

## Recognizing Formulas for Acids, Bases, and Salts

In this activity, you will examine some of the formulas and the ions present in the formulas for acids to find similarities among acids. You will then do the same thing with bases and with salts.

### Procedure

1. Look through this chapter and add at least two more acids to the following table. Include each acid's formula and name, and the ions present.

### Data Table for Acids

Acid formula	Acid name	Ions present
HCl	hydrogen chloride	$H^{+1}$ and $Cl^{-1}$
HNO <sub>3</sub>	hydrogen nitrate	$H^{+1}$ and $NO_3^{-1}$

2. Look through this chapter and add at least two more bases to the following table. Include each base's formula and name, and the ions present.

### Data Table for Bases

Base formula	Base name	Ions present
NaOH	sodium hydroxide	$Na^{+1}$ and $OH^{-1}$
NH <sub>4</sub> OH	ammonium hydroxide	$NH_4^{+1}$ and $OH^{-1}$

3. Look through this chapter and add at least two more salts to the following table. Include each salt's formula and name, and the ions present.

Data Table for Salts

Salt formula	Salt name	Ions present
KCl	potassium chloride	$K^{+1}$ and $Cl^{-1}$
CaSO <sub>4</sub>	calcium sulphate	$Ca^{+2}$ and $SO_4^{-2}$

### Discussion

- Use the information in the data table for acids to answer the following questions.
  - What positive ions do all the acids have?
  - What negative ions do the acids have?
  - Is there anything that the formulas for all acids have in common?
- Use the information in the data table for bases to answer the following questions.
  - What positive ions do all the bases have?
  - What negative ions do the bases have?
  - Is there anything that the formulas for all bases have in common?
- Use the information in the data table for salts to answer the following questions.
  - What positive ions do all the salts have?
  - What negative ions do the salts have?
  - Is there anything that the formulas for all salts have in common?