

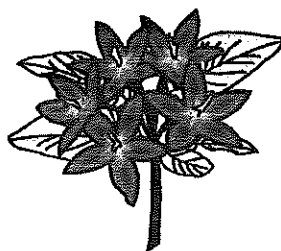
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Sample Item 22

SC.3.L.15.2

TEST PREP 5th GRADE

The illustrations below show two plants that grow in Florida, a penta and a sword fern.

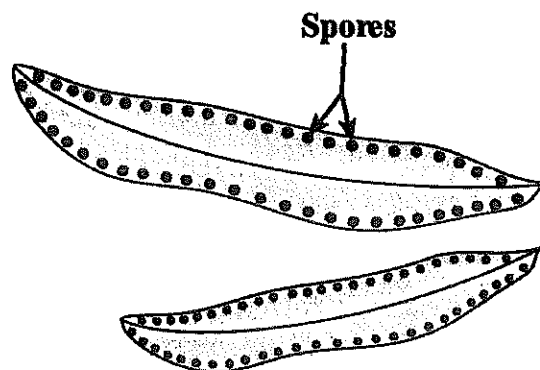


Penta



Sword Fern

The illustration below shows the spores that appear on the underside of the sword fern's leaves.



Which of the following is present in the penta but NOT in the sword fern?

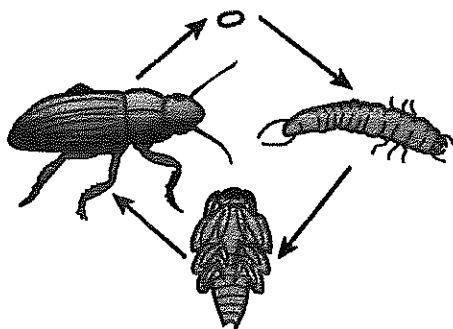
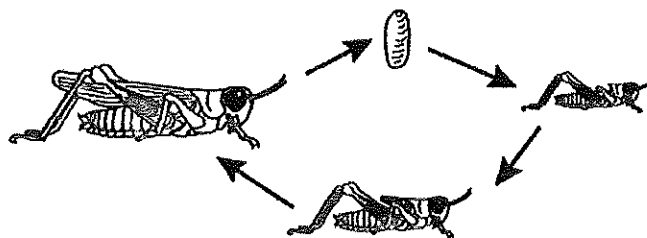
- A. root growth
- B. flower production
- C. ability to reproduce
- D. ability to make food

2.

Sample Item 23

SC.4.L.16.4

The life cycle of both beetles and grasshoppers starts at the same stage. The pictures below show the life cycle of both organisms.

BEETLE LIFE CYCLE**GRASSHOPPER LIFE CYCLE**

Which of the following is the beginning stage of the life cycle for both the beetle and the grasshopper?

- A. egg
- B. larva
- C. pupa
- D. nymph

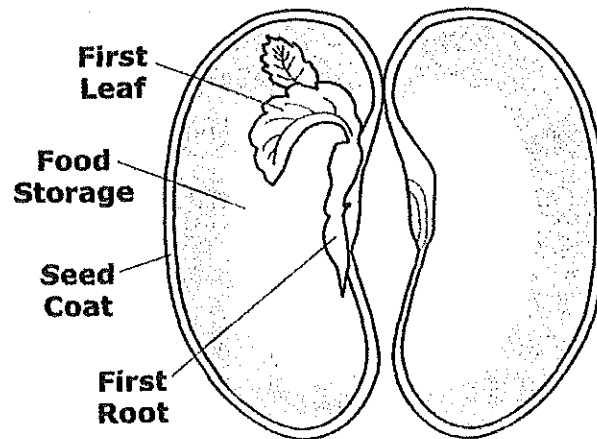
3. Sample Item 21 SC.5.L.14.1

Organs in the human body carry out different functions. Which human organ breaks down food so that it can be used by the human body?

- A. bladder
- B. heart
- C. kidneys
- D. stomach

4. Sample Item 20 SC.3.L.14.1

The inside of a bean seed is shown in the diagram below.

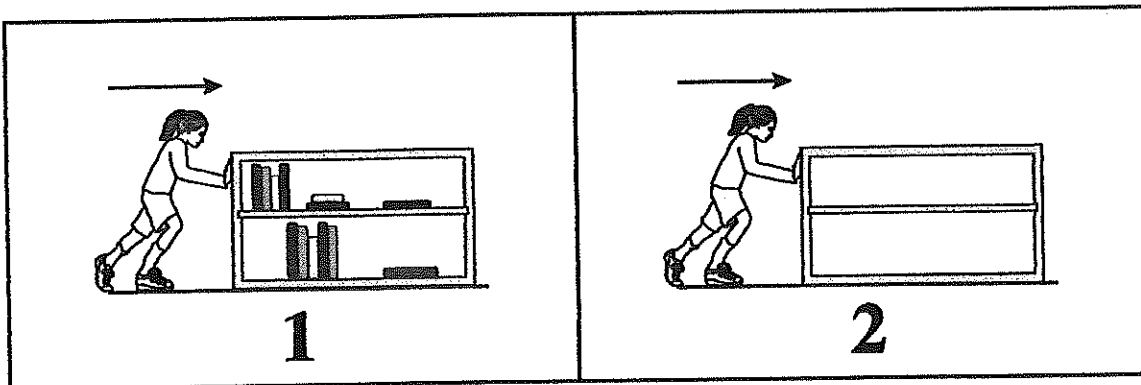


Which statement describes what must occur for a bean seed to develop into a plant?

- A. The seed must germinate.
- B. The seed must be pollinated.
- C. The seed must double in size.
- D. The seed must be carried to a different location.

5. Sample Item 19 SC.5.P.13.3

Stephanie started pushing a bookcase across the room, as shown in picture 1. Then, she removed the books and continued pushing with the same force and direction, as shown in picture 2.



- A. The mass is decreased, making the bookcase move faster.
- B. The gravity is increased, making the bookcase move slower.
- C. The friction is increased, making the bookcase move slower.
- D. The mechanical energy is decreased, making the bookcase move faster.

Delilah followed these steps of an investigation:

- Collect five objects made of different types of metal.
- Place them on a large laboratory table.
- Touch each metal object with a magnet and lift slowly.
- Record observations.

Which of the following statements is Delilah most likely testing?

- A. Some types of metal are attracted to magnets.
- B. Each magnet can lift the metal object to the same height.
- C. Larger magnets can pick up heavier metal objects than smaller magnets can.
- D. Heavier metal objects are more attracted to magnets than lighter metal objects are.

7. Sample Item 2 SC.5.N.1.6

Rashan is performing an investigation using several earthworms. He places a rectangular box under a bright lamp and covers one-half of the box so that it is shaded. Then, he puts the earthworms into the box on the side that is still brightly lit. Later, Rashan notices that all of the earthworms have crawled over to the shaded side of the box. Based on his investigation, which of the following is an observation rather than an opinion?

- A. Earthworms are afraid of light.
- B. Earthworms like staying together.
- C. Earthworms move away from light.
- D. Earthworms like living in the ground.

8. Sample Item 3 SC.5.N.2.2

Gabriel is designing an experiment to see whether sugar or artificial sweetener will attract the greater number of ants. Which statement best describes why Gabriel should write down his experimental procedure and record his data?

- A. The exact experiment can be repeated by others and the results compared.
- B. The experiment can be changed by others to get different results.
- C. The data will help people decide what type of sweetener to use.
- D. The data will show people which ants are more common.

Prior Knowledge Items may require the student to apply science knowledge described in the standards from lower grades. This benchmark requires prerequisite knowledge from SC.K.E.5.5, SC.K.E.5.6, SC.1.E.5.1, and SC.1.E.5.4.

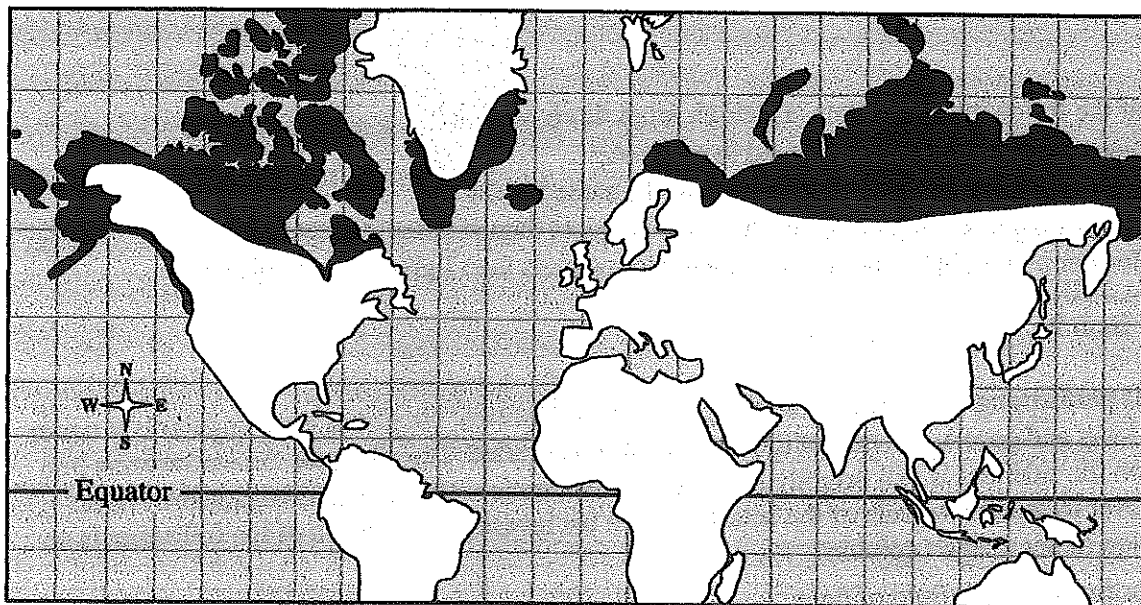
9. Sample Item 4 SC.3.E.5.1

A star named Sirius appears as the brightest star in the nighttime sky, even though a star named Pollux actually gives off more light. Which of the following best explains why Sirius appears brighter than Pollux in our nighttime sky?

- A. Sirius is made of different gases than Pollux is.
- B. Sirius is a different color than Pollux is.
- C. Sirius is closer to Earth than Pollux is.
- D. Sirius is larger than Pollux is.

Earth has many types of climate zones. The map below shows the tundra climate zones of the Northern Hemisphere.

TUNDRA ZONES OF EARTH'S NORTHERN HEMISPHERE



LEGEND	
	Tundra climate

Which of the following best describes this type of climate zone?

- A. It is very hot because it is on the coastline
- B. It is very wet because it is below sea level.
- C. It receives very little snowfall because it is close to the ocean.
- D. It has very cold temperatures because it is far from the equator.

Kyle and Jan are comparing two samples of matter. They make a chart showing the properties of each sample.

PROPERTIES OF SAMPLES

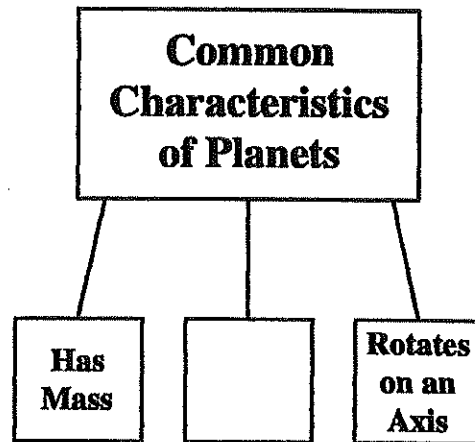
Property	Sample 1	Sample 2
Color	Red	Silver
Mass (grams)	30	5
Shape	Pyramid	Cube
Volume (milliliters)	40	3

Which property provides the best evidence that both samples are solids rather than liquids?

- A. color
- B. mass
- C. shape
- D. volume

12.

Jacob started creating a diagram to show some of the common characteristics of the planets in our Solar System.

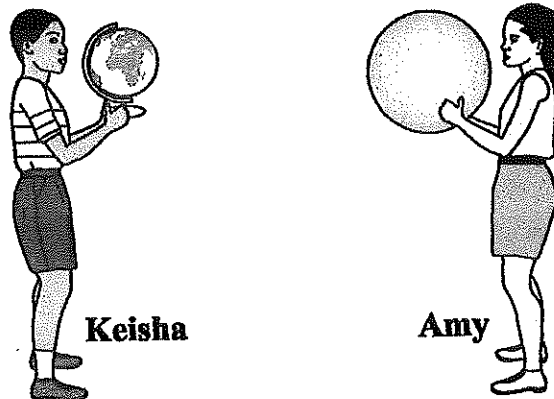


Which characteristic should Jacob enter in the empty box of the diagram?

- A. Made Mostly of Gas
- B. Has a Rocky Surface
- C. Revolves around a Star
- D. Is a Satellite of Another Planet

13.

Keisha wants to show Amy what happens during one Earth day. Keisha holds a small globe representing Earth, and Amy holds a large ball representing the Sun.



What should Keisha do to show Amy what happens during one Earth day?

- A. Keisha should move the globe in one complete circle around Amy.
- B. Keisha should move the globe toward Amy and then away from her.
- C. Keisha should slowly lift the globe above her head and then lower it.
- D. Keisha should slowly spin the globe one complete time about its axis.

14. **Sample Item 13** **SC.5.P.8.2**

Dani adds 10 grams (g) of salt to a jar of water and 10 g of sand to another jar of water. She places a lid on each jar and shakes the jars for 10 seconds. Then, Dani allows the jars to sit on a table for five minutes.

What should Dani expect to observe after five minutes?

- A. Both the salt and the sand dissolved in the water.
- B. Both the salt and the sand settled to the bottom of the jar.
- C. The salt settled to the bottom of the jar, and the sand dissolved in the water.
- D. The salt dissolved in the water, and the sand settled to the bottom of the jar.

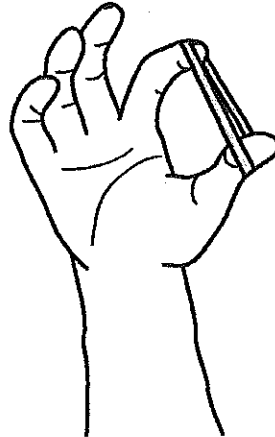
15. **Sample Item 14** **SC.3.P.9.1**

One morning, Ryan noticed there were tiny drops of water on the grass as he walked to school. That afternoon, he did not see any drops of water on the grass when he returned home. Which of the following **best** explains what happened to the drops of water?

- A. The heat from the air caused the water drops to boil.
- B. The air cooled the water and caused the drops to freeze.
- C. The Sun heated the water and caused the drops to evaporate.
- D. The energy from the Sun caused the water drops to condense.

16. **Sample Item 15** **SC.4.P.10.3**

Jason stretches a rubber band between his fingers, as shown below. When he plucks the rubber band, it makes a sound.



Which of the following **best** explains why the rubber band makes a sound when Jason plucks it?

- A. It heats the air.
- B. It vibrates the air.
- C. It absorbs energy from the air.
- D. It releases molecules into the air.

17. **Sample Item 16** **SC.4.P.10.2**

Gustave uses a bowling ball to demonstrate how energy can cause changes. Which of the following actions would **NOT** demonstrate a change caused by Gustave applying energy to the ball?

- A. He holds the bowling ball in both hands.
- B. He spins the bowling ball with one hand.
- C. He rolls the bowling ball across the floor
- D. He lifts the bowling ball to place it on a shelf..

Dennis cannot scratch a mineral sample with his fingernail, but he observes that he can scratch the mineral sample with a piece of metal. What physical property of the mineral sample is Dennis investigating?

- A. cleavage
- B. hardness
- C. luster
- D. streak

19. Sample Item 8 SC.4.E.6.3

There are many different natural resources found in Florida. Which of the following can be described as a renewable resource?

- A. limestone
- B. oil
- C. phosphate
- D. water

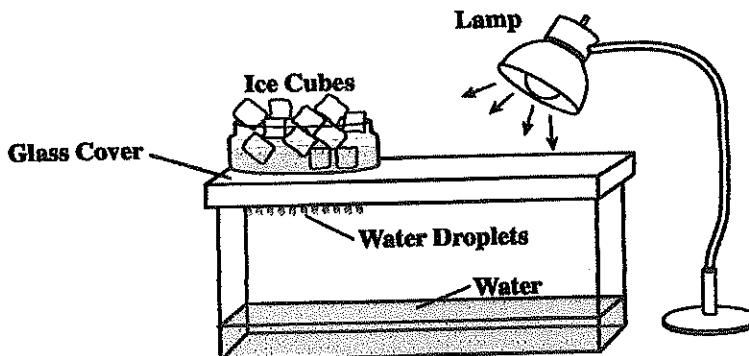
20. Sample Item 9 SC.4.E.6.4

Earth has a great variety of surface features that are caused by weathering and erosion. Which of the following describes a change due only to weathering?

- A. ocean waves washing sand off the beach
- B. rivers carrying soil and rocks through valleys
- C. wind blowing sand and pebbles off a sand dune
- D. tree roots breaking rocks into smaller pieces of rock

21. Sample Item 10 SC.5.E.7.1

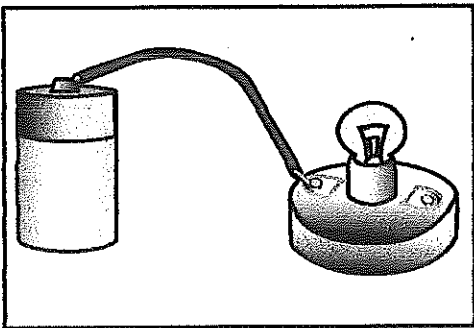
A model of the water cycle was made using an aquarium with a glass cover, a container of ice cubes, water, and a lamp.



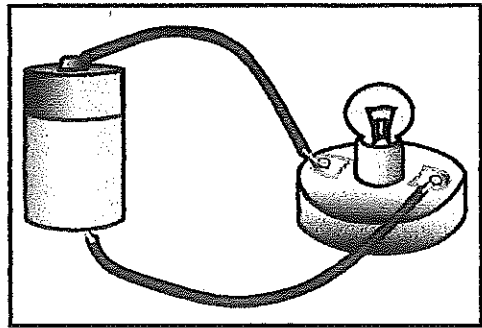
Which part of the water cycle causes the water droplets to form on the glass cover?

- A. condensation
- B. evaporation
- C. precipitation
- D. runoff

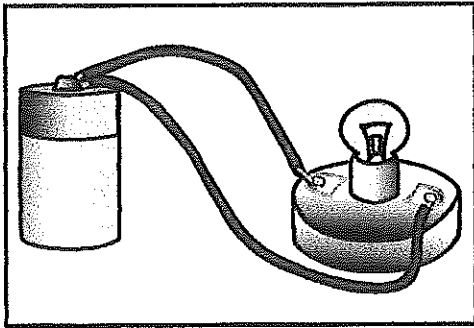
Electric circuits must be properly connected or electricity will not flow. Which of the following shows a properly connected circuit that would allow electricity to flow and light the bulb?



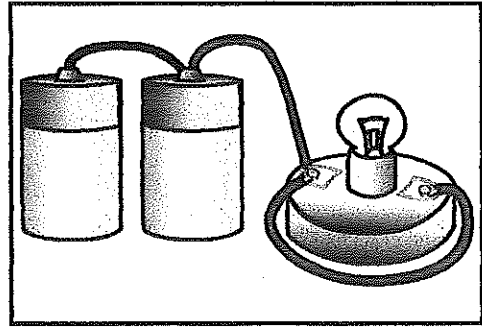
A.



C.

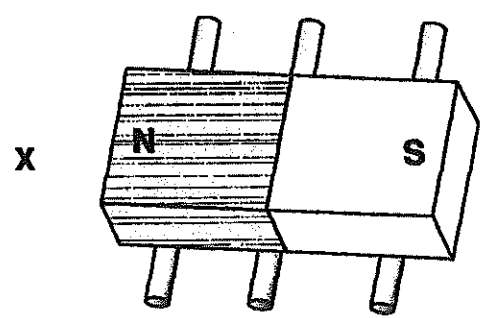


B.



D.

Bar magnets have a north pole (N) and a south pole (S). Latrisha places a bar magnet on three small straws so it can roll. She attempts to make the magnet move by placing different objects in location X. Her setup is shown below.



Which of the following objects should Latrisha use to cause the bar magnet to move away from location X ?

- A. an iron nail
- B. an aluminum can
- C. the north end of another bar magnet
- D. the south end of another bar magnet

24.

Sample Item 24 SC.5.L.17.1

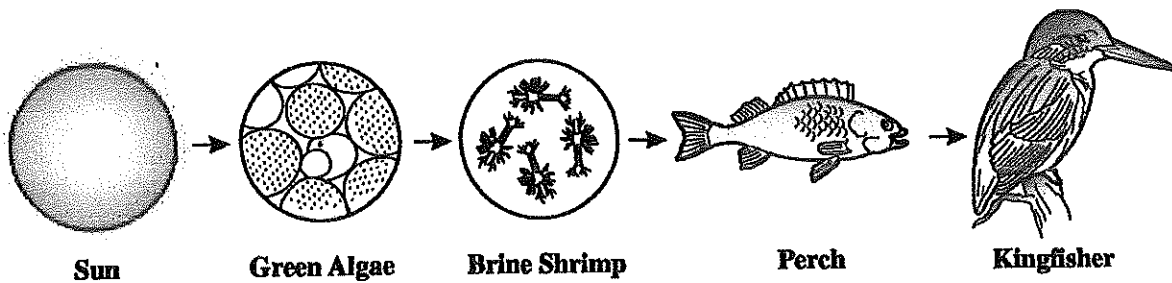
Loggerhead sea turtles are large turtles that live in the ocean and nest on the Florida coast. The female loggerhead sea turtle lays more than 100 eggs in the beach sand. How is laying so many eggs an important adaptation that helps these turtles to survive?

- A. Large nests of eggs help keep the eggs warm enough to allow more turtles to hatch.
 - B. If many turtles hatch, they can help defend each other against predators in large numbers.
 - C. The more eggs that are laid, the greater the chance that more turtles will live to become adults.
 - D. A large number of eggs in one place makes it possible for the mother to lie on the eggs until they hatch.
-

25.

Sample Item 25 SC.4.L.17.3

A lagoon food chain is shown below.



Which of the following describes the transfer of energy from a producer to a consumer?

- A. from Perch to Kingfisher
 - B. from Brine Shrimp to Perch
 - C. from the Sun to Green Algae
 - D. from Green Algae to Brine Shrimp
-

