

SCIENCE A NTI DAY 3

PHYSICAL AND CHEMICAL PROPERTIES AND CHANGES

Name _____ Period _____

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 properties

CHEMICAL CHANGE

1. a change in the physical and
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 ₂ O to steam. | _____ 12. Pancakes cook. |
| _____ 5. Baking soda reacts to vinegar. | _____ 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.