**A New Language**

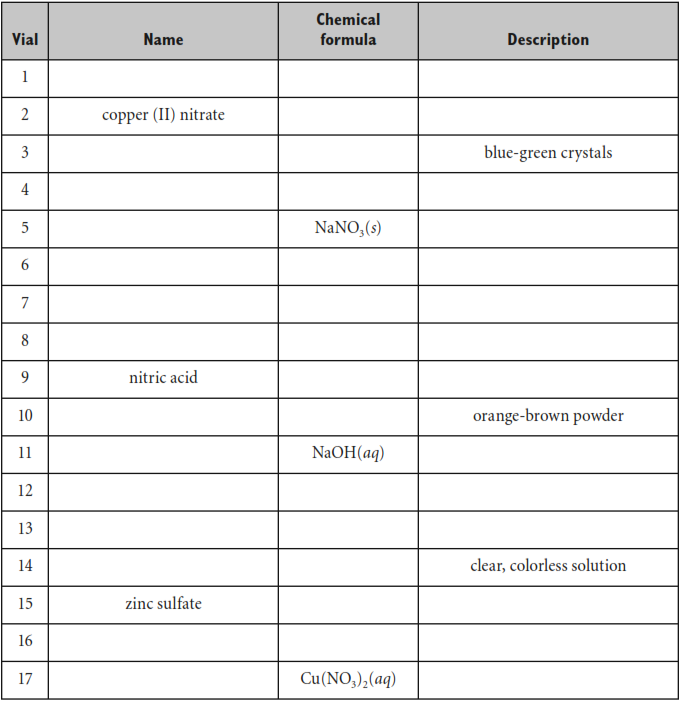
**Chemical Names and Symbols**

**Purpose**

To learn the language of chemical symbols and chemical names.

**Part 1: Observations**

Look at each vial and fill in the data in the table.



**Part 2: Cracking the Code**

**1.** Examine the contents of the vials and their labels. Write down at least six patterns you notice.

**2.** These symbols represent elements. Identify each element.

**a.** Cu **b.** H **c.** Zn

**3.** Translate these element names into their symbols.

**a.** sulfate **b.** nitrate **c.** hydroxide

**4.** Compounds are substances that are made up of more than one element. In your data table, place a C next to the number of each vial that contains a compound.

**5.** What do you think (*s*), (*l*), and (*g*) stand for?

**6.** How would you write the chemical formula for ice?

**7.** What do all the substances labeled (*aq*) have in common?