic.
 - d. Summarize information from multiple sources into a written report or summary.
 - e. Create simple documents using a computer and employing organizational features, such as passwords, entry and pull-down menus, word searches, the thesaurus, and spell checks.

**Oklahoma School Testing Program
Oklahoma Modified Alternate Assessment Program
Grade 5 Reading
Test Blueprint
School Year 2012–2013**

The test blueprint reflects the degree to which each *Oklahoma C³* standard and objective is represented on the test. The overall distribution of operational items in a test form is intended to look as follows:

<i>Oklahoma C³</i> Standards and Objectives	Ideal Number of Items	Ideal¹ Percentage of Items
Vocabulary (1.0)	9–11	21–26%
Words in Context (1.1)	2–4	
Affixes, Roots, and Stems (1.2)	2–4	
Synonyms, Antonyms, and Homonyms/Homophones (1.3)	2–4	
Comprehension/Critical Literacy (3.0)	15–17	35–40%
Literal Understanding (3.1)	3–5	
Inferences and Interpretation (3.2)	3–5	
Summary and Generalization (3.3)	3–5	
Analysis and Evaluation (3.4)	3–5	
Literature (4.0)	9–11	21–26%
Literary Genres (4.1)	2–4	
Literary Elements (4.2)	2–4	
Figurative Language and Sound Devices (4.3)	2–4	
Research and Information (5.0)	6–7	14–16%
Accessing Information (5.1)	2–4	
Interpreting Information (5.2)	2–4	
<i>Total Test</i>	40–43²	100%

¹ Percentages are approximations and may result in a sum other than 100 due to rounding.

² The actual number of items scored for a student may be slightly lower pending a review of item statistics.

- Student performance on the Multiple-Choice test will be reported at the standard level. A minimum of six items is required to report a standard. While the actual numbers of items on the test may not match the blueprint exactly, each future test will move toward closer alignment with the ideal blueprint.
- The *Oklahoma C³ Standards* correspond to the *PASS* standards. In 2014–2015 the Common Core State Standards will be assessed.

Oklahoma C³ Standards

Science—Grade 5

Science Processes and Inquiry

Process Standard 1: Observe and Measure—Observing is the first action taken by the learner to acquire new information about an object, organism, or event. Opportunities for observation are developed through the use of a variety of scientific tools. Measurement allows observations to be quantified. The student will accomplish these objectives to meet this process standard.

1. Observe and measure objects, organisms, and/or events (e.g., mass, length, time, volume, temperature) using the International System of Units (SI) (i.e., grams, milligrams, meters, millimeters, centimeters, kilometers, liters, milliliters, and degrees Celsius). Measure using tools (e.g., simple microscopes or magnifier, graduated cylinders, gram spring scales, metric rulers, metric balances and Celsius thermometers).
2. Compare and/or contrast similar and/or different characteristics (e.g., color, shape, size, texture, sound, position, change) in a given set of objects, organisms, or events.

Process Standard 2: Classify—Classifying establishes order. Objects, organisms, and events are classified based on similarities, differences, and interrelationships. The student will accomplish these objectives to meet this process standard.

1. Classify a set of objects, organisms, and/or events using no more than three observable properties (e.g., dichotomous keys).
2. Arrange objects, organisms and/or events in serial order (e.g., least to greatest, fastest to slowest).

Process Standard 3: Experiment—Experimenting is a method of discovering information. It requires making observations and measurements to test ideas. The student will accomplish these objectives to meet this process standard.

2. Evaluate the design of a scientific investigation (e.g., order of investigation procedures, number of tested variables). 
4. Recognize potential hazards and practice safety procedures in all science investigations.

Process Standard 4: Interpret and Communicate—Interpreting is the process of recognizing patterns in collected data by making inferences, predictions, or conclusions. Communicating is the process of describing, recording, and reporting experimental procedures and results to others. Communication may be oral, written, or mathematical and includes organizing ideas, using appropriate vocabulary, graphs, other visual representations, and mathematical equations. The student will accomplish these objectives to meet this process standard.

2. Interpret data tables, line bar, trend, and/or simple circle graphs. 
3. Make predictions based on patterns in experimental data. 
4. Communicate the results of investigations and/or give explanations based on data. 

PHYSICAL SCIENCE

GRADE 5

Standard 1: Properties of Matter and Energy—Describe characteristics of objects based on physical qualities such as size, shape, color, mass, temperature, and texture. Energy can produce changes in properties of objects such as changes in temperature. The student will engage in investigations that integrate the process standards and lead to the discovery of the following objectives:

1. Matter has physical properties that can be used for identification (e.g., color, texture, shape).
2. Physical properties of objects can be observed, described, and measured using tools such as simple microscopes, gram spring scales, metric rulers, metric balances, and Celsius thermometers.
3. Energy can be transferred in many ways (e.g., energy from the Sun to air, water, and metal).
4. Energy can be classified as either potential or kinetic.

LIFE SCIENCE

GRADE 5

Standard 2: Organisms and Environments—Organisms within an ecosystem are dependent on one another and the environment. The student will engage in investigations that integrate the process standards and lead to the discovery of the following objectives:

1. Organisms in an ecosystem depend on each other for food, shelter, and reproduction.
 - a. Ecosystems include food chains and food webs.
 - b. Relationships exist between consumers, producers, and decomposers within an ecosystem.
 - c. Predator and prey relationships affect populations in an ecosystem.
2. Changes in environmental conditions due to human interactions or natural phenomena can affect the survival of individual organisms and/or entire species.
 - a. Earth's resources can be natural (non-renewable) or man-made (renewable).
 - b. The practices of recycling, reusing, and reducing help to conserve Earth's limited resources.

EARTH/SPACE SCIENCE

GRADE 5

Standard 3: Structure of Earth and the Solar System—Interaction between air, water, rock/soil, and all living things. The student will engage in investigations that integrate the process standards and lead to the discovery of the following objectives:

1. Soil consists of weathered rocks and decomposed organic material from dead plants, animals, and bacteria. Soils are often found in layers.
2. Weather exhibits daily and seasonal patterns (i.e., air temperature, basic cloud types – cumulus, cirrus, stratus, and nimbus, wind direction, wind speed, humidity, precipitation).
 - a. Weather measurement tools include thermometer, barometer, anemometer, and rain gauge.
 - b. Weather maps are used to display current weather and weather predictions.
3. Earth is the third planet from the Sun in a system that includes the moon, the Sun, and seven other planets.
 - a. Most objects in the solar system are in regular and predictable motion (e.g., phases of the moon).
 - b. Objects in the Solar System have individual characteristics (e.g., distance from Sun, number of moons, temperature of object).
 - c. The Earth rotates on its axis while making revolutions around the Sun.

Book Icons  identify Information Literacy skills. Students are best served when these are taught in collaboration and cooperation between the classroom teacher and the library media specialist.

Use of term “i.e.” means “in exactness;” use of term “e.g.” means “example given.”

**Oklahoma School Testing Program
Oklahoma Modified Alternate Assessment Program
Grade 5 Science
Test Blueprint
School Year 2012–2013**

The test blueprint reflects the degree to which each *Oklahoma C³* standard and objective is represented on the test. The overall distribution of operational items in a test form is intended to look as follows:

<i>Oklahoma C³</i> Process Standards and Objectives	Ideal Number of Items	Ideal¹ Percentage of Items
Observe and Measure (P1.0)	8–10	19–23%
SI Metric (P1.1)	3–5	
Similar/different characteristics (P1.2)	3–5	
Classify (P2.0)	8–10	19–23%
Observable properties (P2.1)	3–5	
Serial order (P2.2)	3–5	
Experiment (P3.0)	9–11	21–26%
Experimental design (P3.2)	5–7	
Hazards/practice safety (P3.4)	3–5	
Interpret and Communicate (P4.0)	12–14	28–33%
Data tables/line/bar/trend and circle graphs (P4.2)	4–6	
Prediction based on data (P4.3)	3–5	
Explanations based on data (P4.4)	3–5	
<i>Total Test</i>	40–43²	100%

¹ Percentages are approximations and may result in a sum other than 100 due to rounding.

² The actual number of items scored for a student may be slightly lower pending a review of item statistics.

- Student performance on the Multiple-Choice test will be reported at the standard level. A minimum of six items is required to report a standard. While the actual numbers of items on the test may not match the blueprint exactly, each future test will move toward closer alignment with the ideal blueprint.
- The OMAAP Grade 5 Science blueprint for 2012–2013 is the same as 2011–2012. No standard setting will be necessary summer of 2013.

**Oklahoma School Testing Program
Oklahoma Modified Alternate Assessment Program
Grade 5 Science (Continued)
Test Blueprint
School Year 2012–2013**

<i>Oklahoma C³</i> Content Standards and Objectives	Ideal Number of Items	Ideal ¹ Percentage of Items
Properties of Matter and Energy (1.0)	15–17	35–40%
Matter has physical properties (1.1)	4–6	
Physical properties can be measured (1.2)	4–6	
Energy can be transferred (1.3)	4–6	
Organisms and Environments (2.0)	10–12	23–28%
Dependence upon community (2.1)	4–6	
Individual organism and species survival (2.2)	4–6	
Structure of Earth and the Solar System (3.0)	9–11	21–26%
Weather patterns (3.2)	4–6	
Earth as a planet (3.3)	4–6	
<i>Total Test</i>	37–40^{2*}	93%^{**}

* Three or four out of the 43 total items assess the “Safety” process standard, for which there is no corresponding content standard.

** The approximate percentages are based on the total number of items on a test that are matched to the content standards and do not include items added for safety.

¹ Percentages are approximations and may result in a sum other than 100 due to rounding.

² The actual number of items scored for a student may be slightly lower pending a review of item statistics.

- Student performance on the Multiple-Choice test will be reported at the standard level.
- The OMAAP Grade 5 Science blueprint for 2012–2013 is the same as 2011–2012. No standard setting will be necessary summer of 2013.

Sample Items & Tests—Mathematics

The following pages provide an example of a modified test item and a sample test with directions. The answer key at the end of this guide shows the alignment of each sample test item with an *Oklahoma C³* standard or objective.

Sample Item

To see how original OCCT test items are modified by the rules described in the table on pages 2–4 to serve as OMAAP test items, look at the following example.

Original Sample Item

Here is the original OCCT test item and the *Oklahoma C³* standard to which it aligns.

Oklahoma C³ Standard Alignment:

Standard 1. Algebraic Reasoning: Patterns and Relationships—The student will use algebraic methods to describe patterns and solve problems in a variety of contexts;

Objective 1.1 Describe rules that produce patterns found in tables, graphs, and models and use variables (e.g., boxes, letters, pawns, number cubes, or other symbols) to solve problems or to describe general rules in algebraic expression or equation form.

SAMPLE

Marcos taught his brother a number pattern that uses the rule “skip-count by twos.” The pattern below shows the first 4 numbers in Marco’s pattern.

1, 3, 5, 7, ...

What are the next four numbers in the pattern?

- A 2, 4, 6, 8
- B 2, 3, 4, 5
- C 9, 11, 13, 15
- D 9, 10, 11, 12

Modified Sample Item

Here is the sample test item modified to comply with OMAAP guidelines.

SAMPLE

The number pattern below uses the rule “skip-count by twos.”

1, 3, 5, 7, ...

What are the next two numbers in the pattern?

- Ⓐ 2, 3
- Ⓑ 9, 11
- Ⓒ 9, 10

The original OCCT item was modified in these ways:

- The language was simplified.
- Answer choices were revised.
- Answer choice A was deleted.

Mathematics Sample Test Directions

The sample test is a condensed version of a test, similar to the test you will be taking in this content area.

Sample Test Directions

1. Read each question to yourself.
2. Think of the best answer.
3. Answers will be marked directly in the test booklet.
4. Mark the circle for the answer you have chosen directly on the corresponding letter (as shown in the example below).

Example:

SAMPLE

The number pattern below uses the rule “skip-count by twos.”

1, 3, 5, 7, ...

What are the next two numbers in the pattern?

- Ⓐ 2, 3
- Ⓑ 9, 11
- Ⓒ 9, 10

Mathematics Sample Test

1

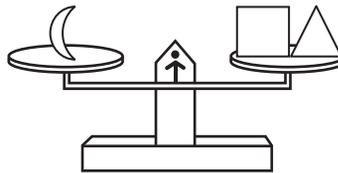
Input (n)	1	2	3	4	5
Output	3	5	7	9	11

If n is the input number, which expression could be used to find the value of the output in the table above?

- Ⓐ $2 \cdot n + 1$
- Ⓑ $3 \cdot n$
- Ⓒ $4 \cdot n - 1$

2

The scale below is balanced.



Which expression must be true?

- Ⓐ $\triangle = \text{☾} + \square$
- Ⓑ $\triangle = \text{☾} - \square$
- Ⓒ $\triangle = \text{☾} \times \square$



3

Mr. Clark's employees work 20 hours each week and earn \$7 per hour. He uses the following expression to find the total weekly payroll for n employees.

$$7 \cdot (20 \cdot n)$$

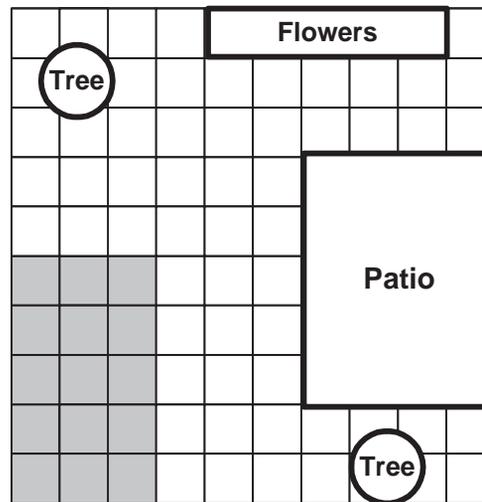
Which is an equivalent expression that can be used to find the total weekly payroll?

- Ⓐ $(7 \cdot 20) \cdot n$
- Ⓑ $20 \cdot (n + 7)$
- Ⓒ $(n + 20) \cdot 7$

4

Thomas made a drawing of his yard on a 10-by-10 grid. In the shaded area, he plans to plant a garden.

Thomas's Yard



Which decimal shows the shaded part of the yard?

- Ⓐ 0.15
- Ⓑ 1.50
- Ⓒ 15.00

5

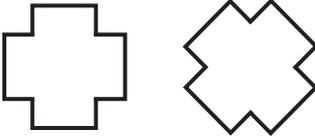
Maggie had a bag of peanuts that weighed 2.84 pounds. She took some of the peanuts out of the bag. The bag then weighed 1.24 pounds.

What was the weight of the peanuts that Maggie took out of the bag?

- (A) 4.08 pounds
- (B) 3.60 pounds
- (C) 1.60 pounds

6

Which pair of shapes appears to be congruent?

- (A) 
- (B) 
- (C) 

7

20 inches



40 inches

What is the area (A), in square inches, of the tabletop shown above?

$$A = lw$$

- Ⓐ 60 square inches
- Ⓑ 400 square inches
- Ⓒ 800 square inches



8

This table shows the prices, including tax, of items sold at a book fair.

Book Fair

Item	Price
stickers	\$0.25
pencil	\$0.35
poster	\$1.05
gel pen	\$1.60
book	\$3.00

- Luna has \$7.75.
- She buys 3 posters and 1 book.

What is the greatest number of pencils Luna can buy after paying for the 3 posters and the book?

- Ⓐ 5 pencils
- Ⓑ 4 pencils
- Ⓒ 2 pencils

9

Favorite Sports

Sport	Percent of 5th-Graders
baseball	23%
basketball	20%
football	40%
soccer	17%

Which type of graph best displays the data in the chart?

- Ⓐ bar graph
- Ⓑ circle graph
- Ⓒ line graph

10

How many different combinations of 1 cake flavor and 1 icing type can Martin use to make a cake?

Cake Flavor	Icing Type
Chocolate	Maple
Vanilla	White
Strawberry	Yellow

- Ⓐ 9
- Ⓑ 6
- Ⓒ 3



Sample Items & Tests—Reading

The following pages provide an example of a modified test item and a sample test with directions. The answer key at the end of this guide shows the alignment of each sample test item with an *Oklahoma C³* standard or objective.

Sample Item

To see how original OCCT test items are modified by the rules described in the table on pages 2–4 to serve as OMAAP test items, look at the following example.

Original Sample Item

Here is the original OCCT test item and the *Oklahoma C³* standard to which it aligns.

Oklahoma C³ Standard Alignment:

Standard 3. Comprehension/Critical Literacy—The student will interact with the words and concepts in the text to construct an appropriate meaning.

Objective 3.2 Inferences and Interpretation; b. Draw inferences and conclusions about text and support them with textual evidence and prior knowledge.

Sample Selection

Fast Tracks

The fastest person can run about 26 miles per hour. However, there are even faster speeds in the animal world. Did you know that the ostrich can run up to 40 miles per hour? The cheetah, however, wins the race. It can dash up to 60 miles per hour when running on flat ground for short distances. Now that’s impressive!

Sample

In the title, the author is probably talking about tracks made by

- A trains.
- B cars.
- C animals.
- D bicycles.

Modified Sample Item

Here is the sample test item modified to comply with OMAAP guidelines.

Sample Selection

Fast Tracks

The fastest person can run about 26 miles per hour. However, there are even faster speeds in the animal world. Did you know that the ostrich can run up to 40 miles per hour? The cheetah, however, wins the race. It can dash up to 60 miles per hour when running on flat ground for short distances. Now that's impressive!

SAMPLE

In the title, the author is talking about tracks made by

- Ⓐ cars.
- Ⓑ animals.
- Ⓒ bicycles.

Please note: Reading passages on the OMAAP will be the same length as the passages presented on the OCCT. However, instead of reading the entire passage and then answering all questions, students who take the OMAAP will find that the passages have been divided into smaller sections with questions between each section.

The original item was modified in these ways:

- The word “probably” was deleted from the stem.
- Answer choice A was deleted.

Reading Sample Test Directions

The sample test is a condensed version of a test, similar to the test you will be taking in this content area.

Sample Test Directions

1. Read each question to yourself.
2. Think of the best answer.
3. Answers will be marked directly in the test booklet.
4. Mark the circle for the answer you have chosen directly on the corresponding letter (as shown in the example below).

Example:

SAMPLE

In the title, the author is talking about tracks made by

- A cars.
- B animals.
- C bicycles.

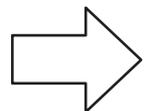


Reading Sample Test

Read the selection. Read each question and choose the best answer. Then mark the circle for the answer you have chosen.

Carl's Problem

- 1 Carl sat on the couch in the living room, his head in his hands, sighing in distress. "I didn't mean to do it," he kept repeating. "It was an accident."
- 2 His older sister, Emily, just home from school, came into the room carrying her backpack and a notebook. "Why the gloomy face and sighs?" she asked.
- 3 Carl groaned again, "What was I thinking?"
- 4 "What happened today?" she asked.
- 5 "I just won the school spelling bee," he said.
- 6 "You just won a spelling contest, and you are upset? You are the best soccer player in the school and you always get A's on everything. You should be proud of yourself. Why are you so discouraged?"
- 7 Carl rolled off the couch and said, "Tim is the best speller in school and probably the world, and I beat him!"
- 8 "Nobody wins all the time and just because Tim happens to be your best friend is no reason to carry on like a wet cat."
- 9 Carl paced around the room with his shoulders slumped. "But Tim is my best friend. The one thing he does better than anybody else is spell. I don't want him to feel bad."
- 10 "Aha!" Emily said, "The sun of truth is rising on the horizon. Tim feels like he doesn't have any talents and that's really sad, but it simply is not true. There must be something Tim can do really well besides spell!"





1

Why is Carl upset about winning the spelling bee?

- Ⓐ He disappoints his teacher, Mr. Beck.
- Ⓑ He makes his sister, Emily, angry.
- Ⓒ He doesn't want Tim to feel bad.

2

In paragraph 10, what does the phrase The sun of truth is rising on the horizon mean?

- Ⓐ It is nearly daybreak outside.
- Ⓑ The facts are being discovered.
- Ⓒ Information will remain hard to get.



Continue reading “Carl’s Problem.”

- 11 “Think about what he’s good at doing,” Emily suggested.
- 12 Carl thought for a moment and then said, “He’s really good at imitating people.”
- 13 “Well, little brother, I think I have a remedy for your unhappiness,” Emily said, smiling. “Mr. Beck is having tryouts tomorrow for the school play. The main character has to imitate all the other characters in the play, so it’s perfect for Tim.”
- 14 “That is a fantastic idea, Emily. I know Tim will do a great job!”
- 15 The next day, Carl tried to persuade Tim to attend the play tryouts. Tim finally agreed, although he believed he would never get a part.
- 16 Emily was at the tryouts, to encourage Tim as well. “You do imitations of your friends all the time. Just be yourself and you will do great!”
- 17 The tryouts went as Emily had predicted. Many students wanted the part of the lead character, but Tim did superb imitations of the characters. It took only seconds for Mr. Beck to decide who would play the lead. “Tim,” he beamed, “you’re a natural born actor!”
- 18 Tim grinned from ear to ear and so did Carl.



3

How does Carl's sister help solve his conflict?

- Ⓐ She laughs at him.
- Ⓑ She gives him an idea.
- Ⓒ She enters him in a spelling bee.

Read the selection. Read each question and choose the best answer. Then mark the circle for the answer you have chosen.

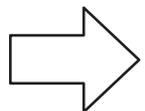
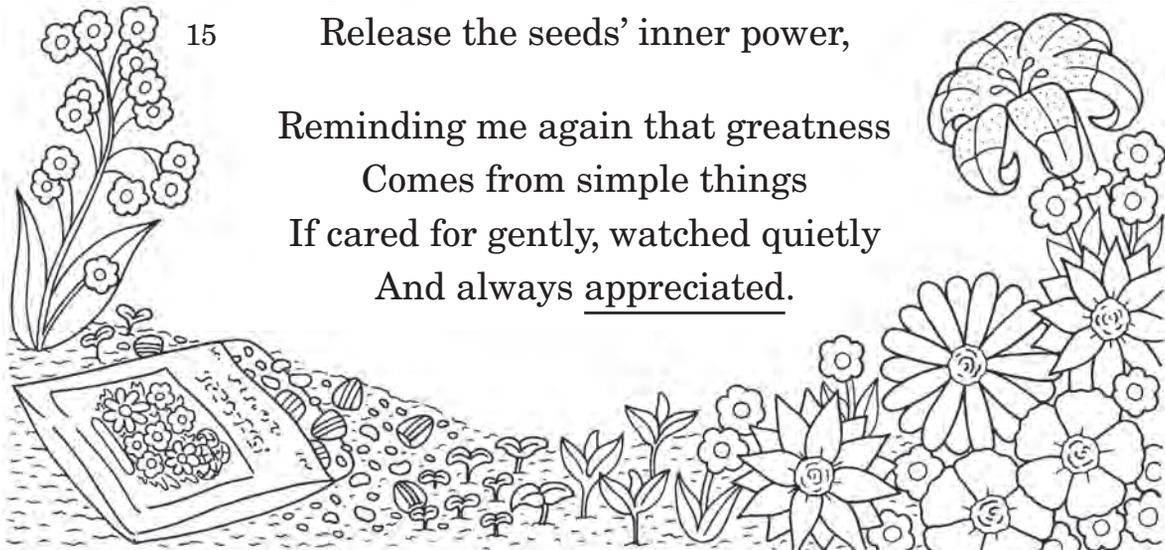
Simple Seeds

- 1 Tiny pieces of possible beauty
 Spill out and fill my palm.
 Simple seeds whose looks deceive.
 Future vines, stems, and blooms
- 5 Hidden inside a plain package.
- Tenderly placed in a cradle of soil,
 Covered up, put into darkness
 Until something deep inside,
 Something mysterious and marvelous,
- 10 Draws them back up to the sun again.

 Directing the sun from top to bottom,
 Spreading water from bottom to top
 In an ancient, primitive, endless cycle,
 Spring's cool rains and summer's

15 Release the seeds' inner power,

 Reminding me again that greatness
 Comes from simple things
 If cared for gently, watched quietly
 And always appreciated.





4

What does the word ancient mean in line 13?

- Ⓐ old
- Ⓑ worn
- Ⓒ tired

5

Which word is a synonym for appreciated as it is used in line 19?

- Ⓐ satisfied
- Ⓑ amused
- Ⓒ valued

6

“Simple Seeds” is a poem because

- Ⓐ it is written in sentences.
- Ⓑ there is punctuation.
- Ⓒ the lines follow a pattern.

7

Where could someone look for information about planting a small garden?

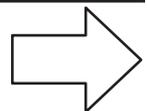
- Ⓐ an online site
- Ⓑ a dictionary
- Ⓒ an atlas



Read the selection. Read each question and choose the best answer. Then mark the circle for the answer you have chosen.

The Nurse Who Taught the Doctors

- 1 It could happen in seconds. One minute a child would be running and playing. The next minute, the youngster would be in pain and not able to move. The disease, polio, had struck.
- 2 These moments usually occurred without warning. Many children were suddenly not able to walk and run. Doctors tried easing the pain by putting the children's legs in braces and casts. They also believed the supports would strengthen the muscles. Actually, as a simple country nurse proved, the opposite was true.
- 3 Elizabeth or "Sister" Kenny, as she became known, was from Australia. She was born on a farm in 1880. Until well into her 20s, she worked on the family farm. As a teenager, she had shown an interest in medicine. While treating her broken wrist, a doctor let Kenny borrow some medical books. He taught her about the body's muscles.
- 4 When Kenny was about 30 years old, she was offered a nursing job. The job meant working in the Australian bush. The bush was a very rough land, but Kenny did not mind. Bush settlements were far from hospitals and doctors. She knew the people living there needed her.
- 5 In 1911, Kenny was called to help a little girl. The girl was in great pain and could not move. Kenny had never seen this illness. She called upon her former doctor for help. He told her the girl had polio. He also said no one knew how to treat it. "Do your best," was his only suggestion.
- 6 Kenny's best idea was to dip wool strips in warm water. She wrapped these strips around the girl's legs. Amazingly, the moist heat eased her pain. Next, Kenny helped the girl exercise her legs. Before long, the girl was walking again without any help. Six other children in the area also got polio. Kenny handled them the same way. They also began to feel better and were able to walk again.





8

Kenny's treatment of polio was different from other doctors' because she

- Ⓐ suggested that patients rest in bed.
- Ⓑ put braces on the children's legs.
- Ⓒ used moist heat and exercise.



Continue reading “The Nurse Who Taught the Doctors.”

- 7 Many doctors did not believe in Kenny’s methods because her handling of polio was so different from theirs. Many did not like that a simple nurse succeeded where they were failing. World War I interrupted Kenny’s effort to win them over.
- 8 Kenny served bravely as a nurse during the war. She performed well and earned the rank of “Sister.”
- 9 After the war, polio remained a problem. By the 1930s, it was breaking out around the world. In 1933, Sister Kenny opened a polio care center in Townsville, Queensland. Patients from around the world came to receive her care. Still, many doctors would not treat polio using her methods.
- 10 In 1940, some supporters suggested Sister Kenny travel to America. There some doctors finally listened. They helped her start the Sister Kenny Institute in Minneapolis, Minnesota. At the Institute, she showed doctors how to care for polio patients.
- 11 Sister Kenny continued her work until she passed away in 1952. That same year, a new medicine was introduced. People who took this medicine no longer worried about getting polio. By then, doctors realized her exercises had other uses. Today, they ease many kinds of bone or muscle problems. Sister Kenny had introduced the new medical field of physical therapy to the world.



9

Why were doctors unwilling to accept Kenny's methods?

- Ⓐ Kenny was not trained as a doctor.
- Ⓑ Kenny did not treat many patients with polio.
- Ⓒ Kenny's treatment did not work as well as the doctors'.

10

What should be in notes about why Elizabeth Kenny was successful?

- Ⓐ Kenny grew up on a farm in Australia.
- Ⓑ A new medicine was developed that prevented polio.
- Ⓒ She worked to educate doctors who did not believe in her.



Sample Items & Tests—Science

The following pages provide an example of a modified test item and a sample test with directions. The answer key at the end of this guide shows the alignment of each sample test item with an *Oklahoma C³* standard or objective.

Sample Item

To see how original OCCT test items are modified by the rules described in the table on pages 2–4 to serve as OMAAP test items, look at the following example.

Original Sample Item

Here is the original OCCT test item and the *Oklahoma C³ Standard* to which it aligns.

Oklahoma C³ Alignment:

Oklahoma C³ Content:

Standard 1. Properties of Matter and Energy—Describe characteristics of objects based on physical qualities such as size, shape, color, mass, temperature, and texture. Energy can produce changes in properties of objects such as changes in temperature. The student will engage in investigations that integrate the process standards and lead to the discovery of the following objectives.

Objective 1.1. Matter has physical properties that can be used for identification (e.g., color, texture, shape).

Oklahoma C³ Process:

Standard 1. Observe and Measure—Observing is the first action taken by the learner to acquire new information about an object, organism, or event. Opportunities for observation are developed through the use of a variety of scientific tools. Measurement allows observations to be quantified. The student will accomplish these objectives to meet this process standard.

Objective 1.2. Compare and/or contrast similar and/or different characteristics (e.g., color, shape, size, texture, sound, position, change) in a given set of objects, organisms, or events.

SAMPLE

Effect of Water on a Substance

Substance	Results When Added to Water
W	Substance slowly disappears
X	Substance sinks to bottom of container
Y	Substance floats on top of water
Z	Substance changes water color to red

The table show the results of testing the effect water has on four substances. Which two substances are similar because water caused a physical change to occur?

- Ⓐ** W and X
- Ⓑ** W and Z
- Ⓒ** X and Y
- Ⓓ** Y and Z

Modified Sample Item

Here is the sample test item modified to comply with OMAAP guidelines.

SAMPLE

The effect water has on three substances is shown in the table below.

Effect of Water on a Substance

Substance	Results When Added to Water
W	Substance slowly disappears
X	Substance sinks to bottom of container
Y	Substance changes water color to red

Which two substances are similar because water caused a physical change to the substance?

- Ⓐ W and X
- Ⓑ W and Y
- Ⓒ X and Y

The original item was modified in these ways:

- Answer choice D was removed.
- Row Z on the table and was removed.
- Answer choice B was altered.
- Reduced the number of different types of substances from four to three.
- Positioned art between prompt and actual question to help student focus.

Science Sample Test Directions

The sample test is a condensed version of a test, similar to the test you will be taking in this content area.

Sample Test Directions

1. Read each question to yourself.
2. Think of the best answer.
3. Answers will be marked directly in the test booklet.
4. Mark the circle for the answer you have chosen directly on the corresponding letter (as shown in the example below).

Example:

SAMPLE

The effect water has on three substances is shown in the table below.

Effect of Water on a Substance

Substance	Results When Added to Water
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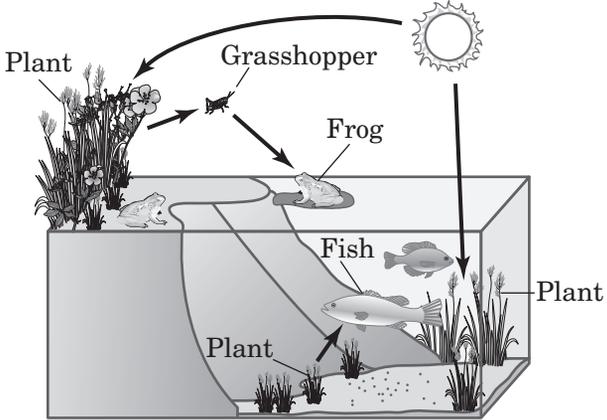
Which two substances are similar because water caused a physical change to the substance?

- A W and X
- B W and Y
- C X and Y

Science Sample Test

1

A Food Web



The diagram illustrates a food web in a pond. At the top, the Sun provides energy to plants on the shore and in the water. A grasshopper eats a plant on the shore. A frog eats the grasshopper. A fish eats the frog. Another fish eats a plant in the water. Arrows indicate the direction of energy flow: Sun to plants, plant to grasshopper, grasshopper to frog, frog to fish, and plant to fish.

Which organisms in this food web get their energy from the Sun?

- (A)** fish
- (B)** plants
- (C)** insects

2

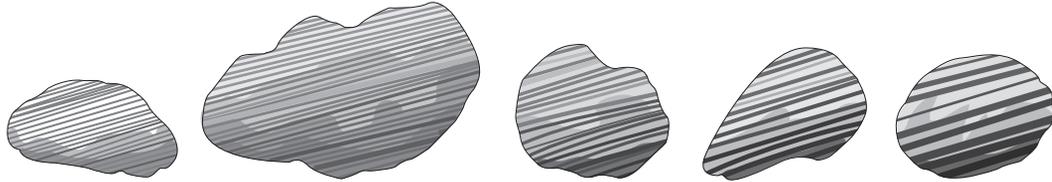


Which measurement is closest to the height of the plant?

- (A)** 17 centimeters
- (B)** 27 centimeters
- (C)** 30 centimeters

3

Jarrett used one property to place the rock samples in the order shown.



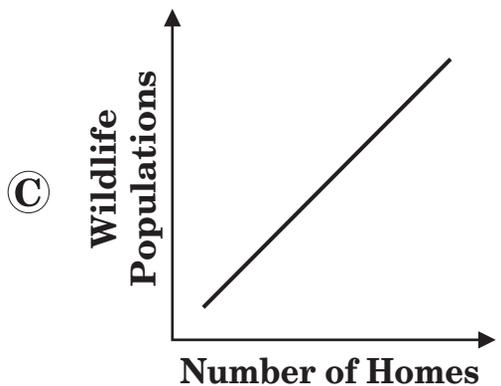
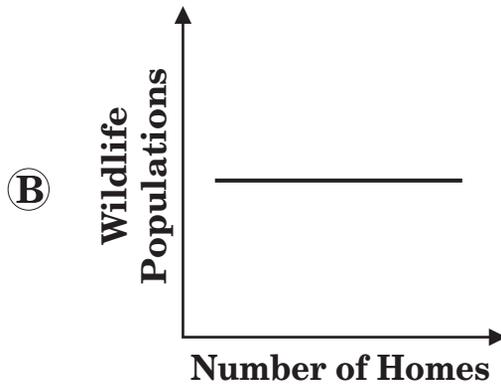
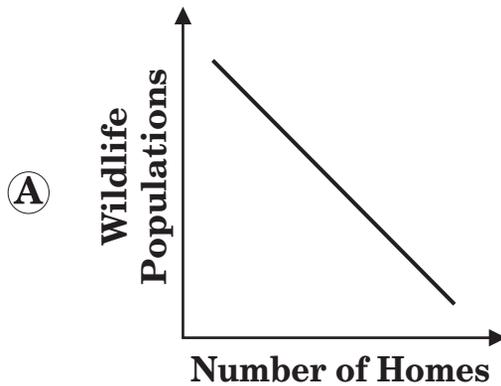
Which property of the rocks did Jarrett use?

- Ⓐ size of the rock
- Ⓑ shape of the rock
- Ⓒ thickness of the rock's layers

4

More homes are being built in places where animals live. This can cause the number of animals living in those areas to decrease.

Which graph shows this relationship?





5

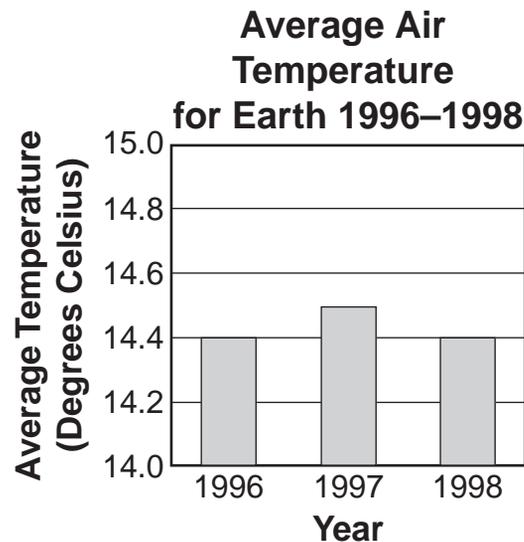
Kara did an experiment to find out whether heat causes yeast to be more active.

Which step would come last in her experiment?

- Ⓐ Move one bowl to a warmer place.
- Ⓑ Add 5 grams of sugar to each bowl.
- Ⓒ Put 120 milliliters of water into two bowls.

6

The graph shows the average air temperatures for Earth from 1996 to 1998.



During this period of time, Earth's air temperatures were

- Ⓐ going up.
- Ⓑ going down.
- Ⓒ going up and then down.

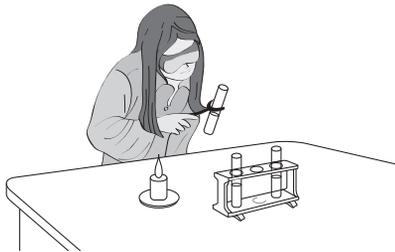
7

Which picture shows a student being unsafe in the laboratory?

A



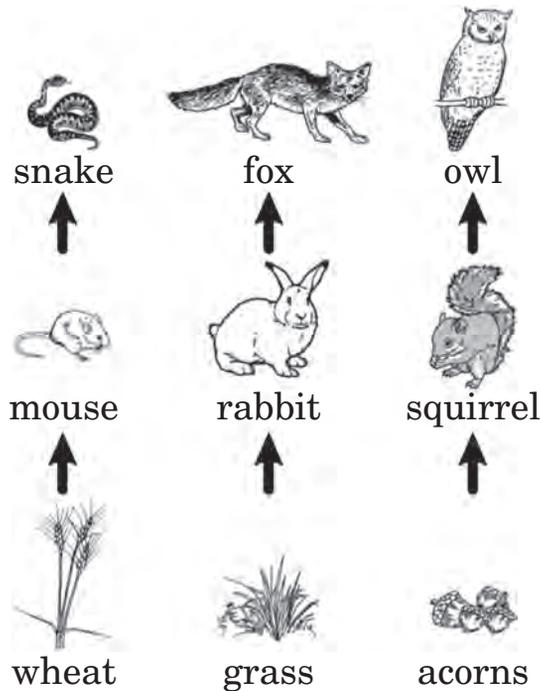
B



C



8



Characteristics of Organisms in Land Ecosystems

Producers	Organisms that produce their own energy
Consumers	Organisms that must consume other organisms for energy

Which of these organisms are only consumers?

- Ⓐ mouse, grasses, owl
- Ⓑ snake, rabbit, squirrel
- Ⓒ wheat, grasses, acorns



9

Identification Key

Step		Characteristics	Identification
1	a	clouds are low in the sky	go to 2
	b	clouds are high in the sky	go to 3
2	a	clouds are light gray and cover the sky like a blanket	stratus
	b	clouds are dark gray and hide the Sun; it may be raining continuously	nimbostratus
3	a	clouds are feathery	cirrus
	b	clouds are puffy with spaces in between like waves	cirrocumulus

Which type of clouds are high in the sky and look feathery?

- Ⓐ cirrus
- Ⓑ stratus
- Ⓒ cirrocumulus



10

Troy placed male and female fish in three tanks on January 8. Four months later, on May 8, he counted the number of male and female fish in each tank. His data are shown below.

Number of Fish in Three Tanks

Tank #	January 8		May 8	
	Males	Females	Males	Females
1	2	3	21	26
2	0	5	0	4
3	5	0	5	0

If no fish are added in the next four months, about how many fish will be in Tank 3 on September 8?

- Ⓐ 0 to 5 male fish
- Ⓑ 0 to 4 female fish
- Ⓒ 6 to 10 male and female fish



Answer Key

Mathematics		
Number	Answer	<i>OK C³</i> Objective
Sample	B	1.1
1	A	1.1
2	B	1.2
3	A	1.3
4	A	2.1b
5	C	2.2a
6	B	3.1
7	C	4.1b
8	B	4.2
9	B	5.1a
10	A	5.2b

Reading		
Number	Answer	<i>OK C³</i> Objective
Sample	B	3.2b
1	C	3.1b
2	B	1.1b
3	B	3.4b
4	A	1.1a
5	C	1.3
6	C	3.4a
7	A	5.1a
8	C	3.1b
9	A	4.1b
10	C	5.2c

Science			
Number	Answer	<i>OK C³</i> Process Objective	<i>OK C³</i> Content Objective
Sample	B	1.2	1.1
1	B	1.2	2.1
2	B	1.1	1.2
3	C	2.2	1.1
4	A	4.2	2.2
5	A	3.2	2.2
6	C	4.4	3.2
7	B	3.4	N/A
8	B	2.1	2.1
9	A	2.1	3.2
10	A	4.3	2.2

