

SOUTH CAROLINA
Science

Standards Test Preparation



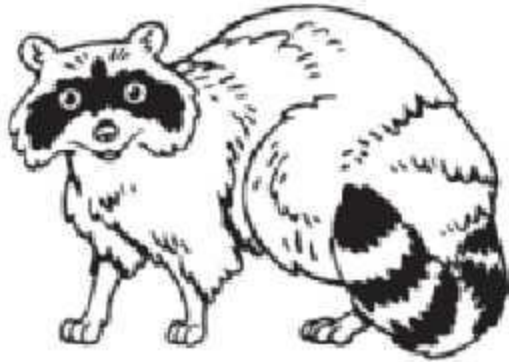
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Directions: Fill in the bubble next to your answer.

1. Which of the following covers **most** of Earth's surface? 3-3.5

(A) rivers
 (B) mountains
 (C) oceans
 (D) lakes

2.



The animal shown in the picture above is a(n) 3-2.5

(F) producer.
 (G) consumer.
 (H) decomposer.
 (I) abiotic factor.

3. Which of the following is true about liquids? 3-4.1, 3-1.1

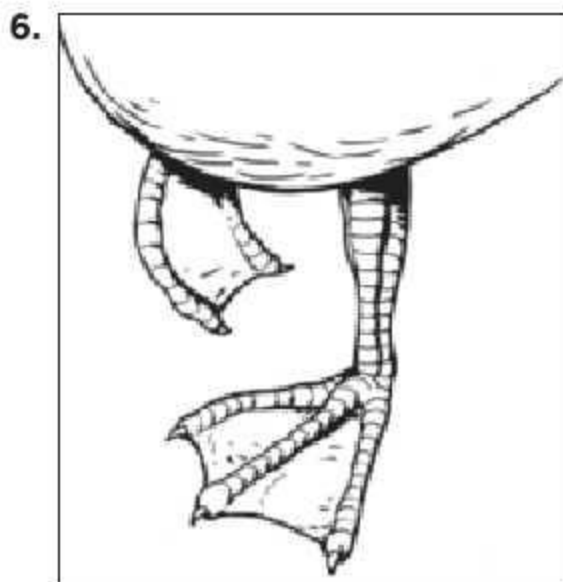
(A) They take the shape of their containers and freeze when cooled.
 (B) They take the shape of their containers and evaporate when cooled.
 (C) They have a definite shape and sublime.
 (D) They have a definite shape and can be broken into pieces.

4. Which tool would be **best** to use to find the amount of silt collected in a water sample? 3-3.1, 3-1.5

(F) meter tape
 (G) forceps
 (H) graduated cylinder
 (I) graduated syringe

5. Gneiss, slate, and schist are types of rocks that were formed from other rocks. These three rocks are examples of 3-3.1

- (A) igneous rocks.
- (B) sedimentary rocks.
- (C) metamorphic rocks.
- (D) magnetized rocks.



Which of the following explains how webbed feet help ducks to survive? 3-2.2

- (F) They allow ducks to fly faster.
- (G) They help ducks to shred their food.
- (H) They help ducks to swim.
- (I) They help ducks to walk long distances.

7. Ollie drops a ball from a height of 5 feet. If Ollie were to drop the same ball from a height of 10 feet, then the force of gravity pulling the ball down 3-5.4, 3-1.3

- (A) would be less.
- (B) would be greater.
- (C) would be the same.
- (D) would not be present.

8. Which of the following lists the order in which an ice cube changes state when it is heated in a pot on the stove? 3-4.2, 3-1.2

- (F) boiling, condensing, melting
- (G) boiling, melting, evaporating
- (H) melting, boiling, evaporating
- (I) melting, condensing, boiling

9. Scientists found fossils of a tropical plant in a desert area. What can the scientists infer about the environment long ago?

3-3.4, 3-1.3

- A There was more water available.
 - B There was less water available.
 - C Temperatures were much cooler.
 - D It has remained the same.
10. Serena wants to investigate the effect a species of bird will have on the fish population in her local pond. Which question should she answer in her investigation? 3-2.4, 3-1.3
- F How does the birds' color help them hide?
 - G What do the birds eat?
 - H Do the birds know how to swim?
 - I Where do the birds build their nests?

11.



Jeremy left his metal spoon in the mug of hot chocolate. A few minutes later, the handle of the spoon was warm. The metal spoon is a good 3-4.3

- A insulator.
 - B conductor.
 - C magnet.
 - D electrical current.
12. A camper rubs two sticks of wood together until smoke begins to form. Heat is generated due to 3-4.4
- F static electricity.
 - G friction.
 - H radiation.
 - I electromagnetism.

- 13.** Kelly observes the sound of a helicopter’s blades as they begin to accelerate. When the vibrations increase,

3-5.8, 3-1.1

- A** the pitch and volume will increase.
- B** the pitch and volume will decrease.
- C** the pitch will increase, but the volume will decrease.
- D** the pitch will decrease, but the volume will increase.

- 14.** Shawna is making a model of a volcano. What should she label the substance that erupts from the volcano?

3-3.6

- F** helium
- G** boiling water
- H** lava
- I** wet sand

- 15.** Terence created a chart about ways to produce heat.

hands	rubbing
wood	

Which of the following **best** completes the chart? 3-4.4,

3-1.6

- A** digging
 - B** holding
 - C** burning
 - D** uncovering
- 16.** A scientist is investigating an unknown mineral. As a safety precaution, what should he never do in this investigation? 3-3.2, 3-1.8
- F** use another mineral to scratch it
 - G** see if the mineral leaves a streak
 - H** compare its taste to that of another mineral
 - I** check to see if the mineral is magnetic

- 17.** Tanya usually plays her cello in a small room. When she plays it outdoors, the sound of her cello seems to be 3-5.7, 3-1.4
- (A) softer.
 - (B) louder.
 - (C) the same.
 - (D) almost silent.

- 18.** Which of the following produces a sound with the highest pitch? 3-5.6



- 19.** Which is true about **all** consumers? 3-2.5

- (A) They eat other organisms.
- (B) They make food.
- (C) They eat grass.
- (D) They live in ponds.

- 20.** Stefanie and Karl put equal amounts of two different clear liquids into the freezer. After one hour, Stefanie's liquid is almost all frozen, but Karl's liquid is only beginning to freeze. What could explain their results? 3-4.2, 3-1.7

- (F) Water does not always freeze at the same temperature.
- (G) Water was not used in either liquid.
- (H) One liquid was tap water, the other was bottled water.
- (I) One liquid was salt water, the other was tap water.

21.



Pam strikes a tuning fork on the edge of the desk and places it in a pot of water. What will happen to the water? 3-5.5, 3-1.4

- A The water will boil due to the heat generated.
- B The water will move due to the vibrations.
- C The water will change colors due to a chemical reaction.
- D All the water will evaporate.

22. Which words would Sheila **most likely** use to describe where her desk is in the classroom? 3-5.1

- F above, outside, inside
- G left, right, behind
- H east, west, degrees
- I miles, days, below

23. Brown bears hibernate in the winter, and a fox's fur changes color. These are examples of 3-2.2

- A life cycle changes.
- B decomposition.
- C adaptations.
- D reproduction.

24. A scientist is conducting an experiment using very hot liquids. What type of tool can she safely hold while conducting her experiment? 3-4.3, 3-1.8

- F glass test tube
- G rubber clamp
- H steel stirrer
- I copper bowl

Use the following chart for questions 25 and 26.

The following minerals are listed from least hard to most hard.

Hardness	Mineral
1	talc
2	gypsum
3	calcite
4	fluorite
5	apatite
6	feldspar
7	quartz
8	topaz
9	corundum
10	diamond

25. A mineral can scratch quartz but cannot scratch corundum. The mineral is **most likely** 3-3.2, 3-1.6

- A fluorite.
- B apatite.
- C feldspar.
- D topaz.

26. If a copper penny can scratch gypsum, then a copper penny is certain to scratch 3-3.2, 3-1.6

- F talc.
- G calcite.
- H fluorite.
- I apatite.

27. If two teams pull on a rope in opposite directions and neither team moves, then

3-5.3

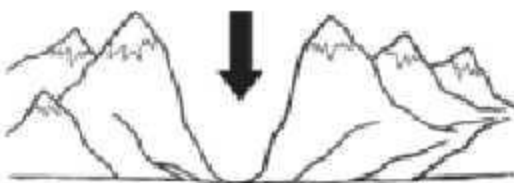
- A forces are unbalanced.
- B forces are balanced.
- C gravity is unequal.
- D gravity has no effect.

28. Which of the following are characteristics of coal?

3-3.7, 3-1.1

- F fossil fuel, renewable resource
- G fossil fuel, nonrenewable resource
- H natural resource, made from sand
- I natural resource, made from metals

29.



Which land feature does the arrow point to in the picture above? 3-3.6

- (A) canyon
- (B) volcano
- (C) plateau
- (D) valley

30. If Bruce is biking west at 12 mph, which of the following would help him to travel faster? 3-5.2

- (F) wind blowing east at 10 mph
- (G) wind blowing west at 10 mph
- (H) wind blowing north at 10 mph
- (I) wind blowing south at 10 mph

31. If a recent drought has caused all the grass in a plain to die, which of the following will **most likely** happen? 3-2.4, 3-1.3

- (A) All consumers will die.
- (B) Some consumers will die, others will leave.
- (C) All decomposers will die.
- (D) There will be no effect on consumers and decomposers.

32. Barbara has a rubber ball, a feather, and a book. She drops the items one at a time from the same height, looks at her stopwatch, and writes down her data. Which question is she **most likely** trying to answer?

3-5.4, 3-1.3

- (F) How high do objects bounce when dropped from the same height?
- (G) How fast do different objects fall from the same height?
- (H) How much do objects weigh at different heights?
- (I) How is the accuracy of a stopwatch measured?

33. Cassie wants to plant her seeds in a type of soil that has the most nutrients. Which of the following should she use? 3-3.1
- (A) humus
 - (B) clay
 - (C) sand
 - (D) silt
34. Which of the following will move the greatest distance? 3-5.3
- (F) strong push on a 10 kg block
 - (G) strong pull on a 5 kg block
 - (H) weak push on a 25 kg block
 - (I) weak pull on a 15 kg block
35. The plants in a tropical rain forest depend on which of these characteristics for their survival? 3-2.3
- (A) hot, dry weather
 - (B) warm, damp weather
 - (C) cold, dry weather
 - (D) cold, damp weather
36. Mallorie wants to measure the pitch of three different strings that are 10 cm, 15 cm, and 20 cm long.



10 cm



15 cm



20 cm

What will Mallorie **most likely** find when she plucks the strings? 3-5.6, 3-1.4

- (F) The 10 cm string has the highest pitch.
- (G) The 15 cm string has the highest pitch.
- (H) The 20 cm string has the highest pitch.
- (I) All the strings have the same pitch.



The picture shown above is a stage in the life cycle of a butterfly called the 3-2.1

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

38. The animals in a desert have adapted to which of the following conditions? 3-2.3

- F hot, dry weather
- G hot, damp weather
- H cold, dry weather
- I cold, damp weather

39. Which of the following will increase the volume of a drum being played? 3-5.7

- A using less energy to hit the drum
- B using more energy to hit the drum
- C loosening the drum skin
- D placing a thick layer of rubber over the drum

40. Tyrese and Sandra both did an experiment where they grew plants. Both students used the same amount of soil, water, and sunlight. Tyrese's plant began to grow, but Sandra's plant did not. What is the **most likely** explanation for this? 3-2.1, 3-1.7

- F The water was contaminated.
- G Sandra's plant did not get enough soil.
- H There was too much sunlight.
- I Sandra's seeds were damaged.

41. An unknown substance is shiny, weighs about 20 grams, and breaks apart when it is hit with a heavy tool. The substance is **most likely** 3-4.1, 3-1.1
- (A) a liquid such as mercury.
 - (B) a gas such as neon.
 - (C) a solid such as quartz.
 - (D) a mixture such as concrete.

42.



Which of the following is **most likely** true about the picture above? 3-3.3, 3-1.1

- (F) It is a fossil of an herbivore.
- (G) It is a fossil of a carnivore.
- (H) It is a skull of an endangered herbivore.
- (I) It is a skull of an endangered carnivore.

43. Walter is giving a bus driver directions to the local public school. Which words should he use to describe the school's location? 3-5.1

- (A) above, inside of, underneath
- (B) tomorrow, underneath, inches
- (C) kilometers, on top of, week
- (D) miles, next to, right

44. A scientist wants to research what happens to the plants and animals in an area that has experienced a landslide. What question is she **most likely** to research? 3-3.8, 3-1.3

- (F) Can plants support consumers after a landslide?
- (G) How much soil is moved by a landslide?
- (H) Is there more air pollution after a landslide?
- (I) Do animals develop camouflage after a landslide?

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