Name: _____

New York State Testing Program

Elementary-level Science Test

Grade 5

Spring 2025

RELEASED QUESTIONS

ELEMENTARY-LEVEL SCIENCE TEST

Elementary-level Science Test

TIPS FOR TAKING THE TEST

Here are some ideas to help you do your best:

- Be sure to read all the directions carefully.
- Read each question carefully.
- Think about the answer before making your choice or writing your answer.
- Make sure you read all the information given for each question.
- You have a ruler and a calculator that you can use on the test if they help you answer the question.

Base your answers to questions 1 through 5 on the information below and on your knowledge of science.

Traits and Survival of Dogs

Reproduction in dogs, like many other species of mammals, results in the production of a litter. A litter is the live birth of multiple offspring at one time from the same mother and, usually, from the same father. The average litter size for all breeds of dogs is from five to six puppies.

Havanese Puppies and Their Parents

1 The hair color pattern of each puppy shown in the photo is different because each puppy inherited

A different information from both of the parents

B identical information from both of the parents

C different information from only the mother

D identical information from only the father

2 Other than hair color pattern, identify **one** specific trait seen in the photograph shared by the parents and their offspring. [1]

GO ON

All dogs shed their hair. Some breeds like the Havanese shed very little, and other dog breeds shed a lot. Shedding can occur year-round or seasonally.

Year-round shedding occurs because of the natural cycles of individual hairs. Shedding varies by breed, age, diet, and other factors. Seasonal shedding occurs because of changes in the length of daylight and temperature.

3 Which statement correctly describes the cause of shedding?

A Shedding is influenced only by inherited traits.

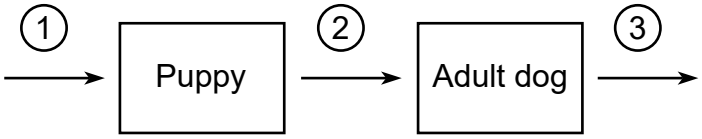
B Shedding is influenced only by the environment.

C Shedding is influenced by inherited traits and the environment.

D Shedding is not influenced by inherited traits or the environment.

Numbers 1, 2, and 3 in the model below represent some life cycle stages of dogs.

Model of Dog Life Cycle Stages



4 Which table identifies the correct life cycle stages indicated by numbers 1, 2, and 3?

Number	Life Cycle Stage
1	growth
2	reproduction
3	birth

A

Number	Life Cycle Stage
1	birth
2	reproduction
3	growth

C

Number	Life Cycle Stage
1	birth
2	growth
3	death

B

Number	Life Cycle Stage
1	reproduction
2	birth
3	death

D

GO ON

In addition to pet dogs, there are different dog breeds that live in the wild. One of these breeds is the African wild dog. These dogs live in packs and work together to take care of the pups.

Data about the survival of African wild dog pups was collected from 11 different packs from 1991-1996 in Tanzania, a country in Africa. Researchers measured the pack size of adult dogs (older than two years) and the number of pups born and raised to one year of age.

The data table below shows the average fraction of pups out of ten that survived to at least one year old.

African Wild Dog Survival Data

Number of Adults in Pack	Average Fraction of Pups that Survived
4	$\frac{4}{10}$
8	$\frac{6}{10}$
14	$\frac{8}{10}$
17	$\frac{9}{10}$

5 Use evidence from the table to support the argument that the size of an African wild dog pack affects the survival of pups in that pack. [1]

GO ON

Base your answers to questions 6 through 10 on the information below and on your knowledge of science.

Properties of Substances

In order to learn about the properties of different substances, a group of students conducted a series of investigations. In the first investigation, the group added 5 grams of water and 5 grams of iron filings (small pieces of iron) to an empty container that had a mass of 25 grams. The container was then sealed, shaken, and left undisturbed overnight.

The next day, the students noticed that the color of some of the filings had changed from black to a dark red. The students then measured the mass of the iron filings, water, and container and found it to be 35 grams.

6 Identify the evidence that indicates a new substance was formed during this investigation. [1]

_____

_____

7 The observations that the students made about the substances before and after they were combined provide evidence that

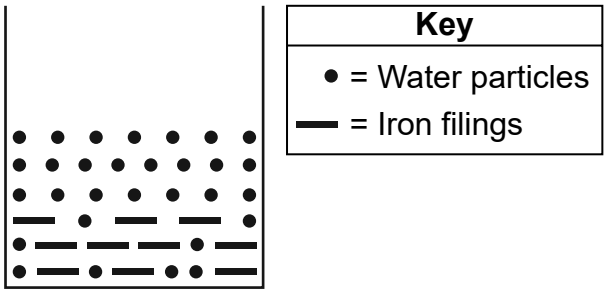
A matter is conserved when substances are mixed in a closed system

B the thermal conductivity of substances increases when placed in water

C all substances experience a phase change when combined

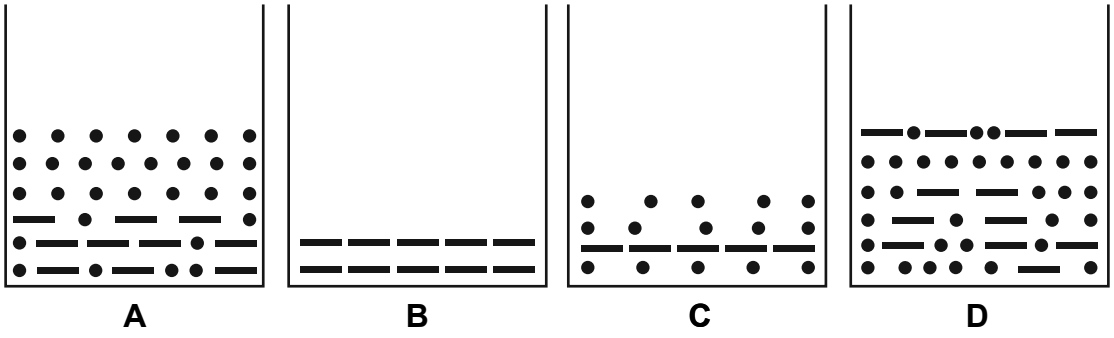
D chemical reactions release heat within a system

In the second investigation, the students unsealed the container and developed a model, shown below, of the contents.

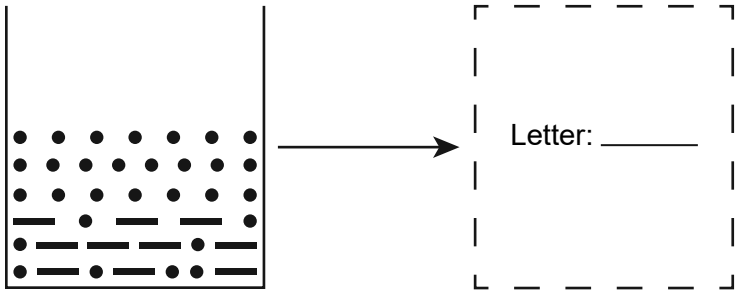


8 From the choices below, place the correct lettered model in the box below that represents the contents of the unsealed container *after* **one** week. Then, identify the name of the process that resulted in your selected choice of models. [1]

Model Choices



Model After One Week



Process: _____

GO ON

Magnetite is a mineral that contains iron. It is commonly found in beach sand. The table below shows some properties of some minerals found in beach sand at Jones Beach State Park on Long Island, New York.

Properties of Some Minerals in Sand at Jones Beach State Park

Mineral	Color	Light Passes Through	Magnetic	Soluble
Magnetite	black	no	yes	no
Garnet	red	yes	no	no
Quartz	white	yes	no	no

9 In the third investigation, the group of students wanted to separate magnetite from a 50-ml sample of sand collected on Jones Beach. Which method would most successfully separate all magnetite from the other materials in the sand?

A Measure the amount of light that passes through magnetite.

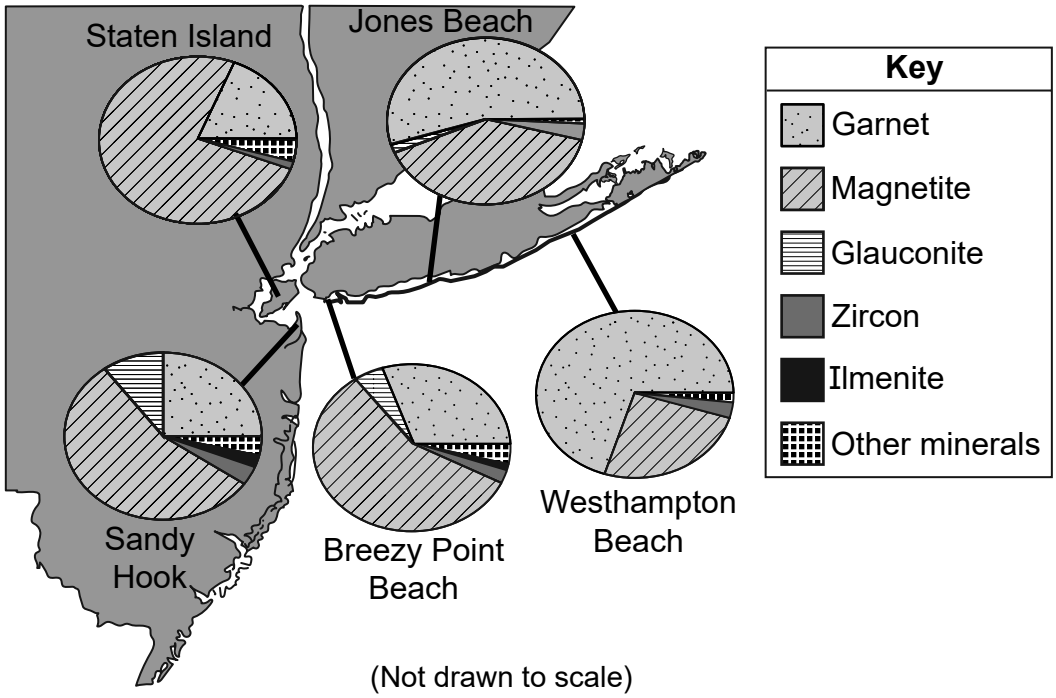
B Mix the sand with water and filter out the magnetite.

C Use a magnet to remove the magnetite from the sample.

D Remove the magnetite particles from each of the other minerals with tweezers.

The map with pie graphs shows the relative amounts of some heavier minerals in the sand of beaches on and near Long Island.

Relative Amounts of Heavier Minerals in Beach Sand



(Not drawn to scale)

10 A student was given a sample of sand from Westhampton Beach. Select the **two** observations that would be made for this sand from Westhampton Beach compared to the sand from the other four beaches based on the pie graphs and table provided. [1]

Observations

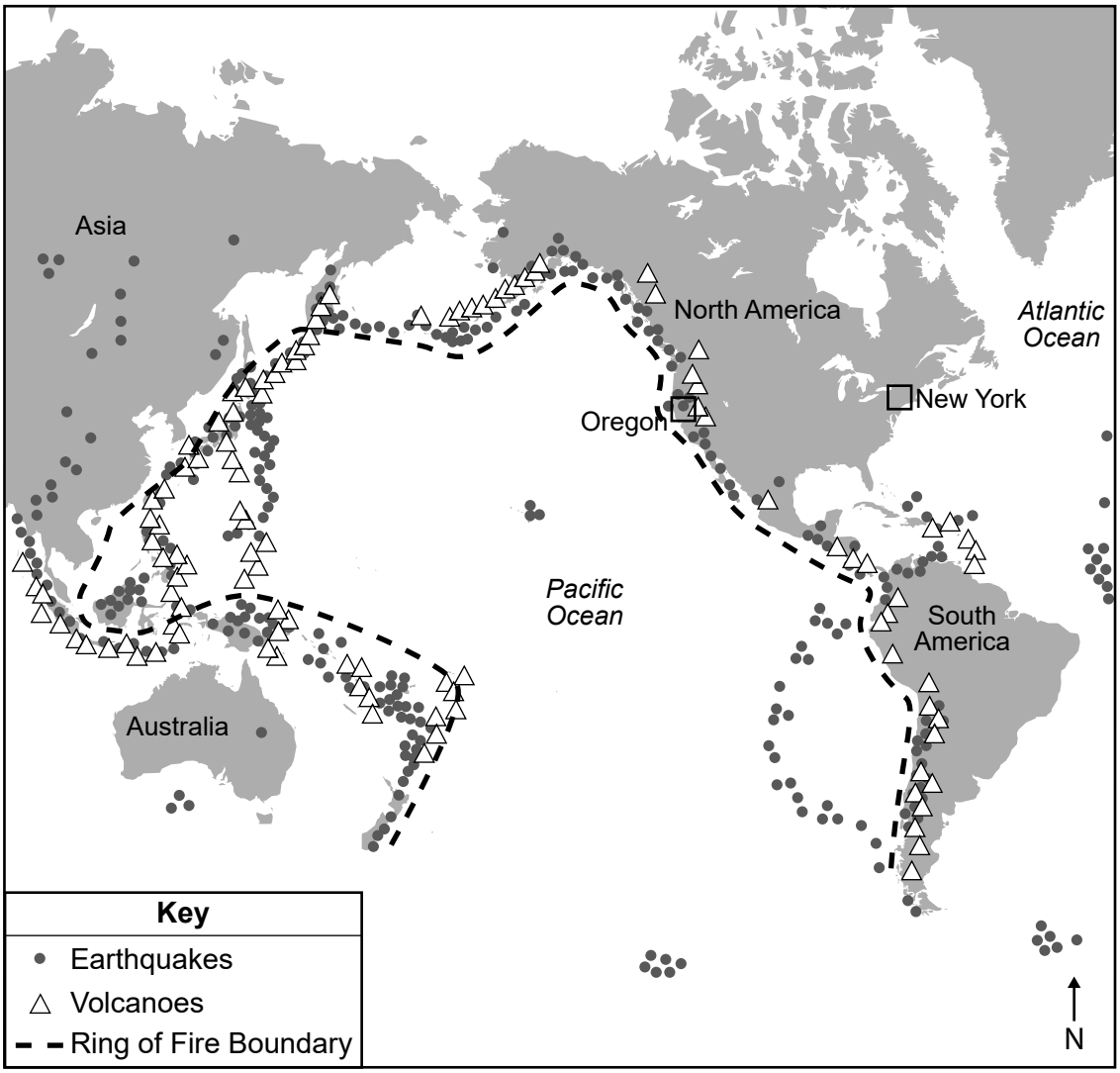
- ☐ More red particles
- ☐ Fewer magnetic particles
- ☐ More black particles
- ☐ Less transparent particles
- ☐ More other minerals

Base your answers to questions 11 through 15 on the information below and on your knowledge of science.

Patterns of Earthquakes and the Ring of Fire

The map below shows many locations where destructive earthquakes have occurred and where volcanoes are found on Earth. The 20 most destructive earthquakes in history have occurred along the Ring of Fire. The locations of two states, Oregon and New York, are indicated.

Ring of Fire



GO ON

11 Based on the map, most earthquakes occur

A in the center of continents

B in the center of oceans

C along some boundaries where oceans and continents meet

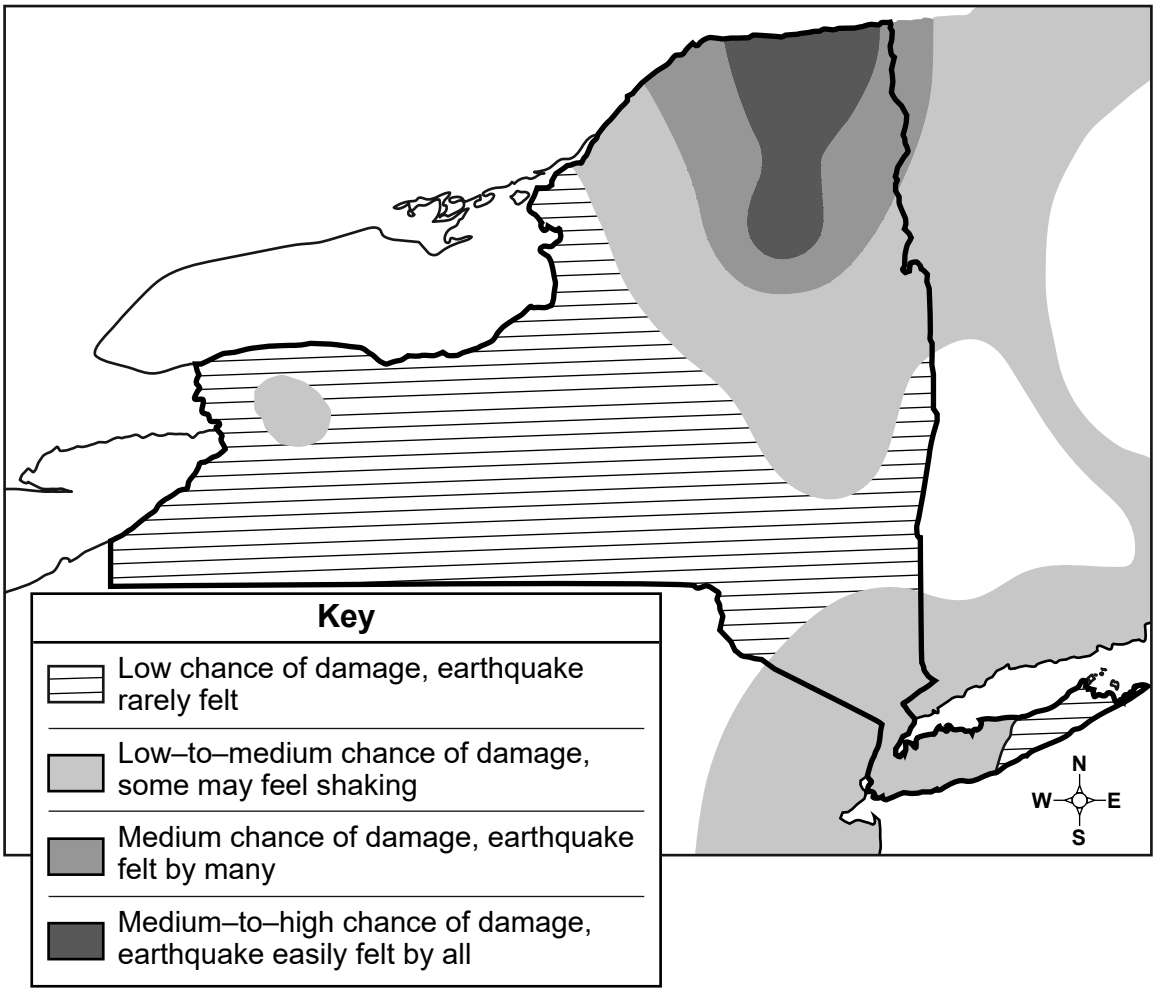
D along all boundaries where oceans and continents meet

12 Describe the general relationship between the pattern of where earthquakes occur and the pattern of where volcanoes occur. [1]

13 Compare the chance of having a destructive earthquake occur in New York State to the chance of having a destructive earthquake occur in Oregon. Use evidence from the map *and* passage to support your answer. [1]

Many small earthquakes occur throughout New York State. The map below identifies the chance of earthquake damage in New York State based on how often earthquakes have occurred at that location and the strength of the resulting ground shaking felt by people.

Chance of Earthquake Damage in New York State



14 Which area of New York State would most likely have the **greatest** chance of experiencing damage due to an earthquake?

A northwest

B northeast

C southwest

D southeast

New York City is home to over one million buildings. Many buildings were not constructed or reinforced to be earthquake resistant. These buildings cannot absorb the forces associated with earthquakes.

Older, harder bedrock allows earthquake vibrations to travel great distances. Shorter buildings constructed on soft, shallow soil above bedrock shake faster than taller buildings constructed on deep soil above bedrock.

Some students suggested solutions that could reduce the impact of earthquake damage on new construction or existing buildings in New York City. These solutions are listed below.

1. Reinforce brick buildings and repair building foundations (basements) so they don't crack in weak areas when an earthquake occurs.
2. Design interior walls of new buildings so they are able to absorb forces and are less likely to fail.
3. Only build new structures on top of shallow soil with bedrock underneath to prevent shaking.
4. Only build new structures that are shorter as they will shake less than taller buildings.
5. Secure walls to the roof and walls to the foundation in existing buildings to prevent the transfer of weight in the building during shaking.

15 Which two solutions would best reduce the impact of an earthquake for the majority of residents in New York City?

A solutions 1 and 2

B solutions 2 and 3

C solutions 4 and 5

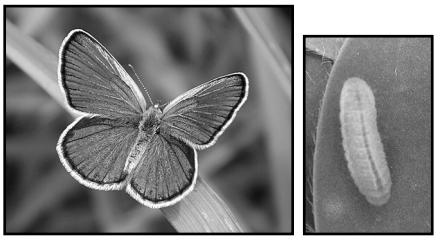
D solutions 5 and 3

Base your answers to questions 21 through 25 on the information below and on your knowledge of science.

The Albany Pine Bush Ecosystem

The Albany Pine Bush is an inland area located in Albany, New York. Parts of this area are protected from development because it has a very special sandy ecosystem normally found in a coastal region. It is home to two endangered species, the Karner blue butterfly and the wild blue lupine plant. The only food source for the caterpillar of this species of butterfly is the wild blue lupine.

Karner Blue Butterfly and Caterpillar



Wild Blue Lupine Plant

One of the few confirmed predators of the Karner blue caterpillar is the seven-spotted ladybug. This ladybug feeds only on animals.

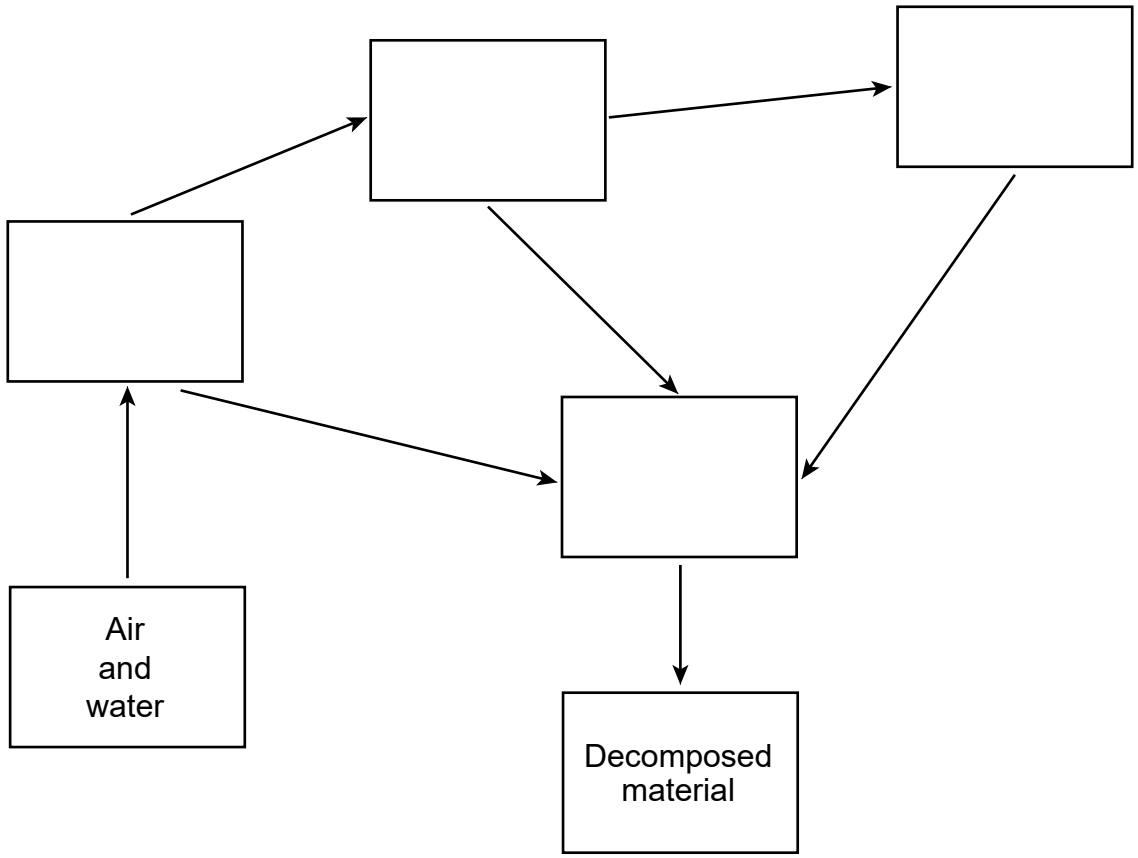
Seven-spotted Ladybug

21 Complete the model below to describe the movement of matter within the Albany Pine Bush ecosystem. Place the name of each of the **four** organisms in the appropriate box to complete the model. [1]

Organisms

Bacteria	Karner blue caterpillar	Wild blue lupine	Seven-spotted ladybug

Movement of Matter Model



22 The wild blue lupine is able to obtain energy from its non-living environment. Which row in the table correctly identifies this source of energy and explains how the wild blue lupine uses this energy?

Row	Source of Energy	Explanation
1	Sun	Energy is converted into motion energy that is transferred to the wild blue lupine.
2	water	Energy from water is transferred between the wild blue lupine and the seven-spotted ladybug.
3	soil	Energy from soil is chemically combined into matter that is recycled by the wild blue lupine.
4	light	Energy is captured and converted into a form usable by the wild blue lupine.

A Row 1

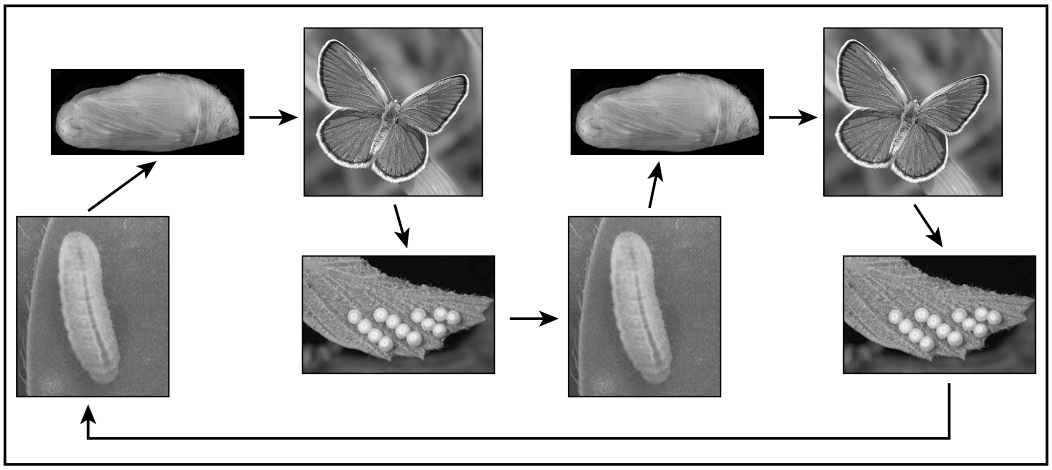
B Row 2

C Row 3

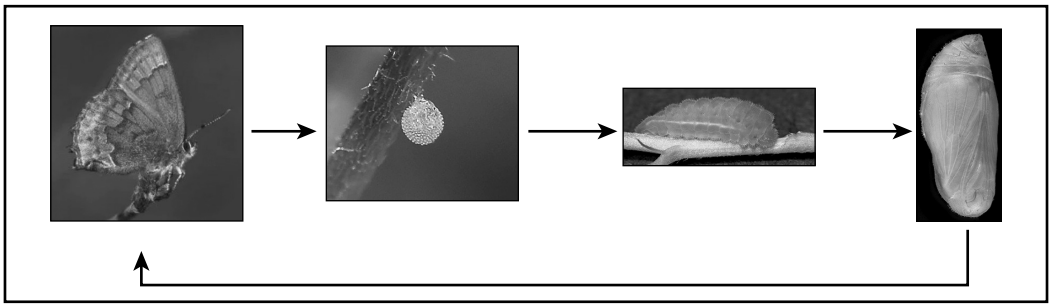
D Row 4

The Karner blue butterfly shares its habitat with the frosted elfin butterfly, and both rely on the wild blue lupine for survival. The models below describe the life cycles of each type of butterfly. The Karner blue butterfly has four stages in its life cycle. These four stages are repeated again by its offspring in one year. The frosted elfin butterfly completes only one life cycle each year.

Life Cycle: Karner Blue Butterfly (Over One Year)



Life Cycle: Frosted Elfin Butterfly (Over One Year)



23 Which claim is supported by the life cycle models of these **two** organisms?

A The life cycles of both of these butterflies have the same stages that occur during the same time of year.

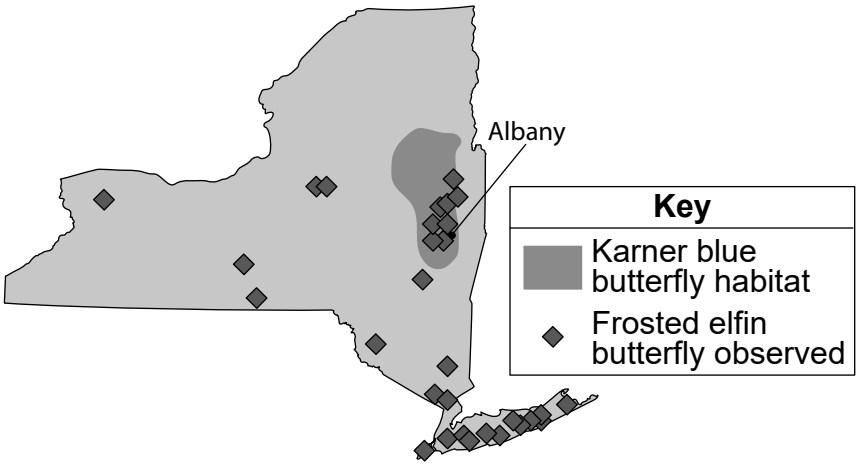
B The life cycles of both of these butterflies have different stages that occur multiple times during the year.

C Over a one-year period, both of these butterflies have similar life cycle stages, but their growth rate is different.

D Over a one-year period, both of these butterflies complete one life cycle and their growth rate is the same.

Both species of butterflies live successfully in the Albany Pine Bush Preserve where wild blue lupine are protected. The Pine Bush Preserve is an area that covers about 3000 acres. The Preserve manages and protects the ecosystem. The Karner blue caterpillar feeds on the leaves of the lupine, while the frosted elfin caterpillar feeds on the flowers and seed pods of the lupine plant.

The map below shows the range of the Karner blue butterfly habitat and locations where the frosted elfin butterfly have been observed in New York State in 2018.



24 Identify which of these species of butterfly, in New York State, would have a better chance of survival if the Albany Pine Bush Preserve was no longer protected from development. Construct an argument with evidence to support your choice. [1]

Karner blue butterfly	
Frosted elfin butterfly	

Argument with evidence: _____

_____

_____

Historically, wildfires kept the habitat in the Albany Pine Bush suitable for wild blue lupine and other native plants. Today, however, most wildfires are quickly extinguished to protect homes and other development in the area. Instead, the Albany Pine Bush Preserve Commission uses controlled burns that function like natural wildfires to maintain the Albany Pine Bush ecosystem.

Firefighters Managing a Controlled Burn

Benefits of Controlled Burns
• eliminates invasive species
• burns leaves and twigs that cover sandy soil so seeds can grow
• prevents areas from being taken over by large trees
• causes seed pods of pine trees to open and release seeds

25 Which claim accurately describes how controlled burns affect the Karner blue butterfly?

A The environment in which the wild blue lupine needs to grow is maintained by controlled burns, allowing food to be produced for the Karner blue butterfly.

B Tall trees and thick underbrush survive after controlled burns and provide a better habitat for the Karner blue butterfly.

C Controlled burns destroy all plants in the environment, prevent wild blue lupine growth for years, and allow more space for the Karner blue butterfly.

D The habitat of the Karner blue butterfly is enlarged by controlled burns since the butterfly needs to move to different locations in New York State.

Base your answers to questions 26 through 30 on the information below and on your knowledge of science.

Solar System Patterns

Our solar system includes planets, moons, and other space objects that orbit our star, the Sun. Movements of Earth, the Sun, and the Moon cause daily, monthly, and seasonal patterns to occur. Many other stars are visible in the night sky but are located outside our solar system.

The photographs show some stars visible from Earth. Alpha Centauri A and B are two stars that orbit each other and appear as one star in the night sky. Alpha Centauri A is slightly larger than the Sun while Alpha Centauri B is slightly smaller than the Sun. Another star seen at night, Beta Pavonis, is about 2.3 times larger than the Sun. The table shows the distances of these stars from Earth.

Star Distance from Earth

Star	Distance from Earth (AU)
Sun	1
Alpha Centauri A & B	13,000
Beta Pavonis	8,600,000

1 AU (Astronomical Unit) = Distance from Earth to Sun

Stars Viewed from Earth

The Sun Viewed from Earth

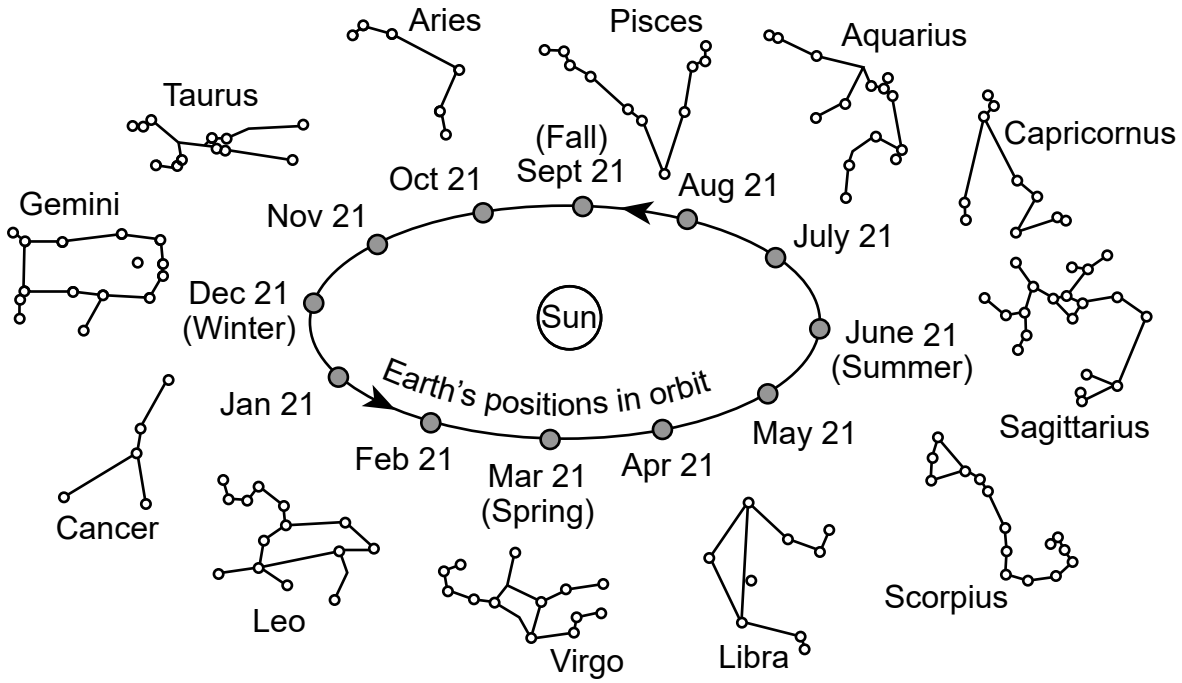
26 Use numerical evidence to support the argument that the Sun appears brighter and larger than Alpha Centauri A and B and Beta Pavonis because of its relative distance and ***not*** its size. [1]

GO ON

Some stars appear to form patterns called constellations. Students noticed that some constellations are only seen at certain times of the year.

The model below represents some constellations that are visible in the night sky during different months as viewed from New York State. The beginning of each season is indicated.

Some Constellations Seen from New York State



(Not drawn to scale)

27 Which table correctly shows a pattern of constellations seen throughout the year from New York State?

Summer	Fall	Winter	Spring
Pisces	Sagittarius	Virgo	Gemini

A

Summer	Fall	Winter	Spring
Virgo	Gemini	Sagittarius	Pisces

C

Summer	Fall	Winter	Spring
Gemini	Virgo	Pisces	Sagittarius

B

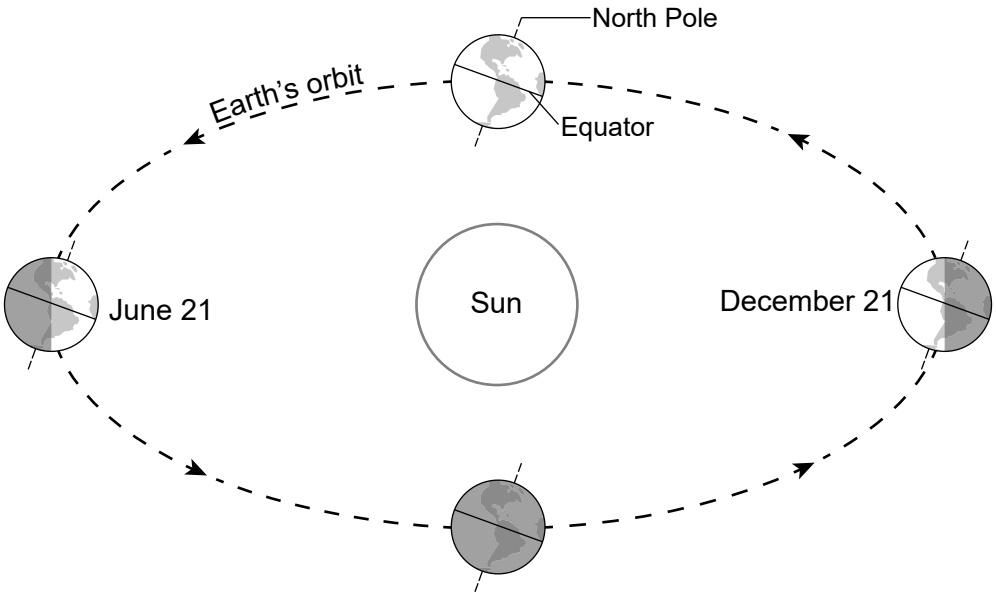
Summer	Fall	Winter	Spring
Sagittarius	Pisces	Gemini	Virgo

D

28 Describe the cause of the repeating yearly pattern of these constellations, which makes the constellations visible to an observer in New York State. [1]

Students made the model below, which represents Earth in four positions in its orbit around the Sun. The shaded part of Earth represents nighttime.

Model of Earth Orbiting the Sun



(Not drawn to scale)

29 Compared to the amount of daylight at the North Pole on June 21, the amount of daylight at the North Pole on December 21 is

A less because Earth is tilted on its axis

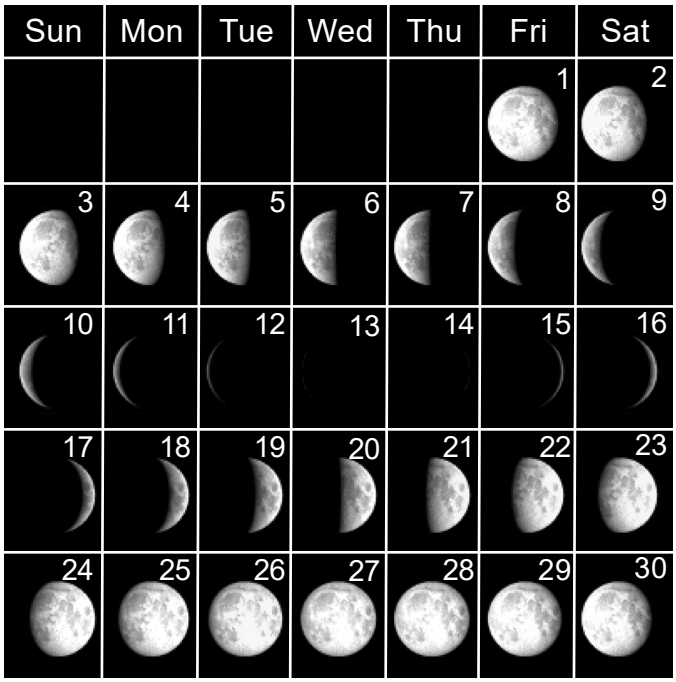
B less because Earth rotates on its axis

C greater because Earth is tilted on its axis

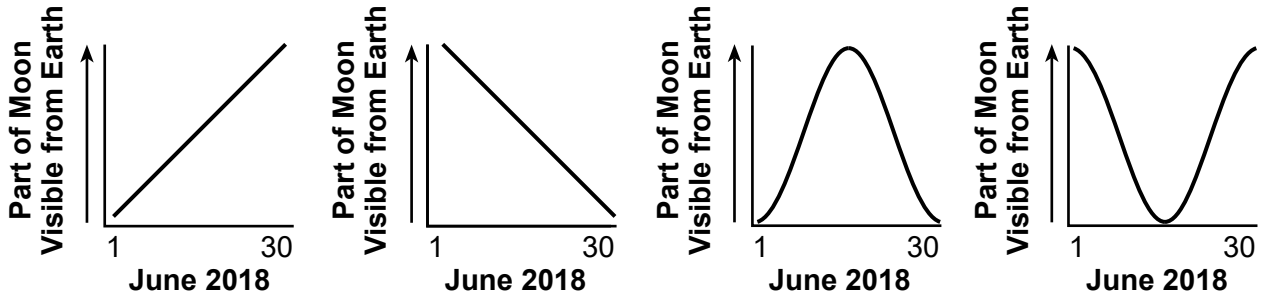
D greater because Earth rotates on its axis

The group of students in New York State took photographs of the Moon and recorded them for one month. The calendar below shows the photographs of the appearance of the Moon phases taken by the students in June 2018.

June 2018 Moon Phases



30 Which graph best represents the pattern of the visible part of the Moon observed from New York State in June 2018?



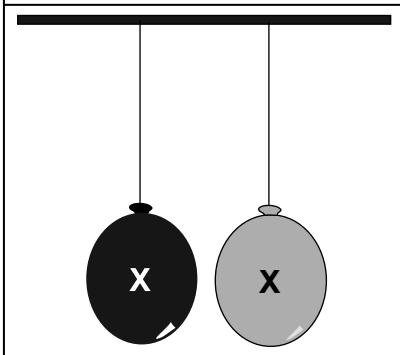
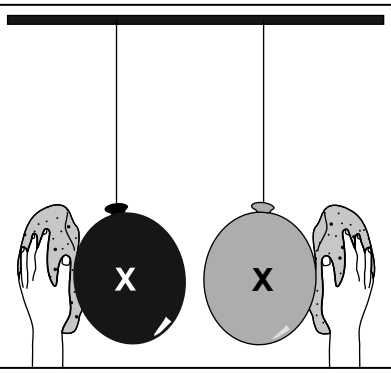
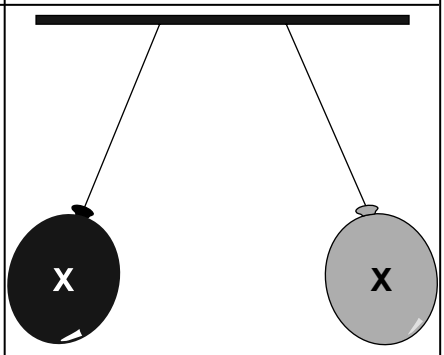
GO ON

Base your answers to questions 31 through 36 on the information below and on your knowledge of science.

Investigations with Balloons

A student performed three investigations using balloons and other materials.

In the first investigation, the student used two balloons on strings and wool cloths. The balloons were hung from a ceiling with string. The entire surface of each balloon was rubbed with a wool cloth. The student observed the interaction between the two balloons. The letter *X* represents the location of the center of each balloon.

Figure 1	Figure 2	Figure 3
		
Balloons are at rest	Both balloons are rubbed with a wool cloth in the same direction	Resulting position of balloons

31 *Figure 1* represents the initial position of the balloons. Identify the forces acting on **one** of the balloons in *Figure 1* as being balanced or unbalanced.

Balanced	
Unbalanced	

Describe the evidence from *Figure 1* that supports your choice. [1]

Evidence: _____

_____

32 Which statement correctly identifies the result of rubbing the balloons with the wool cloth?

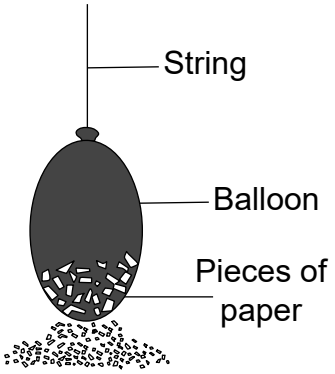
A Each balloon became electrically charged and moved away from the other balloon.

B Each balloon became magnetic and moved away from the other balloon.

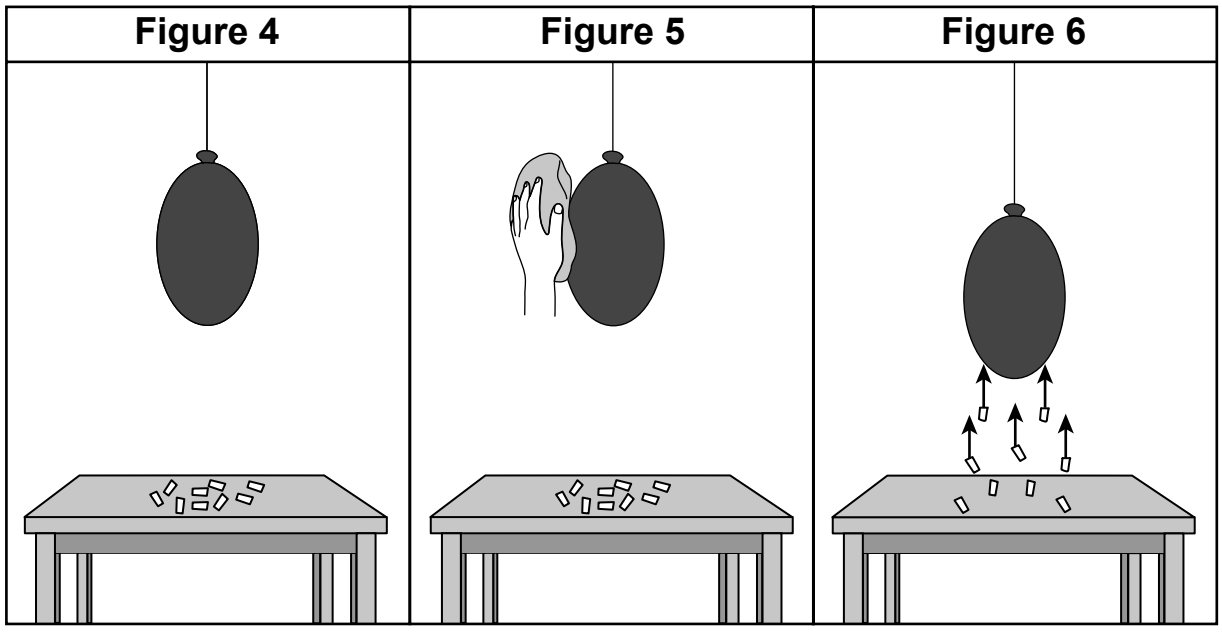
C The wool cloth transferred electric charge from one balloon to the other balloon, causing the balloons to move apart.

D The wool cloth caused the magnetic properties of each balloon to be the opposite of the other balloon, causing the balloons to move apart.

Then, the student discovered that small pieces of paper will stick to a balloon that has been rubbed with a wool cloth.



In the second investigation, the papers were removed from the balloon and placed on a table as shown in the diagram below. The entire balloon was rubbed with the wool cloth in the same way as the previous investigation. The balloon was then lowered near these small, equally-sized pieces of paper lying on top of a table. The student observed the interaction between the balloon and the paper. The student stopped lowering the balloon as soon as the pieces of paper traveled upward to the balloon. Arrows represent the motion of the paper.



GO ON

33 Identify the variable that is being changed in this second investigation.

Variable: _____

Write a question that the student is trying to answer in this second investigation that includes this variable. [1]

_____

_____

_____

34 Which statement explains why the pieces of paper moved toward the balloon in *Figure 6*?

A The sum of the forces on the pieces of paper resulted in a zero net force.

B The forces on the balloon and on the paper were equal and acted in opposite directions.

C The force of friction on the paper pushed the paper toward the balloon.

D The force exerted by the balloon on the paper was greater than the force exerted by gravity on the paper.

35 The student wanted to repeat this second investigation with another balloon. Both balloons were made of the same material and were the same size and color. Why should the student complete another trial of this investigation?

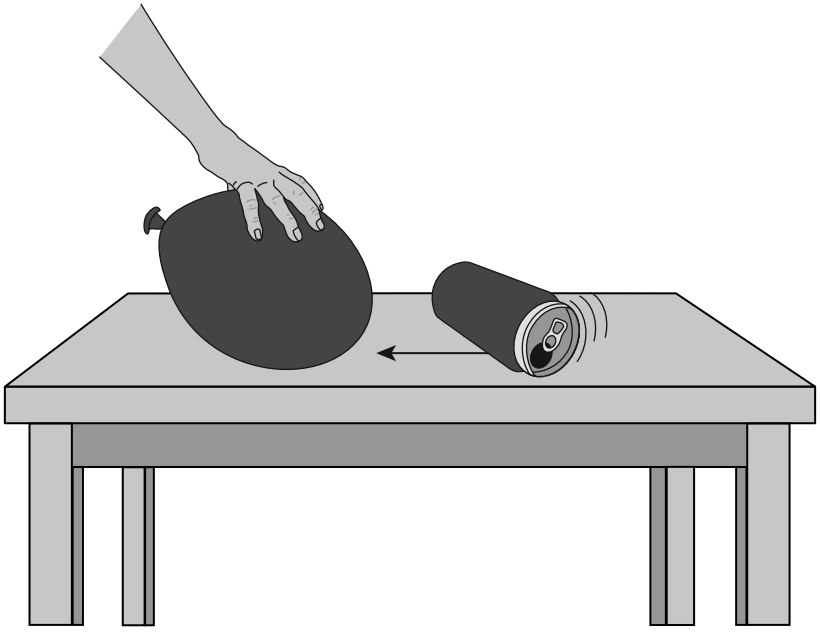
A to test the material and size of the balloon

B to check the reliability of the results of the first trial

C because repeating trials allows for less data to be considered

D because all scientific investigations must have only two trials

In the third investigation, the student rubbed another balloon with a wool cloth and held it near a metal can lying on a table. The balloon was brought near the can and held 10 centimeters (cm) away. The student observed that, when the balloon was held at this distance, the can rolled toward the balloon. The arrow indicates the direction the can rolled.



36 Which statement is evidence that energy was converted from one form to another in this third investigation?

A The balloon was held near the can.

B The volume of air in the balloon decreased.

C The can moved across the table.

D The can was positioned on top of a table.

STOP

Grade 5 Elementary-level Science Test

Spring 2025

ELEMENTARY-LEVEL SCIENCE TEST

Elementary-level Science Test—Rating Guide
Spring 2025

1 [1] Allow 1 credit for *A*.

2 [1] Allow 1 credit. Acceptable responses include, but are not limited to:

- The offspring dogs have the same body shape as their parents.
- The faces of the offspring are similar in shape to their parents' faces.
- Same number of eyes/ears as parents

3 [1] Allow 1 credit for *C*.

4 [1] Allow 1 credit for *B*.

5 [1] Allow 1 credit. Acceptable responses include, but are not limited to:

- If there are four adults in the pack, only an average of four out of ten pups survive. If there are 17 adults in a pack, an average of nine out of ten pups survive, which is a much higher survival rate.
- When the number of adults in the pack decreases from 14 to four, the average fraction of pups that survived was cut in half.
- As the number of adult members of the pack increases, the fraction of pups that survive also increases.

6 [1] Allow 1 credit. Acceptable responses include, but are not limited to:

- A color change occurred in the iron filings which indicates a new substance was formed.
- The evidence that a new substance was formed was that the iron turned from black to red.

7 [1] Allow 1 credit for *A*.

8 [1] Allow 1 credit for Model B *and* evaporation.

9 [1] Allow 1 credit for *C*.

10 [1] Allow 1 credit for *two* correctly selected observations, as shown below:

- [✓] More red particles
- [✓] Fewer magnetic particles
- [ ] More black particles
- [ ] Less transparent particles
- [ ] More other minerals

11 [1] Allow 1 credit for *C*.

12 [1] Allow 1 credit. Acceptable responses include, but are not limited to:

— Many earthquakes and volcanoes occur in the same places/locations.

— They both mainly occur in similar locations along the Ring of Fire.

— Where there are more earthquakes, there tends to be more volcanoes.

13 [1] Allow 1 credit. Acceptable responses include, but are not limited to:

— There is a greater chance of a destructive earthquake occurring in Oregon because it's located near the Ring of Fire, where many destructive earthquakes have occurred.

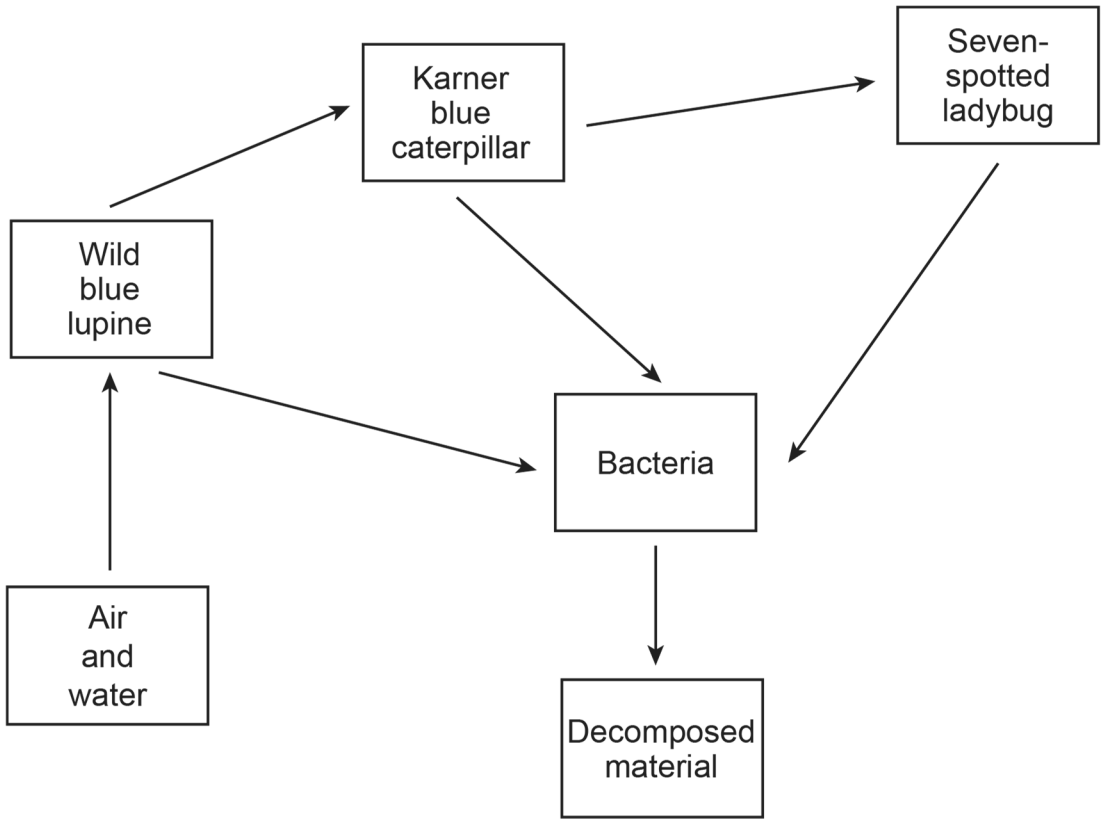
— There are fewer destructive earthquakes in New York State because it's not on the Ring of Fire.

— There are no dots shown on the map in New York State but there are dots shown on the map in Oregon, so there is a lower chance of a destructive earthquake in New York State.

14 [1] Allow 1 credit for *B*.

15 [1] Allow 1 credit for *A*.

21 [1] Allow 1 credit for placing all *four* organisms in the correct locations, as shown below:



22 [1] Allow 1 credit for *D*.

23 [1] Allow 1 credit for *C*.

24 [1] Allow 1 credit for frosted elfin butterfly *and* an acceptable argument with evidence. Acceptable responses include, but are not limited to:

- The frosted elfin butterfly has been observed in many areas in New York State while the Karner blue butterfly is only found in one habitat.
- The Karner blue butterfly is only found in one habitat of New York State but the frosted elfin butterfly is found in many areas of New York State.
- There are more areas where the frosted elfin butterfly lives, which makes it more likely for this butterfly to survive.

25 [1] Allow 1 credit for *A*.

26 [1] Allow 1 credit. Acceptable responses include, but are not limited to:

— Closer stars appear brighter, and the Sun, though smaller than Alpha Centauri A, is only 1 AU from Earth while the other stars are thousands of AU away, making them appear dimmer.

— The Sun is close to Earth, while the other stars are far away from Earth. This makes the Sun look bigger and brighter, even though Beta Pavonis is 2.3 times larger.

— The Sun appears bigger and brighter because it is 1 AU away from Earth, which is less than 13,000 and 8,600,000 AU for the other stars.

27 [1] Allow 1 credit for *D*.

28 [1] Allow 1 credit. Acceptable responses include, but are not limited to:

— The nighttime side of Earth faces different regions of space as Earth revolves around the Sun, so New York State observers see different constellations in the nighttime sky.

— Earth orbits the Sun, so different constellations are visible at different times of the year.

29 [1] Allow 1 credit for *A*.

30 [1] Allow 1 credit for *D*.

31 [1] Allow 1 credit for Balanced *and* appropriate evidence. Acceptable responses include, but are not limited to:

— The balloon is at rest.

— The balloon is not moving.

— There is no change in the balloon's motion in Figure 1.

32 [1] Allow 1 credit for *A*.

33 [1] Allow 1 credit for an appropriate variable *and* an acceptable question. Acceptable responses include, but are not limited to:

Variable:

- height
- distance
- length
- range
- closeness

Question:

- What effect does distance have on the interaction between the balloon and the paper?
- What effect does distance have on electrical forces?
- Is there more electrical force on the paper as a charged balloon gets closer to the paper?
- At what height will the papers be lifted up?

Note: Questions must include a questioning word and/or a question mark.

34 [1] Allow 1 credit for *D*.

35 [1] Allow 1 credit for *B*.

36 [1] Allow 1 credit for *C*.

Performance Levels

For each subject area, students perform along a continuum of the knowledge and skills necessary to meet the demands of the New York State Learning Standards. New York State Elementary-level and Intermediate-level Science assessments are designed to classify student performance into one of four levels based on the knowledge and skills the student has demonstrated. Due to the need to identify student proficiency, the state tests must provide students at each performance level opportunities to demonstrate their knowledge and skills in the Learning Standards.

These performance levels are defined as:

NYS Level 4

Students performing at this level **excel** in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the Learning Standards that are considered **more than sufficient** for the expectations at this grade.

NYS Level 3

Students performing at this level are **proficient** in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the Learning Standards that are considered **sufficient** for the expectations at this grade.

NYS Level 2

Students performing at this level are **partially proficient** in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the Learning Standards that are considered partial but insufficient for the expectations at this grade. Students performing at Level 2 are considered on track to meet current New York high school graduation requirements but are **not yet proficient** in Learning Standards at this grade.

NYS Level 1

Students performing at this level are **below proficient** in standards for their grade. They may demonstrate **limited** knowledge, skills, and practices embodied by the Learning Standards that are considered **insufficient** for the expectations at this grade.

THE STATE EDUCATION DEPARTMENT

THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234

2025 Elementary-level Science Test Map to the Standards

Question	Type	Key	Points	Performance Expectation	Subscore	Percentage of Students Who Answered Correctly (P-Value)
1	Multiple Choice	A	1	3-LS3-1	LS	
2	Constructed Response		1	3-LS3-1	LS	
3	Multiple Choice	C	1	3-LS3-2	LS	
4	Multiple Choice	B	1	3-LS1-1	LS	
5	Constructed Response		1	3-LS2-1	LS	
6	Constructed Response		1	5-PS1-4	PS	
7	Multiple Choice	A	1	5-PS1-2	PS	
8	Constructed Response		1	5-PS1-1	PS	
9	Multiple Choice	C	1	5-PS1-3	PS	
10	Constructed Response		1	5-PS1-3	PS	
11	Multiple Choice	C	1	4-ESS2-2	ESS	
12	Constructed Response		1	4-ESS2-2	ESS	
13	Constructed Response		1	4-ESS2-2	ESS	
14	Multiple Choice	B	1	4-ESS2-2	ESS	
15	Multiple Choice	A	1	3-5-ETS1-2		
21	Constructed Response		1	5-LS2-1	LS	
22	Multiple Choice	D	1	5-PS3-1	PS	
23	Multiple Choice	C	1	3-LS1-1	LS	
24	Constructed Response		1	3-LS4-3	LS	
25	Multiple Choice	A	1	3-LS4-4	LS	
26	Constructed Response		1	5-ESS1-1	ESS	
27	Multiple Choice	D	1	5-ESS1-2	ESS	
28	Constructed Response		1	5-ESS1-2	ESS	
29	Multiple Choice	A	1	5-ESS1-2	ESS	
30	Multiple Choice	D	1	5-ESS1-2	ESS	
31	Constructed Response		1	3-PS2-1	PS	
32	Multiple Choice	A	1	3-PS2-3	PS	
33	Constructed Response		1	3-PS2-3	PS	
34	Multiple Choice	D	1	3-PS2-1	PS	
35	Multiple Choice	B	1	3-5-ETS1-3		
36	Multiple Choice	C	1	4-PS3-2	PS	

* This item map identifies the Performance Expectation with which each test question is aligned. All NYSP-12SLS Performance Expectations are three-dimensional (https://www.nysed.gov/sites/default/files/programs/standards-instruction/p-12-science-learning-standards.pdf). The integration of these three dimensions provides students with a context for the content of science (DCI), the methods by which science knowledge is acquired and understood (SEP), and the ways in which the sciences are connected through concepts that have universal meaning across the disciplines (CCC).