

**Goal** • Demonstrate your understanding of acids and bases.

### What to Do

1. Use the following terms and symbols to complete the sentences below. Some terms and symbols will be used more than once, and some not at all.

H <sup>+</sup>	OH <sup>-</sup>	conduct	lower
sour	bitter	NH <sub>4</sub> <sup>+</sup>	sweet
red	blue	greater than	less than
turns pink	remains colourless	orange	
higher	do not conduct		

- (a) Acids are substances that dissolve in water to release \_\_\_\_\_ ions. Acids are characterized by a pH value \_\_\_\_\_ 7. The \_\_\_\_\_ the pH value, the more acidic a solution is. When an acid is added, \_\_\_\_\_ litmus turns a \_\_\_\_\_ colour and phenolphthalein \_\_\_\_\_. Acidic solutions \_\_\_\_\_ electricity. Acids are responsible for the \_\_\_\_\_ taste in foods.
- (b) Bases are substances that dissolve in water to release \_\_\_\_\_ ions. Bases are characterized by a pH value \_\_\_\_\_ 7. The \_\_\_\_\_ the pH value, the more basic a solution is. When a base is added, \_\_\_\_\_ litmus turns a \_\_\_\_\_ colour and phenolphthalein \_\_\_\_\_. Basic solutions \_\_\_\_\_ electricity. Bases are responsible for the \_\_\_\_\_ taste in foods.

2. Complete the following table about acids and bases. The first row has been completed as an example.

Name of Substance	Chemical Formula of Aqueous Solution	Name of Acid or Base
hydrogen sulphide	H <sub>2</sub> S	hydrosulphuric acid
	H <sub>2</sub> CO <sub>3</sub>	
		phosphoric acid
magnesium hydroxide		
	NH <sub>4</sub> OH	
hydrogen chlorate		
	CH <sub>3</sub> COOH	
		sulphurous acid