

Name: \_\_\_\_\_

Block: \_\_\_\_\_

## ■ Phases of Matter: Understanding the Main Ideas

Complete the following chart.

Phase	Arrangement of Particles	Movement of Particles	Definite Shape?	Definite Volume?
Solid				
Liquid				
Gas				

## ■ Physical and Chemical Changes: Using the Main Ideas

Decide whether each statement describes a physical change or a chemical change. If it describes a physical change, write P in the blank before the statement. If it describes a chemical change, write C.

- \_\_\_\_\_ 1. A bicycle left out in the rain begins to rust.
- \_\_\_\_\_ 2. A match burns, leaving only a charred stick of wood.
- \_\_\_\_\_ 3. A copper wire is cut into five smaller pieces.
- \_\_\_\_\_ 4. An ice cube melts.
- \_\_\_\_\_ 5. A glowing splint placed in a test tube causes a loud "pop."
- \_\_\_\_\_ 6. Food coloring is added to cake icing to make it pink.
- \_\_\_\_\_ 7. Gasoline burns in a car engine.
- \_\_\_\_\_ 8. Antifreeze is added to a car radiator to lower the freezing point.
- \_\_\_\_\_ 9. A spoonful of sugar is dissolved in a cup of coffee.
- \_\_\_\_\_ 10. A silver knife and fork tarnish when they are exposed to air for several weeks.
- \_\_\_\_\_ 11. Leaves of a maple tree turn bright red as winter approaches.
- \_\_\_\_\_ 12. A water molecule gains enough energy to enter the vapor phase.