CHAPTER 5 Acids and Bases

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.

$\mathrm{H}^{\scriptscriptstyle +}$	OH^{-}	conduct	lower	
sour	bitter	NH_{4}^{+}	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				
value, the more acidic a solution is. When an acid is added, litmus				
turns a colour and phenolphthalein				
Acidic solutions	elee	ctricity. Acids are respo	onsible 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 ba	litmus			
turns a	colour and p	henolphthalein	•	
Basic solutions	elect	tricity. Bases are respor	sible 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 ₂ S	hydrosulphuric acid
	H ₂ CO ₃	
		phosphoric acid
magnesium hydroxide		
	NH₄OH	
hydrogen chlorate		
	CH ₃ COOH	
		sulphurous acid

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