

1.

A student places a small piece of sodium in a beaker of water. The sodium begins to smoke, hiss, and jump across the surface of the water. In a few seconds, the sodium disappears. What is the best evidence that a chemical change occurred?

- A. Rapid movement
- B. Change of mass
- C. Creation of heat
- D. Generation of sound

2.

If a student places a burning candle in a sealed container, the flame soon sputters and goes out. What is the best explanation for this?

- A. The candle became too hot.
- B. Most of the oxygen was used.
- C. There is no fuel in the container.
- D. Candle smoke could not escape.

3.

When a student lowered the temperature of a glass of water below  $0^{\circ}\text{C}$ , the water turned into ice. Later the student heated the ice and it turned back into water. Why must this be a physical change?

- A. The water is still water.
- B. The ice required heat to melt.
- C. The amount of water is still the same.
- D. The density of ice and water are different.

4.

When a student mixes oxygen and hydrogen gas in a test tube, nothing seems to happen. However, when the student introduces an electric spark, the mixture "pops," and water forms on the inside of the test tube. What is the best evidence for this chemical change?

- A. Popping sound
- B. Use of electricity
- C. Formation of water
- D. Mixture of two gases