

# CHEMICAL vs. PHYSICAL CHANGE

Name \_\_\_\_\_

In a physical change, the original substance still exists, It has only changed in form. Energy changes usually do not accompany physical changes, except in phase changes and when substances dissolve.

In a chemical change, a new substance is produced. Energy changes always accompany chemical changes. Physical changes usually accompany chemical changes.

Classify the following as being either a chemical or a physical change.

1. Sodium chloride dissolves in water. \_\_\_\_\_
2. Hydrochloric acid reacts with sodium hydroxide to produce a salt, water and heat. \_\_\_\_\_
3. A pellet of sodium is sliced in half. \_\_\_\_\_
4. Water is heated and changed to steam. \_\_\_\_\_
5. Food is digested. \_\_\_\_\_
6. Starch molecules are formed from smaller glucose molecules. \_\_\_\_\_
7. Ice melts. \_\_\_\_\_
8. Plant leaves lose water through evaporation. \_\_\_\_\_
9. A red blood cell placed in distilled water will swell and burst. \_\_\_\_\_
10. The energy in food molecules is transferred into molecules of ATP. \_\_\_\_\_
11. The roots of a plant absorb water. \_\_\_\_\_
12. Iron rusts. \_\_\_\_\_
13. Oxygen is incorporated into hemoglobin to bring it to the cells. \_\_\_\_\_
14. A person gets cooler by perspiring. \_\_\_\_\_
15. Proteins are made from amino acids. \_\_\_\_\_
16. A match burns. \_\_\_\_\_
17. A toothpick is broken in half. \_\_\_\_\_