Texas Assessment of Knowledge and Skills - Answer Key

Grade: 05
Subject: Reading
Administration: February 2006

Item Number	Correct Answer	Objective Measured	Student Expectations
01	C	01	5.10 (F)
02	F	01	5.9 (B)
03	B	01	5.10 (F)
04	G	03	5.10 (L)
05	D	04	5.11 (C)
06	F	02	5.12 (H)
07	B	01	5.9 (B)
08	F	04	5.10 (H)
09	B	04	5.10 (H)
10	G	04	5.11 (D)
11	D	03	5.10 (I)
12	F	04	5.10 (H)
13	A	01	5.9 (B)
14	F	04	5.11 (D)
15	B	01	5.10 (F)
16	F	04	5.12 (B)
17	B	03	5.10 (E)
18	J	01	5.10 (F)
19	A	01	5.10 (G)
20	H	03	5.10 (E)
21	D	02	5.12 (H)
22	H	04	5.10 (H)
23	D	03	5.10 (L)
24	H	04	5.10 (H)
25	A	01	5.10 (F)
26	F	01	5.10 (G)
27	B	01	5.10 (F)
28	F	03	5.10 (E)
29	A	04	5.12 (B)
30	G	02	5.12 (I)
31	D	01	5.10 (F)
32	G	04	5.11 (C)
33	B	04	5.11 (C)
34	H	04	5.12 (B)
35	B	03	5.10 (E)
36	H	02	5.12 (H)
37	A	02	5.12 (I)
38	J	02	5.12 (I)
39	B	02	5.12 (H)
40	F	01	5.10 (G)
41	D	03	5.10 (E)
42	J	02	5.12 (H)

Grade 5 Reading

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Grade 5 Reading at http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html.

Objective 1: The student will demonstrate a basic understanding of culturally diverse written texts.

(5.9) **Reading/vocabulary development.** The student acquires an extensive vocabulary through reading and systematic word study. The student is expected to

(B) draw on experiences to bring meanings to words in context such as interpreting figurative language and multiple-meaning words (4-5); and

(D) determine meanings of derivatives by applying knowledge of the meanings of root words such as *like, pay*, or *happy* and affixes such as *dis-, pre-*, and *un-* (4-8).

(5.10) **Reading/comprehension.** The student comprehends selections using a variety of strategies. The student is expected to

(F) determine a text's main (or major) ideas and how those ideas are supported with details (4-8); and

(G) paraphrase and summarize text to recall, inform, or organize ideas (4-8).

Objective 2: The student will apply knowledge of literary elements to understand culturally diverse written texts.

(5.12) **Reading/text structures/literary concepts.** The student analyzes the characteristics of various types of texts (genres). The student is expected to

(H) analyze characters, including their traits, motivations, conflicts, points of view, relationships, and changes they undergo (4-8); and

(I) recognize and analyze story plot, setting, and problem resolution (4-8).

Objective 3: The student will use a variety of strategies to analyze culturally diverse written texts.

(5.10) **Reading/comprehension.** The student comprehends selections using a variety of strategies. The student is expected to

(E) use the text's structure or progression of ideas such as cause and effect or chronology to locate and recall information (4-8);

(I) find similarities and differences across texts such as in treatment, scope, or organization (4-8); and

(L) represent text information in different ways such as in outline, timeline, or graphic organizer (4-8).

Grade 5 Reading (continued)

(5.12) **Reading/text structures/literary concepts.** The student analyzes the characteristics of various types of texts (genres). The student is expected to

(A) judge the internal consistency or logic of stories and texts such as "Would this character do this?"; "Does this make sense here?" (4-5);

(C) identify the purposes of different types of texts such as to inform, influence, express, or entertain (4-8);

(E) compare communication in different forms such as [contrasting a dramatic performance with a print version of the same story or] comparing story variants (2-8); and

(J) describe how the author's perspective or point of view affects the text (4-8).

Objective 4: The student will apply critical-thinking skills to analyze culturally diverse written texts.

(5.10) **Reading/comprehension.** The student comprehends selections using a variety of strategies. The student is expected to

(H) draw inferences such as conclusions or generalizations and support them with text evidence [and experience] (4-8); and

(J) distinguish fact and opinion in various texts (4-8).

(5.11) **Reading/literary response.** The student expresses and supports responses to various types of texts. The student is expected to

(C) support responses by referring to relevant aspects of text [and his/her own experiences] (4-8); and

(D) connect, compare, and contrast ideas, themes, and issues across text (4-8).

(5.12) **Reading/text structures/literary concepts.** The student analyzes the characteristics of various types of texts (genres). The student is expected to

(B) recognize that authors organize information in specific ways (4-5).

Texas Assessment of Knowledge and Skills - Answer Key

Grade: 05
Subject: Mathematics
Administration: April 2006

Item Number	Correct Answer	Objective Measured	Student Expectations
01	D	05	5.13 (A)
02	H	03	5.7 (A)
03	B	01	5.4 (A)
04	G	06	5.14 (A)
05	A	02	5.5 (C)
06	H	01	5.3 (E)
07	B	06	5.14 (A)
08	J	04	5.11 (A)
09	D	04	5.10 (A)
10	G	04	5.11 (A)
11	D	01	5.1 (A)
12	F	01	5.3 (D)
13	A	02	5.6 (A)
14	H	02	5.5 (B)
15	A	03	5.7 (A)
16	G	03	5.9 (A)
17	A	03	5.8 (A)
18	J	04	5.11 (B)
19	C	05	5.12 (B)
20	F	04	5.11 (B)
21	25	02	5.5 (A)
22	H	02	5.5 (B)
23	B	05	5.13 (B)
24	J	06	5.15 (B)
25	C	06	5.14 (B)
26	F	06	5.14 (C)
27	C	01	5.2 (B)
28	F	03	5.8 (B)
29	C	02	5.5 (A)
30	G	04	5.11 (B)
31	A	04	5.10 (A)
32	H	06	5.14 (C)
33	B	01	5.3 (C)
34	G	05	5.12 (A)
35	D	06	5.16 (A)
36	F	02	5.5 (C)
37	D	01	5.2 (A)
38	G	01	5.1 (B)
39	D	01	5.2 (C)
40	H	06	5.14 (B)
41	A	03	5.9 (A)
42	G	03	5.7 (B)
43	C	01	5.3 (B)
44	G	01	5.3 (A)

Grade 5 Mathematics

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Grade 5 Mathematics at http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html.

Objective 1: The student will demonstrate an understanding of numbers, operations, and quantitative reasoning.

(5.1) **Number, operation, and quantitative reasoning.** The student uses place value to represent whole numbers and decimals. The student is expected to

(A) use place value to read, write, compare, and order whole numbers through the billions place; and

(B) use place value to read, write, compare, and order decimals through the thousandths place.

(5.2) **Number, operation, and quantitative reasoning.** The student uses fractions in problem-solving situations. The student is expected to

(A) generate equivalent fractions;

(B) compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators; and

(C) use models to relate decimals to fractions that name tenths, hundredths, and thousandths.

(5.3) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to

(A) use addition and subtraction to solve problems involving whole numbers and decimals;

(B) use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology);

(C) use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology);

(D) identify prime factors of a whole number and common factors of a set of whole numbers; and

(E) model and record addition and subtraction of fractions with like denominators in problem-solving situations.

(5.4) **Number, operation, and quantitative reasoning.** The student estimates to determine reasonable results. The student is expected to

(A) round whole numbers and decimals through tenths to approximate reasonable results in problem situations; and

(B) estimate to solve problems where exact answers are not required.

Grade 5 Mathematics (continued)

Objective 2: The student will demonstrate an understanding of patterns, relationships, and algebraic reasoning.

(5.5) **Patterns, relationships, and algebraic thinking.** The student makes generalizations based on observed patterns and relationships. The student is expected to

(A) use [concrete objects or] pictures to make generalizations about determining all possible combinations;

(B) use lists, tables, charts, and diagrams to find patterns and make generalizations, such as a procedure for determining equivalent fractions; and

(C) identify prime and composite numbers using [concrete] models and patterns in factor pairs.

(5.6) **Patterns, relationships, and algebraic thinking.** The student describes relationships mathematically. The student is expected to

(A) select from and use diagrams and number sentences to represent real-life situations.

Objective 3: The student will demonstrate an understanding of geometry and spatial reasoning.

(5.7) **Geometry and spatial reasoning.** The student generates geometric definitions using critical attributes. The student is expected to

(A) identify critical attributes, including parallel, perpendicular, and congruent parts of geometric shapes and solids; and

(B) use critical attributes to define geometric shapes or solids.

(5.8) **Geometry and spatial reasoning.** The student models transformations. The student is expected to

(A) sketch the results of translations, rotations, and reflections; and

(B) describe the transformation that generates one figure from the other when given two congruent figures.

(5.9) **Geometry and spatial reasoning.** The student recognizes the connection between ordered pairs of numbers and locations of points on a plane. The student is expected to

(A) locate and name points on a coordinate grid using ordered pairs of whole numbers.

Objective 4: The student will demonstrate an understanding of the concepts and uses of measurement.

(5.10) **Measurement**. The student selects and uses appropriate units and procedures to measure volume. The student is expected to

(A) measure volume using [concrete] models of cubic units.

Grade 5 Mathematics (continued)

(5.11) **Measurement.** The student applies measurement concepts. The student is expected to

(A) measure to solve problems involving length (including perimeter), weight, capacity, time, temperature, and area; and

(B) describe numerical relationships between units of measure within the same measurement system, such as an inch is one-twelfth of a foot.

Objective 5: The student will demonstrate an understanding of probability and statistics.

(5.12) **Probability and statistics.** The student describes and predicts the results of a probability experiment. The student is expected to

(A) use fractions to describe the results of an experiment; and

(B) use experimental results to make predictions.

(5.13) **Probability and statistics.** The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to

(A) use tables of related number pairs to make line graphs;

(B) describe characteristics of data presented in tables and graphs, including the shape and spread of the data and the middle number; and

(C) graph a given set of data using an appropriate graphical representation, such as a picture or line.

Objective 6: The student will demonstrate an understanding of the mathematical processes and tools used in problem solving.

(5.14) **Underlying processes and mathematical tools.** The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to

(A) identify the mathematics in everyday situations;

(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; and

(C) select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.

(5.15) **Underlying processes and mathematical tools.** The student communicates about Grade 5 mathematics using informal language. The student is expected to

(B) relate informal language to mathematical language and symbols.

(5.16) **Underlying processes and mathematical tools.** The student uses logical reasoning to make sense of his or her world. The student is expected to

(A) make generalizations from patterns or sets of examples and nonexamples.

Texas Assessment of Knowledge and Skills - Answer Key

Grade: 05
Subject: Science
Administration: April 2006

Item Number	Correct Answer	Objective Measured	Student Expectations
01	B	02	5.6 (C)
02	H	03	5.8 (A)
03	B	01	5.3 (B)
04	F	02	5.10 (A)
05	D	01	5.1 (A)
06	F	02	4.6 (A)
07	C	03	5.7 (B)
08	G	02	5.5 (B)
09	A	03	5.7 (D)
10	G	01	5.3 (A)
11	C	02	3.8 (A)
12	F	04	3.11 (A)
13	D	03	5.8 (B)
14	G	01	5.1 (A)
15	A	02	5.10 (A)
16	H	02	5.9 (A)
17	A	03	5.8 (D)
18	J	01	5.2 (C)
19	B	03	5.8 (C)
20	6	01	5.2 (C)
21	C	04	3.6 (B)
22	J	04	5.5 (B)
23	B	04	5.11 (C)
24	J	04	5.11 (B)
25	C	04	5.6 (A)
26	G	03	5.5 (B)
27	C	03	5.7 (C)
28	F	04	4.11 (C)
29	B	03	5.5 (B)
30	J	04	3.6 (B)
31	A	01	5.3 (C)
32	G	01	5.2 (A)
33	C	01	5.4 (A)
34	F	04	5.12 (A)
35	B	01	5.1 (A)
36	J	01	5.2 (D)
37	B	02	5.5 (A)
38	H	01	5.4 (A)
39	A	02	2.9 (A)
40	G	01	5.3 (B)

Grade 5 Science

For a more complete description of the objectives measured, please refer to the Revised TAKS Information Booklet for Grade 5 Science at http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html.

Objective 1: The student will demonstrate an understanding of the nature of science.

(3.1, 4.1, 5.1) **Scientific processes.** The student conducts field and laboratory investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to

(A) demonstrate safe practices during field and laboratory investigations.

(3.2, 4.2, 5.2) **Scientific processes.** The student uses scientific methods during field and laboratory investigations. The student is expected to

(A) plan and implement descriptive and simple experimental investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology;

(B) collect information by observing and measuring;

(C) analyze and interpret information to construct reasonable explanations from direct and indirect evidence;

(D) communicate valid conclusions; and

(E) construct simple graphs, tables, maps, and charts using tools [including computers] to organize, examine, and evaluate information.

(3.3, 4.3, 5.3) **Scientific processes.** The student uses critical thinking and scientific problem solving to make informed decisions. The student is expected to

(A) analyze, review, [and critique] scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information;

(B) draw inferences based on information [related to promotional materials] for products and services; and

(C) represent the natural world using models and identify their limitations.

(3.4, 4.4, 5.4) **Scientific processes.** The student knows how to use a variety of tools and methods to conduct science inquiry. The student is expected to

(A) collect and analyze information using tools including calculators, microscopes, [cameras, sound recorders, computers,] hand lenses, rulers, thermometers, compasses, balances, [hot plates,] meter sticks, timing devices, magnets, collecting nets, and safety goggles (5.4).

Objective 2: The student will demonstrate an understanding of the life sciences.

(2.9) **Science concepts.** The student knows that living organisms have basic needs. The student is expected to

(A) identify the external characteristics of different kinds of plants and animals that allow their needs to be met; and

(B) compare and give examples of the ways living organisms depend on each other and on their environments.

(3.8) **Science concepts.** The student knows that living organisms need food, water, light, air, a way to dispose of waste, and an environment in which to live. The student is expected to

(A) observe and describe the habitats of organisms within an ecosystem;

(B) observe and identify organisms with similar needs that compete with one another for resources such as oxygen, water, food, or space;

(C) describe environmental changes in which some organisms would thrive, become ill, or perish; and

(D) describe how living organisms modify their physical environment to meet their needs such as beavers building a dam or humans building a home.

(4.6) **Science concepts.** The student knows that change can create recognizable patterns. The student is expected to

(A) identify patterns of change such as in weather, metamorphosis, and objects in the sky.

(5.5) **Science concepts.** The student knows that a system is a collection of cycles, structures, and processes that interact. The student is expected to

(A) describe some cycles, structures, and processes that are found in a simple system; and

(B) describe some interactions that occur in a simple system.

(5.6) **Science concepts.** The student knows that some change occurs in cycles. The student is expected to

(C) describe and compare life cycles of plants and animals.

(4.8, 5.9) **Science concepts.** The student knows that adaptations may increase the survival of members of a species. The student is expected to

(A) compare the adaptive characteristics of species that improve their ability to survive and reproduce in an ecosystem (5.9);

(B) analyze and describe adaptive characteristics that result in an organism's unique niche in an ecosystem (5.9); and

(C) predict some adaptive characteristics required for survival and reproduction by an organism in an ecosystem (5.9).

(3.10, 4.9, 5.10) **Science concepts.** The student knows that likenesses between offspring in plants and parents can be inherited or learned. The student is expected to

(A) identify traits that are inherited from parent to offspring in plants and animals (5.10); and

(B) give examples of learned characteristics that result from the influence of the environment (5.10).

Grade 5 Science (continued)

Objective 3: The student will demonstrate an understanding of the physical sciences.

(3.6) **Science concepts.** The student knows that forces cause change. The student is expected to

(A) measure and record changes in the position and direction of the motion of an object to which a force such as a push or pull has been applied.

(4.6) **Science concepts.** The student knows that change can create recognizable patterns. The student is expected to

(A) identify patterns of change such as in weather, metamorphosis, and objects in the sky.

(5.5) **Science concepts.** The student knows that a system is a collection of cycles, structures, and processes that interact. The student is expected to

(A) describe some cycles, structures, and processes that are found in a simple system; and

(B) describe some interactions that occur in a simple system.

(3.7, 4.7, 5.7) **Science concepts.** The student knows that matter has physical properties. The student is expected to

(A) classify matter based on its physical properties including magnetism, physical state, and the ability to conduct or insulate heat, electricity, and sound (5.7);

(B) demonstrate that some mixtures maintain the physical properties of their ingredients (5.7);

(C) identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving sugar in water (5.7); and

(D) observe and measure characteristic properties of substances that remain constant such as boiling points and melting points (5.7).

(5.8) **Science concepts.** The student knows that energy occurs in many forms. The student is expected to

(A) differentiate among forms of energy including light, heat, electrical, and solar energy;

(B) identify and demonstrate everyday examples of how light is reflected, such as from tinted windows, and refracted, such as in cameras, telescopes, and eyeglasses;

(C) demonstrate that electricity can flow in a circuit and can produce heat, light, sound, and magnetic effects; and

(D) verify that vibrating an object can produce sound.

Objective 4: The student will demonstrate an understanding of the earth sciences.

(3.6) **Science concepts.** The student knows that forces cause change. The student is expected to

(B) identify that the surface of the Earth can be changed by forces such as earthquakes and glaciers.

Grade 5 Science (continued)

(4.6) **Science concepts.** The student knows that change can create recognizable patterns. The student is expected to

(A) identify patterns of change such as in weather, metamorphosis, and objects in the sky.

(5.5) **Science concepts.** The student knows that a system is a collection of cycles, structures, and processes that interact. The student is expected to

(A) describe some cycles, structures, and processes that are found in a simple system; and

(B) describe some interactions that occur in a simple system.

(5.6) **Science concepts.** The student knows that some change occurs in cycles. The student is expected to

(A) identify events and describe changes that occur on a regular basis such as in daily, weekly, lunar, and seasonal cycles; and

(B) identify the significance of the water, carbon, and nitrogen cycles.

(4.10, 5.11) **Science concepts**. The student knows that certain past events affect present and future events. The student is expected to

(A) identify and observe actions that require time for changes to be measurable, including growth, erosion, dissolving, weathering, and flow;

(B) draw conclusions about "what happened before" using data such as from tree-growth rings and sedimentary rock sequences (5.10); and

(C) identify past events that led to the formation of the Earth's renewable, non-renewable, and inexhaustible resources (5.10).

(3.11, 4.11, 5.12) **Science concepts.** The student knows that the natural world includes earth materials and objects in the sky. The student is expected to

(A) identify and describe the importance of earth materials including rocks, soil, water, and gases of the atmosphere in the local area and classify them as renewable, nonrenewable, or inexhaustible resources (3.11);

(C) identify the planets in our solar system and their position in relation to the Sun (3.11);

(D) describe the characteristics of the Sun (3.11);

(A) test properties of soils including texture, capacity to retain water, and ability to support life (4.11);

(B) summarize the effects of the oceans on land (4.11);

(C) identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle (4.11);

(A) interpret how land forms are the result of a combination of constructive and destructive forces such as deposition of sediment and weathering (5.12); and

(C) identify the physical characteristics of the Earth and compare them to the physical characteristics of the moon (5.12).