

5.1.4 CHEMICAL vs. PHYSICAL CHANGE

Name _____

In a physical change, the original substance (molecules) 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 in the stomach and intestines. _____
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. _____