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 _____

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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 _____

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