

- 1) State the **difference** between a physical change and a chemical change, and list three likely indications that a chemical change has occurred.

- 2) Classify the following changes as **physical or chemical**.
 - a. Cookies are baked.
 - b. Water boils.
 - c. Salt dissolves in water.
 - d. A firefly emits light.
 - e. Milk spoils.
 - f. A metal chair rusts.

- 3) State **several physical or chemical properties** that could be used to distinguish between each of the following pairs of substances.
 - a. Gasoline and water.
 - b. copper and silver
 - c. water and a saltwater solution
 - d. aluminum and steel

- 4) Classify the following properties of the element silicon as **chemical or physical** properties.
 - a. Blue-gray color
 - b. brittle
 - c. insoluble in water
 - d. melts at 1410°C
 - e. reacts vigorously with fluorine

- 5) Each of the following is a chemical change. What evidence would you see to confirm this?
 - a. Food spoils.
 - b. A foaming antacid tablet fizzes in water.
 - c. A ring of scum forms around your bathtub.
 - d. Iron rusts.
 - e. A firecracker explodes.