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# **Chemical Reactions Worksheet**

# Data Tables

#### Reaction #1

Observations	
Evidence That a Chemical Reaction Occurred	
Balanced Chemical Equation	
Type of Reaction	

### Reaction #2

Observations	
Evidence That a Chemical Reaction Occurred	
Balanced Chemical Equation	
Type of Reaction	

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## Data Tables (continued)

### Reaction #3

Observations	
Evidence That a Chemical Reaction Occurred	
Balanced Chemical Equation	
Type of Reaction	

# Reaction #4

Observations	
Evidence That a Chemical Reaction Occurred	
Balanced Chemical Equation	
Type of Reaction	

#### Reaction #5

Observations	
Evidence That a Chemical Reaction Occurred	
Balanced Chemical Equation	
Type of Reaction	

#### **Post-Lab Questions**

- 1. Do any of the reactions performed in this laboratory activity fall into more than one category of reaction type? If so, which ones? What evidence supports your categorization?
- 2. For each of the following sets of reactants, (a) predict the products for each chemical reaction, (b) complete and balance each chemical equation using coefficients, and (c) list each reaction type.

#### **Reaction Type**

a. \_\_\_\_NaOH(aq) + \_\_\_\_CuSO<sub>4</sub>(aq)  $\rightarrow$ b. \_\_\_\_CaO(s) + \_\_\_\_H<sub>2</sub>O(l)  $\rightarrow$ c. \_\_\_\_Al(s) + \_\_\_\_O<sub>2</sub>(g)  $\rightarrow$ d. \_\_\_\_BaCl<sub>2</sub>(aq) + \_\_\_\_Na<sub>2</sub>SO<sub>4</sub>(aq)  $\rightarrow$ e. \_\_\_\_CH<sub>4</sub>(g) + \_\_\_\_O<sub>2</sub>(g)  $\rightarrow$ f. \_\_\_\_CaCO<sub>3</sub>(s)  $\rightarrow$ g. \_\_\_\_HCl(aq) + \_\_\_\_Zn(s)  $\rightarrow$ h. \_\_\_\_Cl<sub>2</sub>(g) + \_\_\_\_KBr(aq)  $\rightarrow$ 

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- 3. For each of the clues listed as evidence of chemical reaction, list a common occurrence that must involve a chemical reaction. For example, when a firefly glows it is giving off light. This emission of light is due to a chemical reaction.
  - a. Production or absorption of heat.
  - b. Absorption or emission of light.
  - c. Production of sound.
  - d. Change of color.
  - e. Formation of a precipitate.
  - f. Release of a gas.

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