

VIRGINIA STANDARDS OF LEARNING

Spring 2010 Released Test

# GRADE 3 SCIENCE

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Form S0110, CORE 1

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## Directions

Read each question and choose the best answer. Then fill in the circle on your answer document for the answer you have chosen.

### **SAMPLE**

**When Earth is seen from outer space, it looks mainly blue. This is because most of Earth is covered with —**

- A** ice
- B** mountains
- C** oceans
- D** deserts

**1 Mold is often found growing on old bread. In a food chain, mold is a —**

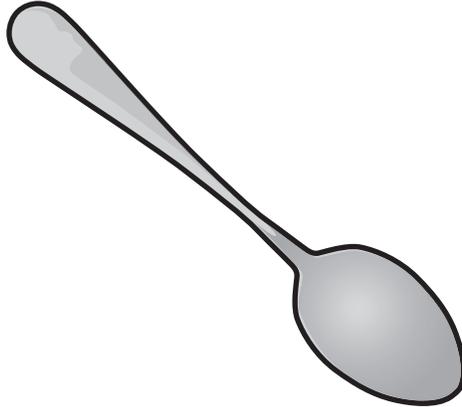
- A** decomposer
- B** producer
- C** consumer
- D** scavenger

**2 Skunks spray a strong-smelling liquid to —**

- F** get rid of wastes
- G** attract prey
- H** defend themselves
- J** help nearby plants grow

3

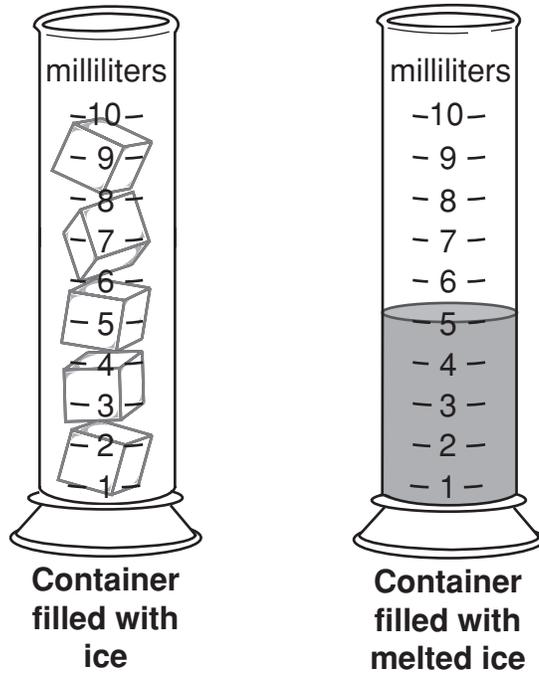
Spoon



Which of these **BEST** describes the texture of the metal spoon?

- A Small
- B Smooth
- C Flexible
- D Shiny

4



**A container was filled with ice cubes. The container was left outside until the ice cubes melted. Based on the picture, how much water came from the melted ice cubes?**

- F** 3 milliliters
- G** 5 milliliters
- H** 7 milliliters
- J** 10 milliliters

**5 When notebook paper is folded to make an airplane, what physical property of the paper changes?**

- A** Mass
- B** Weight
- C** Shape
- D** Smell

**6 Why is it important to protect soil?**

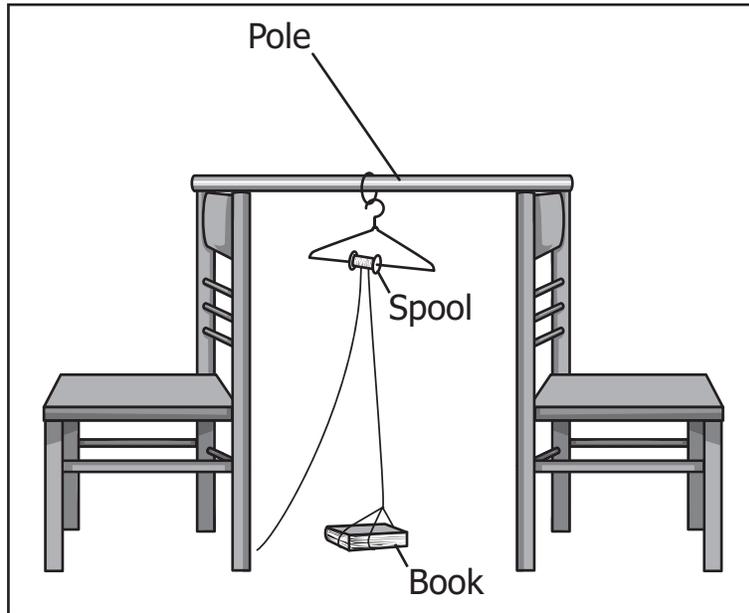
- F** It covers the bedrock layer in the earth.
- G** It has nutrients used by plants to grow.
- H** It holds many harmful pollutants.
- J** It dries quickly in sunlight.

**7 Jake's cats eat food from a can. The cats come running into the kitchen when they hear the electric can opener. Now, each time Jake's mother opens a can of corn, the cats come running. This is an example of —**

- A** learned behavior
- B** correct behavior
- C** instinct
- D** migration

8

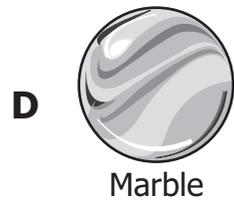
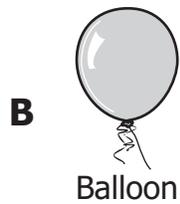
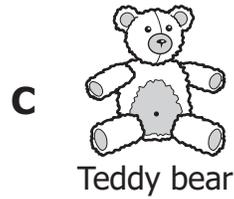
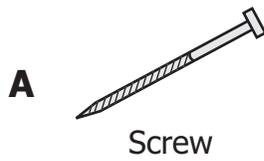
**Model of a Simple Machine**



**Which of these simple machines does this model represent?**

- F** A screw
- G** A wedge
- H** A lever
- J** A pulley

**9 A student is blindfolded and given several objects to feel. Which of these would he describe as hard and smooth?**



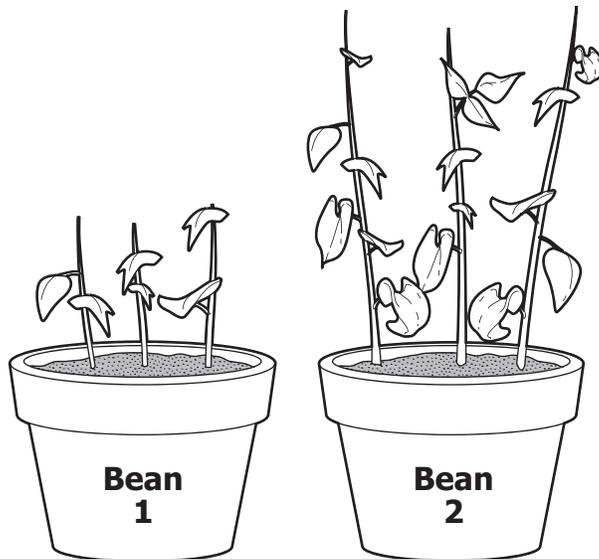
**10 Which of these will take the LONGEST time to observe?**

- F** One moon-phase cycle
- G** One ocean-tide cycle
- H** An acorn growing into an adult tree
- J** A caterpillar becoming a butterfly

**11 Which of these is the BEST way to save animals and trees?**

- A** Ride bikes more
- B** Make more farmland
- C** Take care of forests
- D** Move to the city

**12**



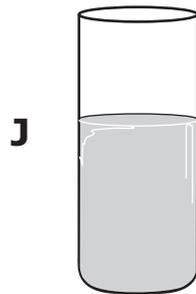
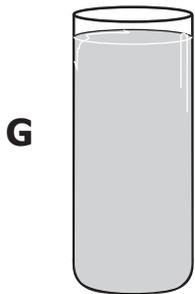
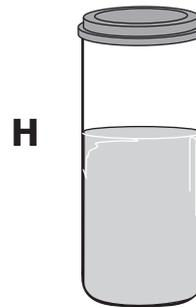
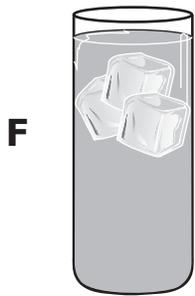
**Students planted two types of bean seeds. Both types of bean plants are measured after two weeks. Which of these questions are they MOST likely trying to answer?**

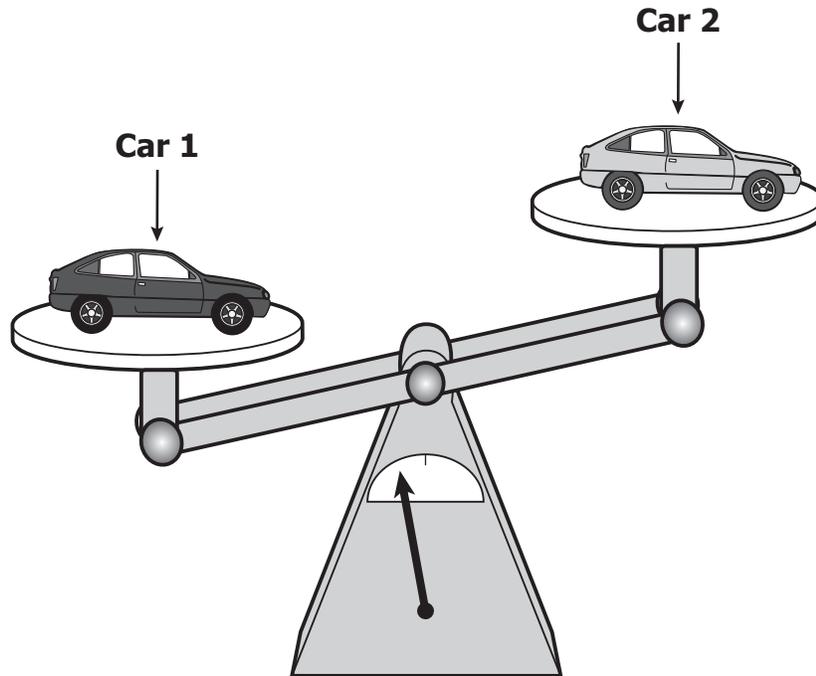
- F** Which type of bean plant grows faster?
- G** Which type of bean plant is prettier?
- H** Which type of bean plant tastes better?
- J** Which type of bean plant costs more?

**13 The teeth of a carnivore are MOSTLY —**

- A** pointed
- B** rounded
- C** wide
- D** flat

**14 Which of these glasses will MOST likely become empty first because of evaporation?**

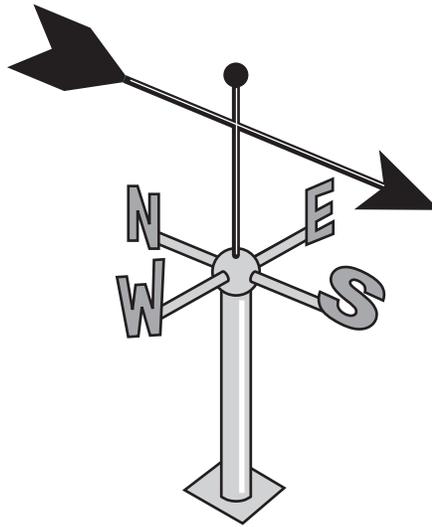




**Students made observations about these toy cars. Which of these BEST describes Car 1 and Car 2?**

- A** Car 1 is heavier than Car 2.
- B** Car 2 is darker than Car 1.
- C** Car 2 is bigger than Car 1.
- D** Car 1 is longer than Car 2.

Weather Vane



**What does a weather vane show?**

- F** Wind direction
- G** Air temperature
- H** Cloud cover
- J** Air pressure

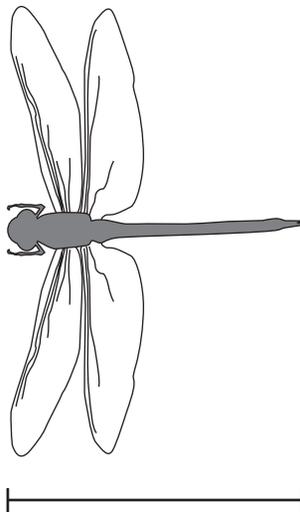
**17 Which part of a bicycle BEST moves in a circle?**

- A** Seat
- B** Frame
- C** Foot pedal
- D** Kickstand

**18** When it rains, some animals will —

- F** hibernate for the season
- G** migrate to warmer climates
- H** change their body covering
- J** move to seek shelter

**19**



**About how long is the dragonfly in the picture?**

- A** 2 centimeters
- B** 4 centimeters
- C** 6 centimeters
- D** 8 centimeters

**20 Having dry, hot weather for a long time can cause a —**

- F** drought
- G** thunderstorm
- H** tornado
- J** flood

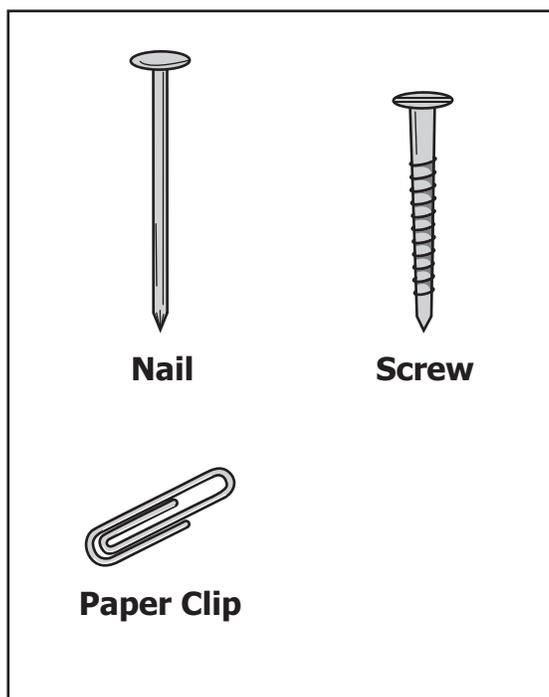
**21 Which of these describes water in a solid state?**

- A** Vapor rising in the sky
- B** Hail during a storm
- C** Waves crashing on the seashore
- D** Rain falling from the clouds

**22 Which lists the correct order of changes that happen to a plant in spring?**

- F** Buds form, flowers open, fruits grow
- G** Flowers die, fruits grow, buds form
- H** Seeds drop, flowers open, buds form
- J** Seeds drop, flowers die, fruits grow

**23**



**Which of these is the BEST title for the group of objects shown?**

- A** Heavy Objects
- B** Rough Objects
- C** Wooden Objects
- D** Magnetic Objects

**24 Which of these is made from a plant?**

**F**



**Cotton Shirt**

**H**



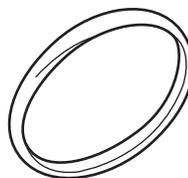
**Plastic Glasses**

**G**

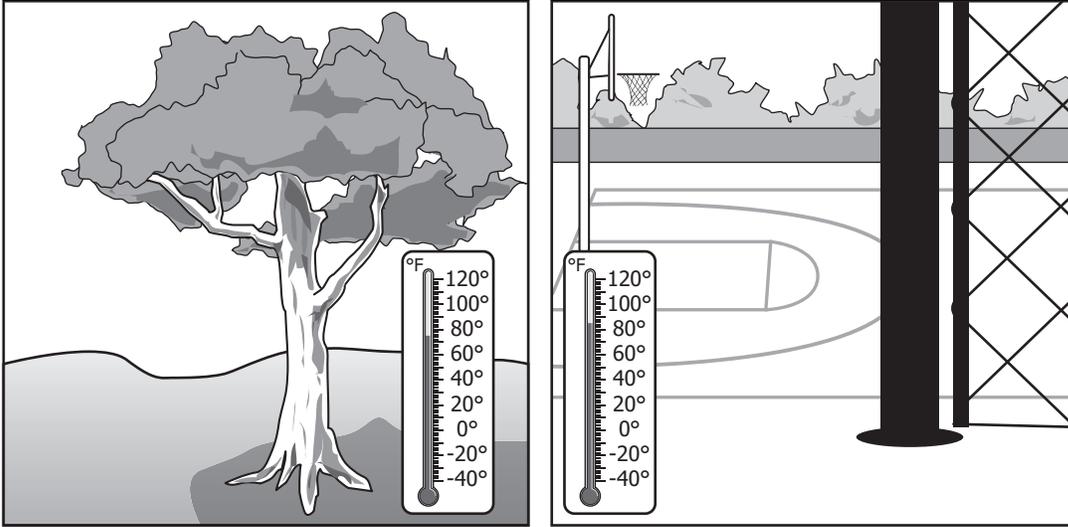


**Leather Boots**

**J**

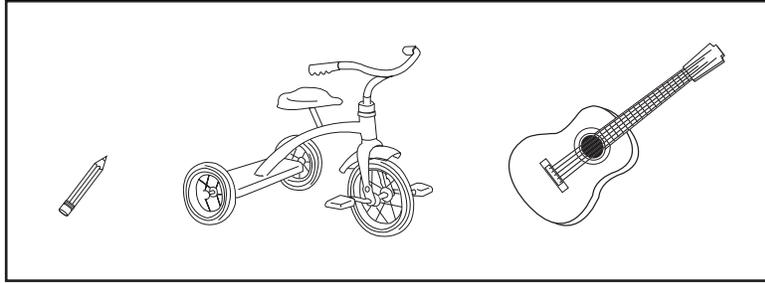


**Metal Bracelet**



**Students used thermometers to compare temperatures around their school. Which of these is MOST likely the reason it was cooler under a tree than on the playground?**

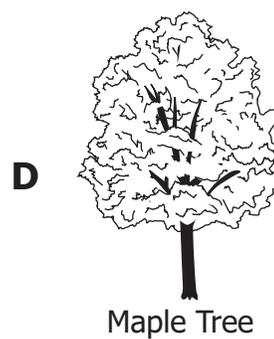
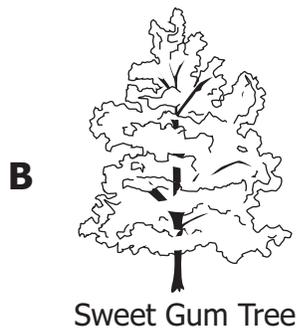
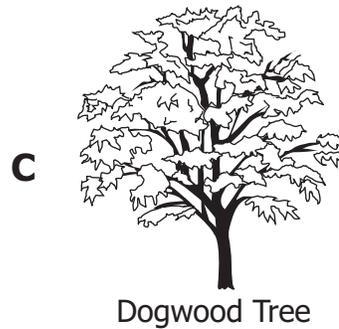
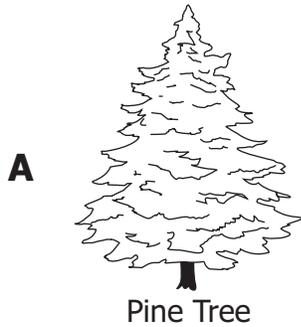
- A** The tree blocked the cold wind.
- B** A student blocked the wind.
- C** Tree leaves blocked some of the sunlight.
- D** A cloud blocked the Sun.



**All of the objects shown can be described as —**

- F** having moving parts
- G** having the same size
- H** needing a magnifying glass to be seen
- J** being made from more than one material

**27 Which of these trees stays green all year?**



**28 Which of these can make a shadow on the ground during the day?**

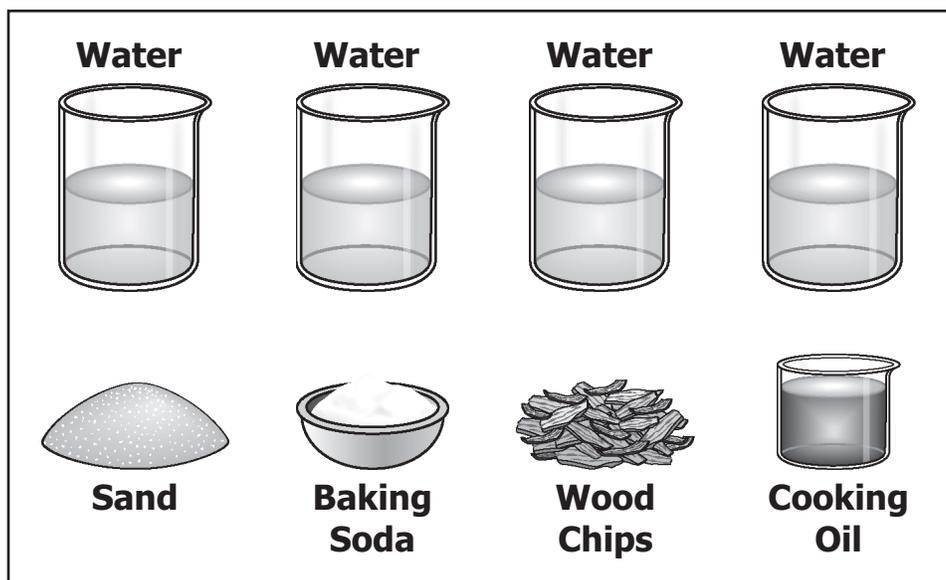
- F** River
- G** Air
- H** Thunder
- J** Cloud

**29** People can help keep a forest a good place for birds to live by —

- A** dumping garbage in a small part of the forest
- B** building a road through the middle of the forest
- C** burning dead trees to make smoke in the air
- D** preventing too many trees from being cut down

**30**

**Mixing Substances With Water**



**Which of these can be dissolved in water?**

- F** Grains of sand
- G** Baking soda
- H** Wood chips
- J** Cooking oil

31

Paper Clips



Pencil

This pencil is about how many paper clips long?

- A 2
- B 5
- C 7
- D 9

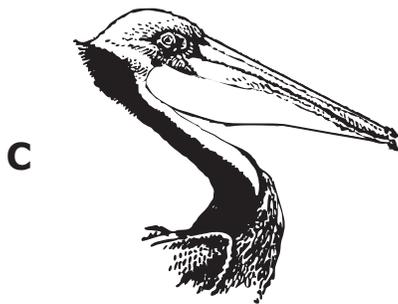
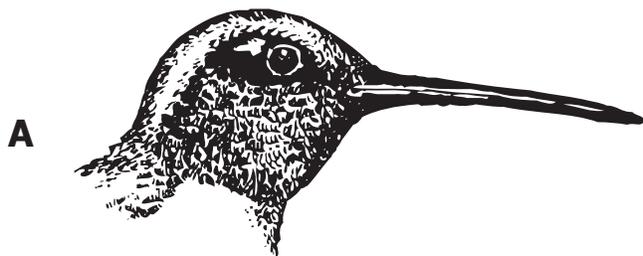


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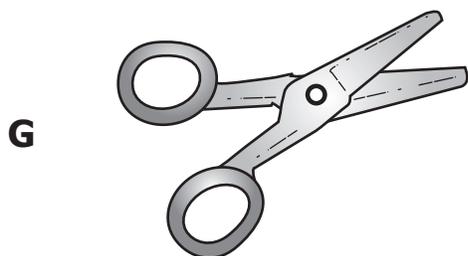
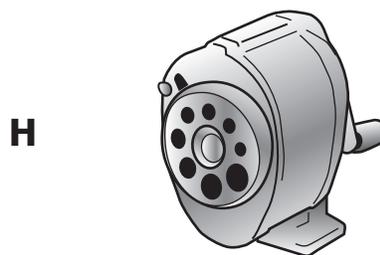
**Which of these BEST describes this leaf?**

- F** Long
- G** Square-shaped
- H** Round
- J** Star-shaped

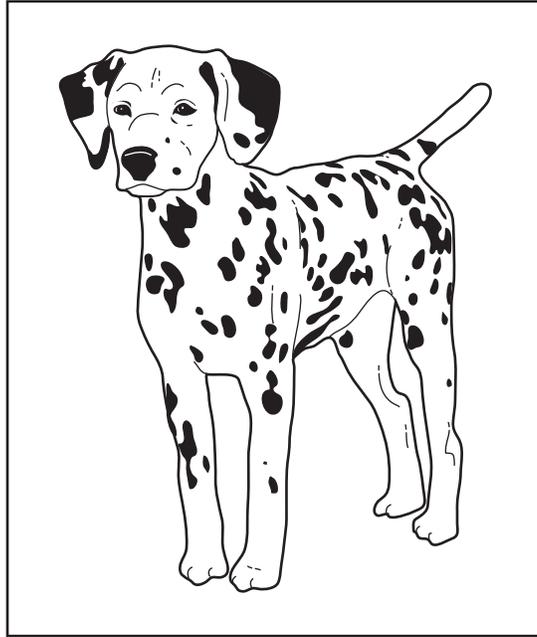
33 Which of these birds MOST likely uses its beak to scoop up small fish for food?



34 Which of these is a compound machine that is a lever and a wedge working together?

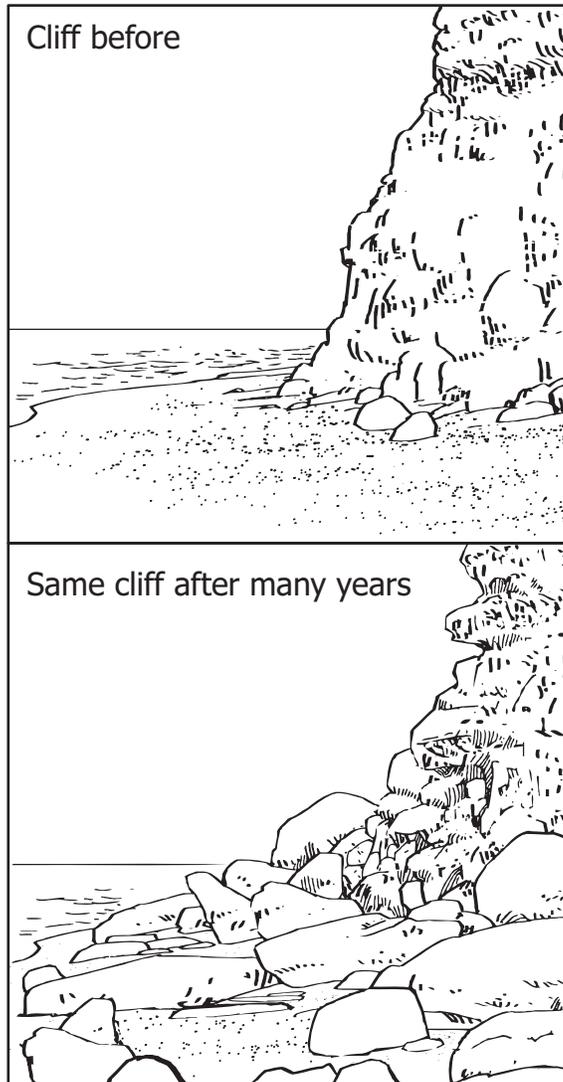


Dog



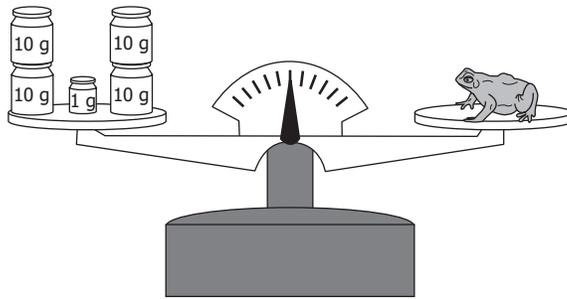
**Based on the picture of this dog, an observation can be made that this animal —**

- A** runs fast
- B** barks loudly
- C** jumps high
- D** has spots



**Which of these may have caused the boulders to break away from the cliff?**

- F** Weathering
- G** Evaporating
- H** Depositing
- J** Grinding



**What is the mass of the frog?**

- A** 39 grams (g)
- B** 40 grams (g)
- C** 41 grams (g)
- D** 42 grams (g)

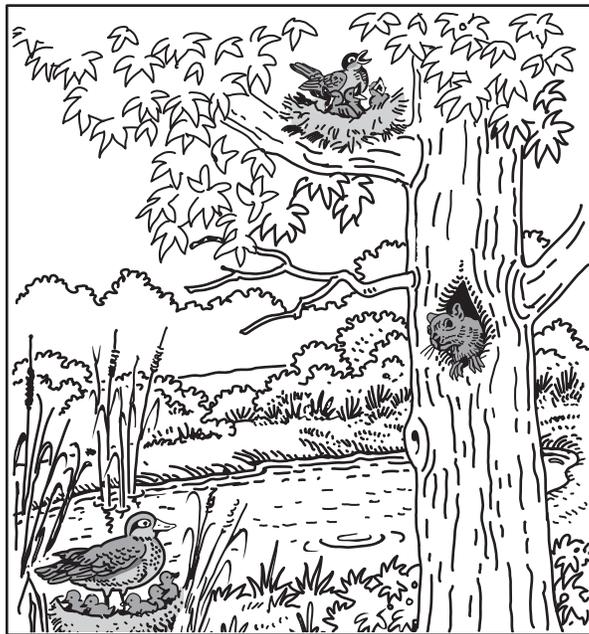
**38 A company plants trees on a bare hillside. Which of these is the BEST reason for planting the trees?**

- F** The trees provide oxygen for the soil.
- G** The trees prevent soil from washing away.
- H** The trees make shade for animals living there.
- J** The trees cause animals to move to other places.

**39 A simple machine makes work easier because using it —**

- A** takes less force to move something heavy
- B** changes the weight of something heavy
- C** improves the way something looks
- D** lets something become a different shape

**40**



**This picture BEST shows how —**

- F** animals use plants for food
- G** animals use plants for homes
- H** plants get in the way of animals
- J** plants keep animals warm in winter