Use with textbook pages 225–226.

Names of acids

1. An acid will have the suffix "–ic acid" at the end of its name when the negative ion has a suffix _____. For example, "hydrogen carbon**ate** (H_2CO_3)" is called "carbon**ic acid**".

2. An acid will have the suffix "–ous acid" at the end of its name when the negative ion has a suffix _____. For example, "hydrogen sulph**ite** (H_2SO_3)" is called "sulphur**ous acid**."

3. What is the name of each of the following acids?

(a) H_2CO_3 _____

(b) CH_3COOH _____

(c) H_3PO_4 _____

(d) $HClO_2$ _____

(e) H_2SO_3 _____

(f) HNO_3 _____

(g) HF _____

(h) HCl _____

4. What is the chemical formula for each of the following acids?

(a) hydriodic acid _____

(b) sulphuric acid _____

(c) perchloric acid _____

(d) nitrous acid _____

(e) chloric acid _____

(f) hydrobromic acid _____

(g) phosphorous acid _____

(h) hypochlorous acid _____

Use with textbook pages 220–229.

Acids versus bases

1. Compare and contrast acids and bases by completing the following table.

	Acids	**Bases**
definition		
pH		
what to look for in chemical formula		
production of ions		
electrical conductivity		
taste		
touch		
examples		

2. Classify each of the following as an acid or a base.

(a) + H_3PO_4 _____

(b) NH_4OH _____

(c) $Mg(OH)_2$ _____

(d) has a pH of 4 _____

(e) has a pH of 9 _____

(f) sulphurous acid _____

(g) hydrogen bromide _____

(h) potassium hydroxide _____

(i) causes methyl orange to turn red _____

(j) causes phenolphthalein to turn pink _____

(k) causes indigo carmine to turn yellow _____

(l) causes bromothymol blue to turn yellow _____