

TEST NAME: 5.P Standard Assessment (COPY 2)
TEST ID: 4526274
GRADE: 05 - Fifth Grade
SUBJECT: Life and Physical Sciences
TEST CATEGORY: School Assessment

Student: _____

Class: _____

Date: _____

- Sodium bicarbonate (NaHCO_3) is commonly known as baking soda. Sodium bicarbonate is a white solid that can dissolve in water. Under the proper conditions, sodium bicarbonate can release carbon dioxide (CO_2) gas. Which of the following is NOT a physical property of sodium bicarbonate?**
 - It is white.
 - It is a solid.
 - It can dissolve in water.
 - It releases carbon dioxide.

- One type of cold remedy is an effervescent tablet that breaks down in water. When the tablet is placed in water, it forms gas bubbles. In this example, the formation of a gas**
 - is a physical property.
 - occurs when adding water to acid.
 - is a sign of a chemical change.
 - occurs when the water boils.

- Physical and chemical properties can be used to classify substances. Which of these shows a chemical property?**
 - Silver melts.
 - Magnesium burns.
 - Sulfur is a yellow solid.
 - Aluminum conducts heat.

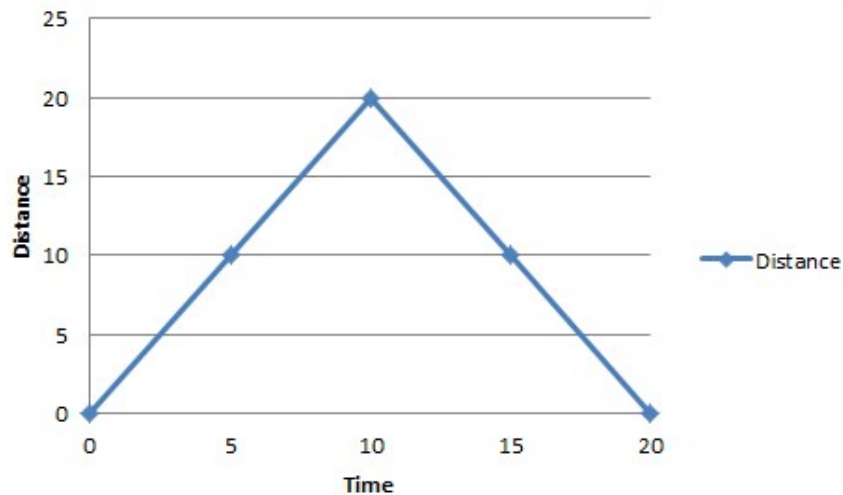
- Which **best** describes an example of heat transfer through radiation?
 - getting warm in front of a portable heater
 - burning your finger on a curling iron
 - ironing a dress shirt and tie
 - cooking soup on the stove

5. Which causes surface water in a lake to heat up during the hot summer?
- A. conduction
 - B. convection
 - C. evaporation
 - D. radiation
6. Which **best** describes heat transfer due to convection?
- A. It occurs with direct contact.
 - B. It occurs only during the day.
 - C. It occurs with movement of a fluid.
 - D. It occurs only when something is burning.
7. Why is copper often used to line the bottom of cookware?
- A. Copper cools quickly.
 - B. Copper is inexpensive.
 - C. Copper is a good insulator.
 - D. Copper is a good conductor.
8. Which container used for cooking food would **best** conduct heat?
- A. a container made of foam
 - B. a container made of glass
 - C. a container made of metal
 - D. a container made of plastic

9. Which **best** explains why a metal ice cream scoop works more efficiently than a plastic ice cream scoop when dipped in warm water prior to scooping the ice cream?
- A. The metal heats more quickly than the plastic.
 - B. The plastic heats more quickly than the metal.
 - C. The metal insulates against heat.
 - D. The plastic conducts heat.
10. After throwing a basketball through the net, Anna observed the ball as it hit the ground. Which is **most likely** responsible for the ball hitting the ground?
- A. friction
 - B. gravity
 - C. mass
 - D. speed
11. Chris climbs onto a skateboard ramp halfway between the top and the bottom of the ramp. Because gravity acts on Chris, which is **most likely** to happen?
- A. He won't move.
 - B. He will roll up the ramp.
 - C. He will roll down the ramp.
 - D. He will float above the ramp.
12. Katie was pulling a sled with her puppy in it. Katie's sister then got into the sled with the puppy. How would the sled's speed **most likely** change after Katie's sister got into the sled?
- A. The speed would increase due to the change in mass.
 - B. The speed would decrease due to the change in mass.
 - C. The speed would increase due to the change in friction.
 - D. The speed would decrease due to the change in gravity.

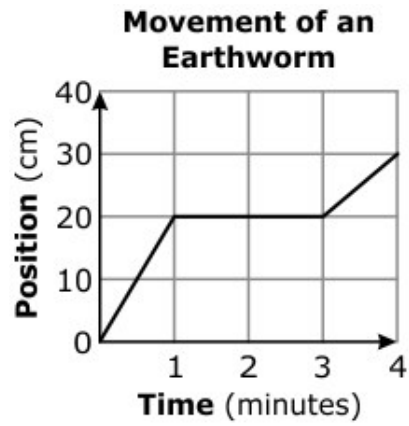
13. Kyle and John are taking a road trip. The car travels a greater distance during the second hour of the trip than the first hour. Which can **most likely** be concluded?
- A. The car is moving at a constant speed during the entire trip.
 - B. The car is moving faster during the first hour of the trip than in the second hour.
 - C. The car is moving faster during the second hour of the trip than in the first hour.
 - D. The car is moving in a different direction the second hour of the trip than in the first hour.
14. Mike and Rachel ride their bikes 1 mile to the park and then ride their bikes 1 mile to the store. It takes them longer to get to the park than it takes to get to the grocery store. Which can **most likely** be concluded?
- A. Mike and Rachel biked faster to the park.
 - B. Mike and Rachel biked faster to the store.
 - C. Mike and Rachel went a different way to the park and the store.
 - D. Mike and Rachel biked the same speed to the park and the store.
15. Kyle rode his bike for 30 minutes. He noticed that he traveled farther in the first 15 minutes than he did in the second 15 minutes. Which conclusion can Kyle draw about his bike ride?
- A. He rode at a constant speed.
 - B. He rode downhill the entire trip.
 - C. He rode faster the first fifteen minutes.
 - D. He rode slower the first fifteen minutes.

16. A student went on a walk, and kept track of their time and distance. The data is displayed in the graph. Which best describes the student's walk?



- A. The student went up a hill, and then down a hill.
- B. The student walked very quickly at the beginning of the walk, but then slowed down at the end.
- C. The student walked slowly at the beginning of the walk, and faster at the end.
- D. The student walked at a steady pace, and then returned to the starting point.

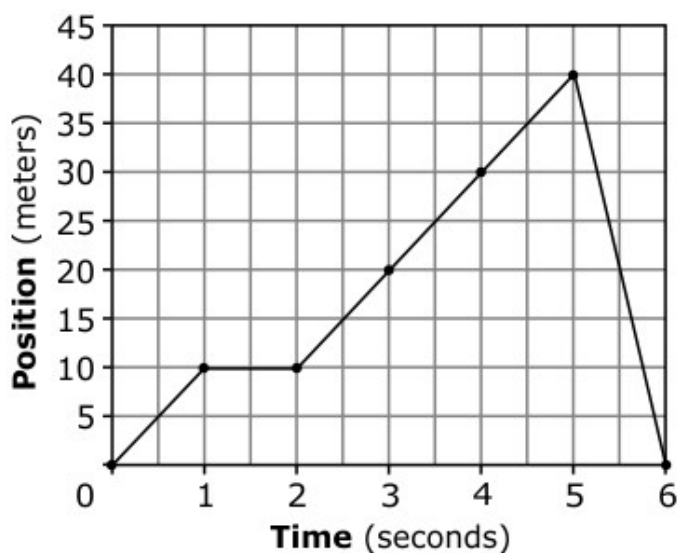
17. This graph shows the movement of an earthworm.



Gavin and Maddy observed an earthworm crawling on the sidewalk for four minutes. When did the earthworm move the greatest distance?

- A. between 0 and 1 minutes
- B. between 1 and 2 minutes
- C. between 2 and 3 minutes
- D. between 3 and 4 minutes

18. This graph shows the movement of an object.



When is the biggest decrease in movement?

- A. between seconds 0 and 1
- B. between seconds 1 and 2
- C. between seconds 2 and 5
- D. between seconds 5 and 6

19. Which item will require the **most** force to move?

- A. an empty wagon
- B. a wagon full of bricks
- C. a wagon full of apples
- D. a wagon full of feathers

20. A librarian stacked two identical carts of books. One cart was completely filled, while the second was half-filled. What will happen when the carts are moved?

- A. Both carts will require the same amount of force to push.
- B. The cart with the most books will require a greater force to push.
- C. The cart with the fewest books will require a greater force to push.
- D. The cart with the most books will require a greater force of gravity to push.

21. Henry was helping his dad with a project outside. Henry pulled a wagon full of bricks across the yard. He took the bricks out of the wagon to use for their project. Henry then pulled the wagon back across the yard to refill it. Which did Henry **most likely** observe about the wagon?
- A. The wagon full of bricks needed more force to be moved because it had less mass.
 - B. The wagon full of bricks needed less force to be moved because it had more mass.
 - C. The empty wagon needed more force to be moved because it had more mass.
 - D. The empty wagon needed less force to be moved because it had less mass.
22. What must occur before clouds can form?
- A. Water vapor must get warmer.
 - B. Water vapor must lose heat energy.
 - C. Precipitation must begin to fall and run off.
 - D. Transpiration must add water vapor to the atmosphere.
23. **The atmosphere of Earth blocks many of the Sun's rays. If weather patterns change and more of the Sun's rays penetrate the atmosphere of Earth, which is MOST likely to increase?**
- A. the number of daylight hours
 - B. the evaporation of oceans
 - C. the length of each season
 - D. the pull of gravity
24. **Approximately 71% of Earth's surface is covered with water. The majority of this water is salt water found in the oceans. Where is the majority of Earth's fresh water found?**
- A. ice
 - B. lakes
 - C. rivers
 - D. the atmosphere

25. Maya adds 6 grams of sugar to a bottle containing 14 grams of warm water. What is the total weight of the sugar and water?
- A. 6 grams
 - B. 8 grams
 - C. 14 grams
 - D. 20 grams
26. The mass of a piece of copy paper is 10 grams. Katie tears the paper into 4 equal sections. What is their combined mass?
- A. 14 grams
 - B. 10 grams
 - C. 20 grams
 - D. 40 grams
27. John, Jacob, and Jamian were creating figures with modeling clay. They divided a 90-gram bar of clay. John and Jamian combined their clay to make one large figure, then Jacob added his. What happened to the mass of the figure they created?
- A. The resulting figure's mass would be about 180 grams, since John and Jamian's figure had twice as much clay.
 - B. The resulting figure's mass would be about 90 grams, since the divided clay was formed back together.
 - C. The resulting figure's mass would be about 30 grams, since the original bar was divided into thirds.
 - D. The resulting figure's mass would be about 270 grams, since all three boys combined their clay.