

# PHYSICAL VS. CHEMICAL CHANGES

Name \_\_\_\_\_

In a physical change, the original substance still exists, it has only changed in form. In a chemical change, a new substance is produced. Energy changes always accompany chemical changes.

Classify the following as being a physical or chemical change.

1. Sodium hydroxide dissolves in water. \_\_\_\_\_
2. Hydrochloric acid reacts with potassium hydroxide to produce a salt, water and heat. \_\_\_\_\_
3. A pellet of sodium is sliced in two. \_\_\_\_\_
4. Water is heated and changed to steam. \_\_\_\_\_
5. Potassium chlorate decomposes to potassium chloride and oxygen gas.  
\_\_\_\_\_
6. Iron rusts. \_\_\_\_\_
7. When placed in  $H_2O$ , a sodium pellet catches on fire as hydrogen gas is liberated and sodium hydroxide forms. \_\_\_\_\_
8. Evaporation \_\_\_\_\_
9. Ice melting \_\_\_\_\_
10. Milk sours. \_\_\_\_\_
11. Sugar dissolves in water. \_\_\_\_\_
12. Wood rotting \_\_\_\_\_
13. Pancakes cooking on a griddle \_\_\_\_\_
14. Grass growing in a lawn \_\_\_\_\_
15. A tire is inflated with air. \_\_\_\_\_
16. Food is digested in the stomach. \_\_\_\_\_
17. Water is absorbed by a paper towel. \_\_\_\_\_