

**STAAR CONNECTION™**

**Diagnostic Series™**

Science

**1**

teacher

**(revised for streamlined TEKS)**



**KAMICO®**

**Instructional Media, Inc.**

# STAAR CONNECTION™

Science  
**1**  
teacher

## Diagnostic Series™

XXIX/i/MMXXII

Version 2

**(revised for streamlined TEKS)**



**KAMICO®**

Instructional Media, Inc.

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**KAMICO® Instructional Media, Inc.**  
**STAAR CONNECTION™**  
**Introduction**

KAMICO® Instructional Media's program is validated by scientifically based research. **STAAR CONNECTION™ Diagnostic Series™** and **Developmental Series™** can be used in tandem to ensure mastery of Texas reporting categories and TEKS. The *Diagnostic Series™* consists of a bank of assessments. Each assessment covers a mixture of reporting categories and TEKS. This research-based format provides continual reinforcement for and ensures retention of mastered concepts. To take full advantage of this series, administer an assessment to students. After they have completed the assessment, use it as an instructional tool. Go over each item with the class, discussing all correct and incorrect answers. Then, use the assessment as a diagnostic tool to determine a standard for which students need remediation. Find that standard in the *Developmental Series™*.

Each book in the *STAAR CONNECTION Developmental Series™* consists of isolated activities and assessments to allow for the development of specific TEKS. For every TEKS, there is at least one individual or group activity. The activities provide a fun, challenging, yet nonthreatening, way to develop mastery of the TEKS. In addition to these activities, each *Developmental Series™* book has assessments on isolated standards to be used to identify mastery or the need for further skill development or reinforcement. Continue to alternate between the *STAAR CONNECTION™ Diagnostic Series™* and the *Developmental Series™*.

KAMICO's **DATA CONNECTION®** software prints student answer sheets on plain paper using a standard laser printer, scans answer sheets using a TWAIN-compliant scanner, scores assessments, and disaggregates student academic data, showing which goals and objectives are mastered and which goals and objectives are in need of reinforcement. The software is preprogrammed to work with all KAMICO® assessments. It is easily customized to work with other instructional materials and assessments as well as teacher-, school-, district-, or state-created assessments. **DATA CONNECTION®** analyzes academic data from individual students, classes, grade levels, and demographic groups. Reports are presented in tabular and graphic form. Item analysis is provided to help determine the most effective method of instruction.

KAMICO® Instructional Media, Inc., supports efforts to ensure adequate yearly progress and eliminate surprises in high-stakes test results.

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**KAMICO® Instructional Media, Inc.**  
**STAAR CONNECTION™**  
**Diagnostic Series™**  
**Grade 1 Science**  
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**NOTE:**

TEA advises that the Scientific Investigation and Reasoning Skills "will be incorporated into at least 40% of the test questions in reporting categories 1-4 and will be identified along with content standards." KAMICO® has followed these guidelines. However, to ensure thorough coverage of the Scientific Investigation and Reasoning Skills, KAMICO® writers have included extra questions over just those skills to ensure student mastery.



**Grade 1 Science**  
**Texas Essential Knowledge and Skills**

**Scientific Investigation and Reasoning Skills**

- (1.1) **Scientific investigation and reasoning:** The student conducts classroom and outdoor investigations following home and school safety procedures and uses environmentally appropriate and responsible practices. The student is expected to
- (A) identify, discuss, and demonstrate safe and healthy practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately; and
  - (B) identify and learn how to use natural resources and materials, including conservation and reuse or recycling of paper, plastic, and metals.
- (1.2) **Scientific investigation and reasoning:** The student develops abilities to ask questions and seek answers in classroom and outdoor investigations. The student is expected to
- (A) ask questions about organisms, objects, and events observed in the natural world;
  - (B) plan and conduct simple descriptive investigations;
  - (C) collect data and make observations using simple tools;
  - (D) record and organize data using pictures, numbers, and words; and
  - (E) communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations.

- (1.3) **Scientific investigation and reasoning:** The student knows that information and critical thinking are used in scientific problem solving. The student is expected to
- (A) identify and explain a problem and propose a solution;
  - (B) make predictions based on observable patterns; and
  - (C) describe what scientists do.
- (1.4) **Scientific investigation and reasoning:** The student uses age-appropriate tools and models to investigate the natural world. The student is expected to
- (A) collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles or chemical splash goggles, as appropriate; timing devices; non-standard measuring items; weather instruments such as demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums; and
  - (B) measure and compare organisms and objects using non-standard units.

**Reporting Category 1:  
Matter and Energy**

- (1.5) **Matter and energy:** The student knows that objects have properties and patterns. The student is expected to
- (A) classify objects by observable properties such as larger and smaller, heavier and lighter, shape, color, and texture;
  - (B) predict and identify changes in materials caused by heating and cooling; and
  - (C) classify objects by the materials from which they are made.

## **Reporting Category 2: Force, Motion, and Energy**

- (1.6) **Force, motion, and energy:** The student knows that force, motion, and energy are related and are a part of everyday life. The student is expected to
- (A) identify and discuss how different forms of energy such as light, thermal, and sound are important to everyday life;
  - (B) predict and describe how a magnet can be used to push or pull an object; and
  - (C) demonstrate and record the ways that objects can move such as in a straight line, zig zag, up and down, back and forth, round and round, and fast and slow.

## **Reporting Category 3: Earth and Space**

- (1.7) **Earth and space:** The student knows that the natural world includes rocks, soil, and water that can be observed in cycles, patterns, and systems. The student is expected to
- (A) observe, compare, describe, and sort components of soil by size, texture, and color;
  - (B) identify and describe a variety of natural sources of water, including streams, lakes, and oceans; and
  - (C) identify how rocks, soil, and water are used to make products.
- (1.8) **Earth and space:** The student knows that the natural world includes the air around us and objects in the sky. The student is expected to
- (A) record weather information, including relative temperature such as hot or cold, clear or cloudy, calm or windy, and rainy or icy;
  - (B) observe and record changes in the appearance of objects in the sky such as the Moon and stars, including the Sun;
  - (C) identify characteristics of the seasons of the year and day and night; and
  - (D) demonstrate that air is all around us and observe that wind is moving air.

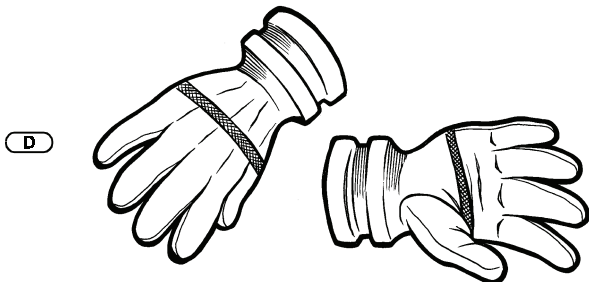
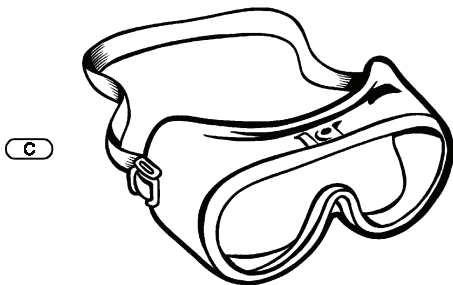
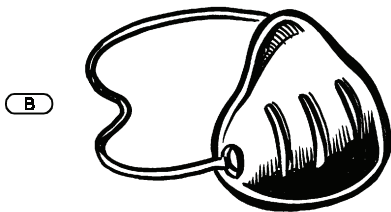


## **Reporting Category 4: Organisms and Environments**

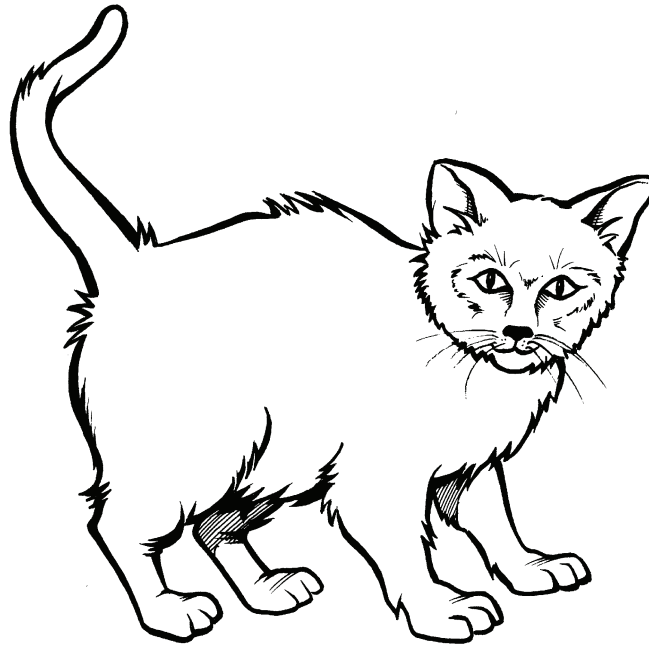
- (1.9) **Organisms and environments:** The student knows that the living environment is composed of relationships between organisms and the life cycles that occur. The student is expected to
- (A) sort and classify living and nonliving things based upon whether they have basic needs and produce offspring;
  - (B) analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver; and
  - (C) gather evidence of interdependence among living organisms such as energy transfer through food chains or animals using plants for shelter.
- (1.10) **Organisms and environments:** The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to
- (A) investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats;
  - (B) identify and compare the parts of plants;
  - (C) compare ways that young animals resemble their parents; and
  - (D) observe and record life cycles of animals such as a chicken, frog, or fish.

Name \_\_\_\_\_ Date \_\_\_\_\_

1 Kip is going to use chemicals in science class. What will protect Kip's eyes?



2 Kay has a new kitten.



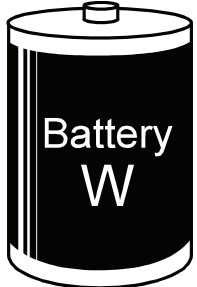

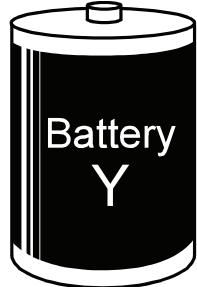

Look at the three questions.

1. How many paws does Kay's kitten have?
2. Why does Kay's kitten have claws?
3. Does Kay's kitten have whiskers?

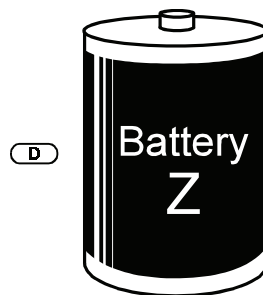
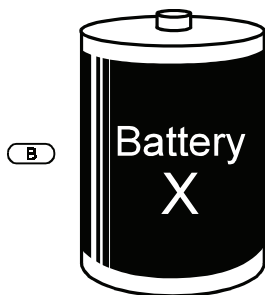
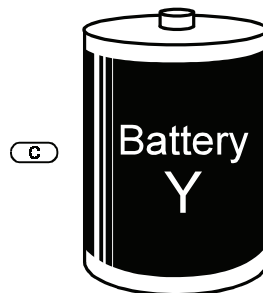
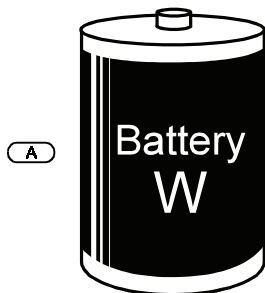
Which question **cannot** be answered by looking at Kay's kitten?

- F question 1
- G question 2
- H question 3

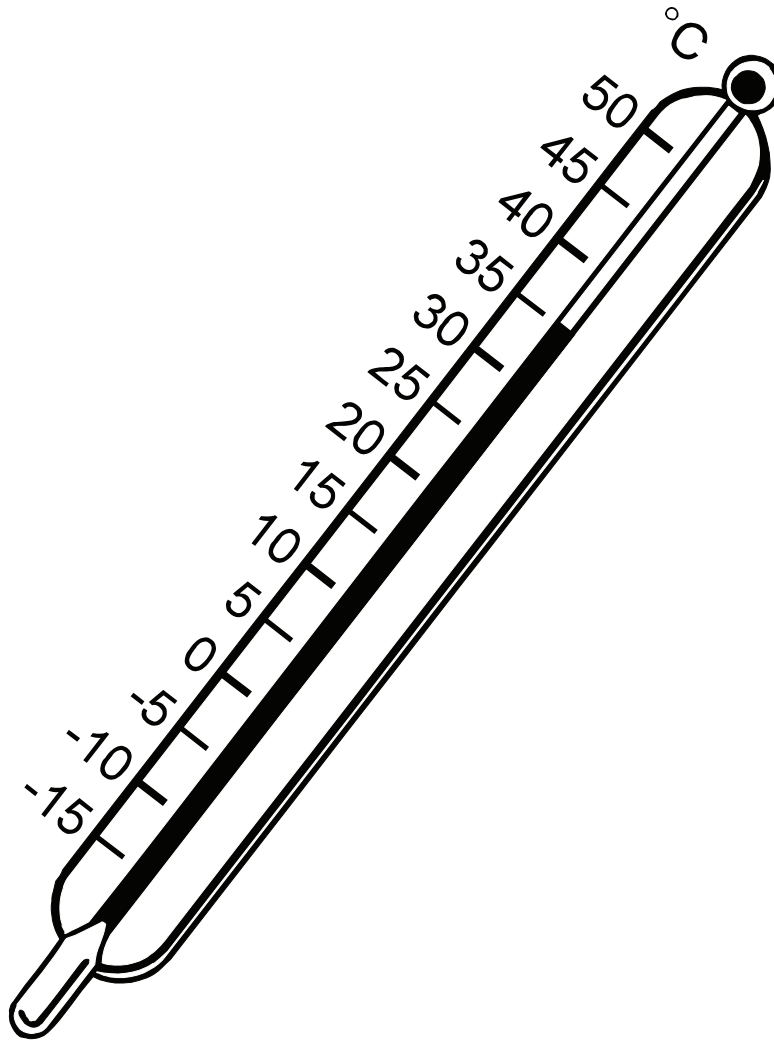
- 3 Tom's flashlight batteries keep running out. The table shows how long different battery brands last in a flashlight.

<b>Battery Brand</b>				
<b>Lasts How Long?</b>	10 hours	9 hours	11 hours	12 hours

Which battery brand will let Tom use a flashlight for the longest time?



4 Look at the thermometer.



What is the temperature?

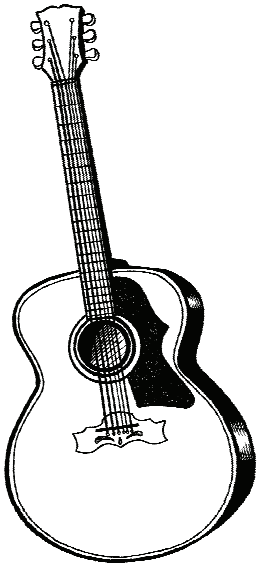
F 30°C

G 35°C

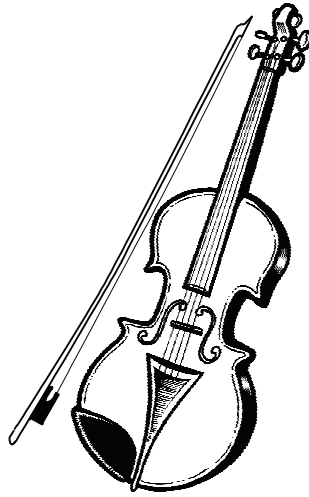
H 45°C

J 40°C

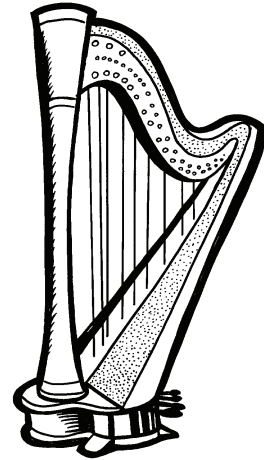
5 Look at the musical instruments.



guitar



violin



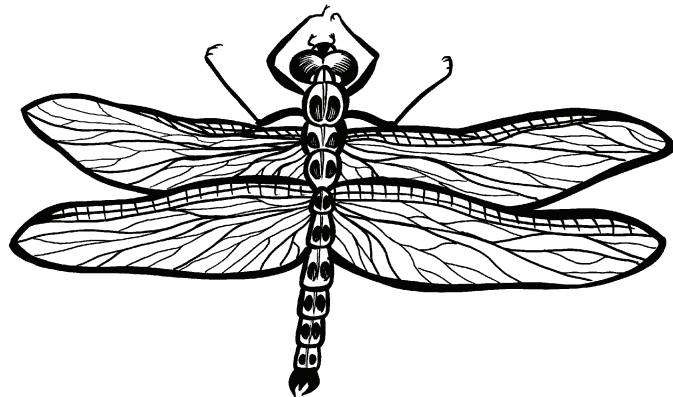
harp

What is the same about the three musical instruments?

- A You blow into them to make music.
- B They have strings.
- C You beat them with sticks to make music.



6 A dragonfly has four wings.



Number of Dragonflies	Combined Number of Wings
1	4
2	8
3	

Look at the chart. What is the combined number of wings on 3 dragonflies?

Record your answer in the boxes below. Then fill in the bubbles.

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

7 Naomi is outside. The air is cool. She sees leaves falling off trees. It is only six o'clock in the afternoon. It is already getting dark. The season is —

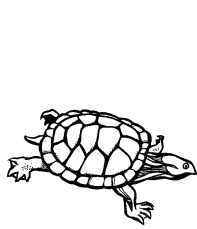
A summer.

B fall.

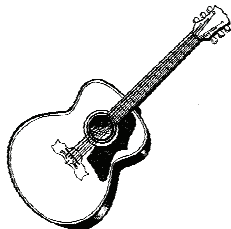
C winter.

D spring.

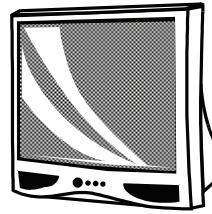
8 Look at the pictures.



turtle



guitar



television



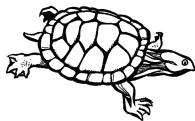
cactus



bird

Living things have special needs. Living things produce offspring. Which choice shows only living things?

F



turtle

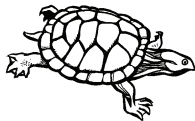


cactus

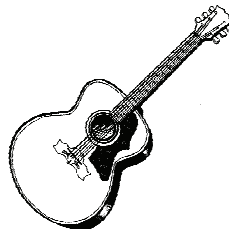


bird

G

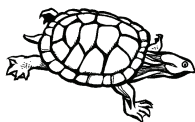


turtle

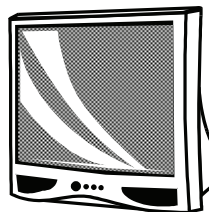


guitar

H



turtle



television

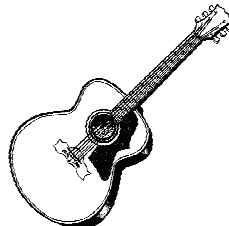


cactus

J



cactus



guitar



bird

Student  
Name:

STAAR CONNECTION™  
Grade 1  
Diagnostic Series Science

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Science assessment questions are listed below by reporting category and TEKS. Circle the number of any question that has been answered incorrectly. Next, circle the TEKS that needs additional reinforcement.

Assessment 1					Assessment 2				
Question Number	Answer	Reporting Category	TEKS	SIRS	Question Number	Answer	Reporting Category	TEKS	SIRS
1	C	SIRS	1.1A	1.1A	1	C	4	1.10A	1.2A
2	G	SIRS	1.2A	1.2A	2	F	3	1.7B	
3	D	SIRS	1.3A	1.3A	3	D	SIRS	1.1B	1.1B
4	G	SIRS	1.4A	1.4A	4	G	SIRS	1.2A	1.2B
5	B	1	1.5C		5	B	SIRS	1.2D	1.3B
6	12	SIRS	1.2D	1.2D	6	G	SIRS	1.2D	1.4A
7	B	3	1.8C	1.2A	7	D	4	1.10A	
8	F	4	1.9A		8	F	1	1.5A	

Assessment 3					Assessment 4				
Question Number	Answer	Reporting Category	TEKS	SIRS	Question Number	Answer	Reporting Category	TEKS	SIRS
1	A	1	1.5B	1.3B	1	B	3	1.8A	1.4A
2	F	2	1.6A	1.2A	2	H	3	1.7C	
3	C	4	1.9C	1.2A	3	A	4	1.10A	1.2A
4	F	1	1.5A	1.2A	4	F	1	1.5A	
5	C	SIRS	1.4A	1.2C	5	C	4	1.10D	1.2A
6	F	SIRS	1.3C	1.3C	6	G	3	1.8A	1.2E
7	2	SIRS	1.4B	1.4B	7	D	SIRS	1.1A	1.1A
8	F	2	1.6C		8	F	3	1.8C	1.2A