

**PHYSICAL PROPERTY**

1. observed with senses
2. determined without destroying matter

**CHEMICAL PROPERTY**

1. indicates how a substance reacts with something else
2. matter will be changed into a new substance after the reaction

Identify the following as a chemical (C) or physical property (P):

- |                                 |                            |
|---------------------------------|----------------------------|
| _____ 1. blue color             | _____ 8. melting point     |
| _____ 2. density                | _____ 9. reacts with water |
| _____ 3. flammability (burns)   | _____ 10. hardness         |
| _____ 4. solubility (dissolves) | _____ 11. boiling point    |
| _____ 5. reacts with acid       | _____ 12. luster           |
| _____ 6. supports combustion    | _____ 13. odor             |
| _____ 7. sour taste             | _____ 14. reacts with air  |

**PHYSICAL CHANGE**

1. a change in size, shape, or state
2. no new substance is formed

**CHEMICAL CHANGE**

1. a change in the physical and chemical properties
2. a new substance is formed

Identify the following as physical (P) or chemical (C) changes.

- |  |                                      |
|--|--------------------------------------|
| _____ 1. NaCl (Table Salt) dissolves in water.   | _____ 9. Milk sours.                 |
| _____ 2. Ag (Silver) tarnishes.                  | _____ 10. Sugar dissolves in water.  |
| _____ 3. An apple is cut.                        | _____ 11. Wood rots.                 |
| _____ 4. Heat changes H <sub>2</sub> O to steam. | _____ 12. Pancakes cook.             |
| _____ 5. Baking soda reacts to vinger.           | _____ 13. Grass grows.               |
| _____ 6. Fe (Iron) rusts.                        | _____ 14. A tire is inflated.        |
| _____ 7. Alcohol evaporates .                    | _____ 15. Food is digested.          |
| _____ 8. Ice melts.                              | _____ 16. Paper towel absorbs water. |

## Physical and Chemical Changes

Can you recognize the chemical and physical changes that happen all around us? If you change the way something looks, but haven't made a new substance, a **physical change** (P) has occurred. If the substance has been changed into another substance, a **chemical change** (C) has occurred.

|     |   |
|-----|---|
| 1.  | An ice cube is placed in the sun. Later there is a puddle of water. Later still the puddle is gone. |
| 2.  | Two chemicals are mixed together and a gas is produced.   |
| 3.  | A bicycle changes color as it rusts.  |
| 4.  | A solid is crushed to a powder.   |
| 5.  | Two substances are mixed and light is produced.   |
| 6.  | A piece of ice melts and reacts with sodium.  |
| 7.  | Mixing salt and pepper.   |
| 8.  | Chocolate syrup is dissolved in milk.   |
| 9.  | A marshmallow is toasted over a campfire.   |
| 10. | A marshmallow is cut in half.   |