



Chemical and Physical Changes

Name: _____

Date: _____

Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. Which observation is the strongest evidence that a chemical change has happened?

- A) A liquid becomes solid when cooled
- B) A color changes and a new gas is given off
- C) A piece of metal is bent into a curve
- D) A sugar cube dissolves in hot tea

2. A student burns a piece of paper and weighs the leftover ash. The ash weighs less than the paper. What happened to the missing mass?

- A) Mass was destroyed in the chemical reaction
- B) It floated away as smoke and gases that were not weighed
- C) The paper was turned into pure energy with no mass
- D) The scale was broken before the reaction

3. Which everyday example shows BOTH a physical change and a chemical change?

- A) Boiling water in a pot until it becomes vapor
- B) Cutting a tomato into slices for a salad
- C) Lighting a candle so the wax melts and the wick burns
- D) Folding a paper airplane and throwing it

4. Two clear liquids are mixed in a beaker. Which result best shows that a chemical change took place?

- A) The liquids combine and stay clear
- B) The mixture turns yellow and a solid forms at the bottom
- C) The temperature stays exactly the same
- D) The mixture can be separated by simple filtration

Part B: Fill in the Blank

Write the correct answer on each line.

1. When a bike chain rusts in the rain, it has gone through a _____ change because iron and oxygen made a new substance.

2. When a popsicle melts in the sun, it has gone through a _____ change because the liquid is still the same substance.

3. Sour milk smells bad because tiny living things have caused a _____ change in the milk.

4. Crushing a soda can changes its shape but not the metal it is made of, so it is a _____ change.

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Part B: Fill in the Blank

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1. When a bike chain rusts in the rain, it has gone through a chemical change because iron and oxygen made a new substance.
2. When a popsicle melts in the sun, it has gone through a physical change because the liquid is still the same substance.
3. Sour milk smells bad because tiny living things have caused a chemical change in the milk.
4. Crushing a soda can changes its shape but not the metal it is made of, so it is a physical change.
5. By the law of conservation of matter, atoms are rearranged but never destroyed during a chemical