Test Code	Year	Form
3051	23	4
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2023 *STAAR Released* Blueprint
Grade 5 Science
Spring, 2023–2024

SE Descriptions	Reporting Category	TEKS/SE	R or S	No. of Items	% of Test
1. Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to predict, observe, and record changes in the state of matter caused by heating or cooling such as ice becoming liquid water, condensation forming on the outside of a glass of ice water, or liquid water being heated to the point of becoming water vapor.	1	3.5C	S	1	3%
2. Force, motion, and energy. The student knows that forces cause change and that energy exists in many forms. The student is expected to demonstrate and observe how position and motion can be changed by pushing and pulling objects such as swings, balls, and wagons.	2	3.6B	S	1	3%
3. Organisms and environments. The student knows and can describe patterns, cycles, systems, and relationships within the environments. The student is expected to observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem.	4	3.9A	S	1	3%
4. Organisms and environments. The student knows that organisms undergo similar life processes and have structures that help them survive within their environments. The student is expected to investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady beetles.	4	3.10B	S	1	3%
5. Earth and space. The students know that Earth consists of useful resources and its surface is constantly changing. The student is expected to examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants.	3	4.7A	S	1	3%
6. Earth and space. The students know that Earth consists of useful resources and its surface is constantly changing. The student is expected to identify and classify Earth's renewable resources, including air, plants, water, and animals; and nonrenewable resources, including coal, oil, and natural gas; and the importance of conservation.	3	4.7C	S	1	3%
7. Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to measure, record, and predict changes in weather.	3	4.8A	S	1	3%
8. Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process.	3	4.8B	S	1	3%
9. Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to collect	3	4.8C	S	1	3%

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and analyze data to identify sequences and predict patterns of change in shadows, seasons, and the observable appearance of the Moon over time.					
10. **Matter and energy.** The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to classify matter based on measurable, testable, and observable physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating using water as a reference point), solubility in water, and the ability to conduct or insulate thermal energy or electric energy.	1	5.5A	R	2	6%
11. **Matter and energy.** The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to demonstrate that some mixtures maintain physical properties of their ingredients such as iron filings and sand and sand and water.	1	5.5B	S	1	3%
12. **Matter and energy.** The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student is expected to identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving salt in water or adding lemon juice to water.	1	5.5C	S	1	3%
13. **Force, motion, and energy.** The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy.	2	5.6A	R	1	3%
14. **Force, motion, and energy.** The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to demonstrate that the flow of electricity in closed circuits can produce light, heat, or sound.	2	5.6B	R	2	6%
15. **Force, motion, and energy.** The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to demonstrate that light travels in a straight line until it strikes an object and is reflected or travels through one medium to another and is refracted.	2	5.6C	R	2	6%
16. **Force, motion, and energy.** The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems. The student is expected to design a simple experimental investigation that tests the effect of force on an object.	2	5.6D	S	1	3%
17. **Earth and space.** The student knows Earth's surface is constantly changing and consists of useful resources. The student is expected to explore the processes that led to the formation of sedimentary rocks and fossil fuels.	3	5.7A	R	2	6%
18. **Earth and space.** The student knows Earth's surface is constantly changing and consists of useful resources. The student is expected to recognize how landforms such as deltas, canyons, and sand dunes are the result of changes to Earth's surface by wind, water, or ice.	3	5.7B	R	1	3%
19. **Earth and space.** The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system. The student is expected to demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky.	3	5.8C	R	1	3%

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20. Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components.	4	5.9A	R	2	6%
21. Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers.	4	5.9B	R	2	6%
22. Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways.	4	5.9C	S	1	3%
23. Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to identify fossils as evidence of past living organisms and the nature of the environments at the time using models.	4	5.9D	S	1	3%
24. Organisms and environments. The student knows that organisms have structures and behaviors that help them survive within their environments. The student is expected to compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals.	4	5.10A	R	2	6%
25. Organisms and environments. The student knows that organisms have structures and behaviors that help them survive within their environments. The student is expected to differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle.	4	5.10B	R	1	3%

Item Types by Point						
	1-point questions (MC & TE Items)	25	**Total**	**R**	18	56%
	2-point questions (TE Items)	7		**S**	14	44%
	Total	39		**All**	**32**	100%

Note: ***R*** = *Readiness Standard*, ***S*** = *Supporting Standard*. Percentages are rounded to the nearest whole number.

Reporting Categories: 1. Matter and Energy
2. Force, Motion, and Energy
3. Earth and Space
4. Organisms and Environments

Scientific Investigation and Reasoning Skills Eligible for Assessment	
Descriptions	**SE**
1. Demonstrate safe practices and the use of safety equipment as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations using safety equipment, including safety goggles or chemical splash goggles, as appropriate, and gloves, as appropriate.	5.1A
2. Make informed choices in the use and conservation of natural resources and reusing and recycling of materials.	5.1B
3. Describe, plan, and implement simple experimental investigations testing one variable.	5.2A
4. Ask well defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology.	5.2B
5. Collect and record information using detailed observations and accurate measuring.	5.2C
6. Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.	5.2D
7. Demonstrate that repeated investigations may increase the reliability of results.	5.2E
8. Communicate valid conclusions in both written and verbal forms.	5.2F
9. Construct appropriate simple graphs, tables, maps, and charts using technology, including computers, to organize, examine, and evaluate information.	5.2G
10. Analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing.	5.3A
11. Draw or develop a model that represents how something that cannot be seen such as the Sun, Earth, and Moon system and formation of sedimentary rock works or looks.	5.3B
12. Connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.	5.3C
13. The student is expected to collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices; and materials to support observations of habitats or organisms such as terrariums and aquariums.	5.4A

DAN/STAAR Tech-Enhanced (TE) Items Comparison

DAN TE Item Type	Definition	STAAR TE Item Type
Multiple Choice (**MC**)	Requires students to select one correct answer from several answer choices.	Multiple Choice
Multiple Response (**MR**)	Requires students to select two or more correct answers from several answer choices.	Multiple Select
Graphic Gap Match (**GGM**)	Requires students to drag and drop images into or next to the correct answer box(es).	Drag and Drop
Gap Match (**GM**)	Requires students to drag and drop words, phrases, or numbers into or next to the correct answer box(es).	Drag and Drop
Constructed Response (**CR**)	Student gives a brief explanation in their own words to demonstrate their understanding of content.	Short Constructed Response
Multipart (**MP**)	Requires students to answer a two-part question in which Part B provides text evidence for the answer in Part A. Part A and B can be a combination of Multiple Choice and Multiple Response items.	Multipart