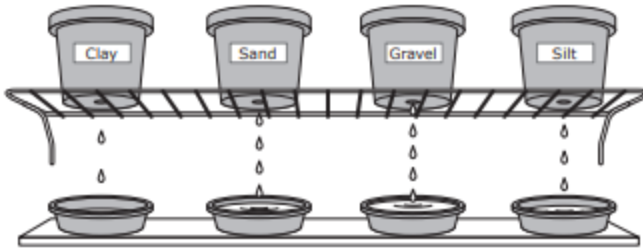


- 4 A student places 250 g samples of clay, sand, gravel, and silt in separate flower pots. The pots are set on a wire rack, and dishes are placed beneath the pots so that water can drip through holes and collect. The student then pours 100 mL of water over the sample in each pot. The student measures the time it takes for water to begin dripping from the bottom of each pot.



What property of soils is the student most likely examining with this procedure?

- F The differences in texture between wet and dry soils
 - G How well different soils retain water
 - H How much water is needed to dissolve different soils
 - J The amount of time it takes different soils to dry
- 13 Which statement best describes the relationship between humans and plants in the carbon dioxide–oxygen cycle?
- A Humans depend on oxygen released into the air by plants, and plants depend on carbon dioxide that humans release into the air.
 - B Plants produce carbon dioxide as a product of photosynthesis and release it into the air to provide energy for humans.
 - C Plants depend primarily on energy supplied by oxygen for photosynthesis, a process which releases carbon dioxide needed by humans.
 - D Humans and plants use gases in the air and the energy of sunlight to produce their own food.
- 34 What would most likely happen to the carbon dioxide–oxygen cycle if Earth’s large forests were all cut down?
- F There would be more carbon dioxide in the atmosphere because fewer plants would be using it to produce their own food.
 - G The remaining plants would stop producing carbon dioxide, and animals would use less oxygen.
 - H The remaining plants would produce more oxygen, and animals would produce less carbon dioxide.
 - J There would be more oxygen in the atmosphere because fewer plants would be using it to produce their own food.

5 Animals and plants use substances that cycle through the environment. Which substance is needed by plants to survive and is released into the environment by animals?

- A** Oxygen
- B** Sugar
- C** Salt
- D** Carbon dioxide

24 Which of these correctly describes the relationship between plants and animals in the carbon dioxide-oxygen cycle?

- F** Plants produce and release the oxygen that animals need to breathe.
- G** Plants produce and release the carbon dioxide that animals need to breathe.
- H** Animals produce and release the oxygen that plants need to make their own food.
- J** Animals produce and release the oxygen that plants convert to carbon dioxide.

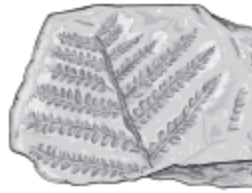
13 A dinosaur fossil is shown.



Which question can scientists most likely answer from studying the fossil of the dinosaur?

- A** What was the pattern on the skin of the dinosaur?
- B** What was the type of food the dinosaur ate?
- C** How fast was the heart of the dinosaur beating?
- D** How many eggs were in the nest of the dinosaur?

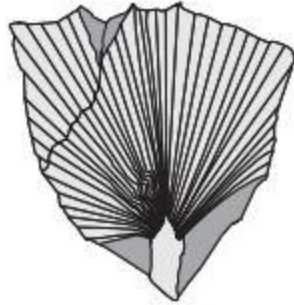
23 A scientist finds the plant fossil shown.



Which question can the scientist most likely answer by examining this fossil?

- A** What was the average monthly rainfall in the area?
 - B** How much water was absorbed by the roots of the plant?
 - C** How much oxygen was in the atmosphere surrounding the plant?
 - D** What was the environment like in the area when the plant was alive?
- 42** Many types of plants grow in a forest ecosystem. How do plants affect the air that forest animals breathe?
- F** Plants use oxygen from the air to make food.
 - G** Plants release pollution into the air.
 - H** Plants release energy from the sun into the air.
 - J** Plants take in carbon dioxide and release oxygen into the air.

- 27** Scientists have uncovered palm plant fossils in Alaska, the northern-most state of the United States. Modern-day palm plants grow in tropical climates. A picture of a palm fossil that measures almost one meter across is shown.



This discovery suggests to scientists that this area in Alaska once was —

- A** covered with an ocean
- B** warmer than it is now
- C** populated by polar bears
- D** changed by earthquakes