



Properties of Matter

Name: _____

Date: _____

Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. A student heats sugar in a pan. The sugar turns brown and gives off a smell. Which statement best explains what happened?

- A) A physical change occurred because the sugar simply melted into a liquid.
- B) A chemical change occurred because the brown color and new odor indicate a new substance formed.
- C) A physical change occurred because heating always causes physical changes.
- D) A chemical change occurred because all changes caused by heat are chemical changes.

2. A scientist mixes two clear liquids together and a yellow solid appears at the bottom of the beaker. What type of change is this?

- A) A physical change because both liquids were clear before mixing.
- B) A physical change because the solid can be filtered out of the mixture.
- C) A chemical change because a precipitate forming indicates a new substance was created.
- D) A chemical change because all mixing of liquids produces chemical reactions.

3. A student dissolves salt in warm water. The water tastes salty but looks clear. Which conclusion is correct?

- A) A chemical change occurred because the salt disappeared into the water.
- B) A physical change occurred because the salt and water can be separated by evaporation.
- C) A chemical change occurred because the taste of the water changed.
- D) A physical change occurred because the water changed from clear to salty.

4. A nail left outside for several weeks develops an orange coating. Which evidence best supports that this is a chemical change?

- A) The nail changed shape as the coating built up on its surface.
- B) A new substance called iron oxide formed with different properties than iron.
- C) The nail became heavier because it absorbed water from the rain.
- D) The orange color is just dirt that stuck to the surface of the nail.

Part B: Fill in the Blank

Write the correct answer on each line.

1. When a new color appears during a reaction, it is evidence that a _____ change occurred.

2. A change that can easily be reversed, like melting ice, is usually a _____ change.

Part A: Multiple Choice

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Part B: Fill in the Blank

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1. When a new color appears during a reaction, it is evidence that a chemical change occurred.
2. A change that can easily be reversed, like melting ice, is usually a physical change.
3. The formation of gas bubbles during a reaction often signals a chemical change.