



Name: ..... ( )

# Chem!stry

Class: .....

Date: ..... / ..... / .....

## Writing Balanced Chemical Equations for the Reactions Between Acids, Metals, Bases and Carbonates

- Complete the word equation and then write the balanced chemical equation for each one of the following reactions.

- 1) hydrochloric acid + magnesium → .....  
.....
- 2) hydrochloric acid + sodium hydroxide → .....  
.....
- 3) hydrochloric acid + sodium carbonate → .....  
.....
- 4) hydrochloric acid + copper(II) oxide → .....  
.....
- 5) hydrochloric acid + iron(III) oxide → .....  
.....
- 6) hydrochloric acid + calcium hydroxide → .....  
.....
- 7) nitric acid + magnesium → .....  
.....
- 8) nitric acid + sodium hydroxide → .....  
.....
- 9) nitric acid + sodium carbonate → .....  
.....
- 10) nitric acid + copper(II) oxide → .....  
.....

- 11) nitric acid + iron(III) oxide → .....  
.....
- 12) nitric acid + calcium hydroxide → .....  
.....
- 13) ethanoic acid + magnesium → .....  
.....
- 14) ethanoic acid + sodium hydroxide → .....  
.....
- 15) ethanoic acid + sodium carbonate → .....  
.....
- 16) ethanoic acid + copper(II) oxide → .....  
.....
- 17) ethanoic acid + iron(III) oxide → .....  
.....
- 18) ethanoic acid + calcium hydroxide → .....  
.....
- 19) sulphuric acid + magnesium → .....  
.....
- 20) sulphuric acid + sodium hydroxide → .....  
.....
- 21) sulphuric acid + sodium carbonate → .....  
.....
- 22) sulphuric acid + copper(II) oxide → .....  
.....
- 23) sulphuric acid + iron(III) oxide → .....  
.....
- 24) sulphuric acid + calcium hydroxide → .....  
.....
- 25) phosphoric acid + magnesium → .....  
.....

- 26) phosphoric acid + sodium hydroxide → .....  
.....
- 27) phosphoric acid + sodium carbonate → .....  
.....
- 28) phosphoric acid + copper(II) oxide → .....  
.....
- 29) phosphoric acid + iron(III) oxide → .....  
.....
- 30) phosphoric acid + calcium hydroxide → .....  
.....
- 31) hydrofluoric acid + magnesium → .....  
.....
- 32) hydrofluoric acid + sodium hydroxide → .....  
.....
- 33) hydrofluoric acid + sodium carbonate → .....  
.....
- 34) hydrofluoric acid + copper(II) oxide → .....  
.....
- 35) hydrofluoric acid + iron(III) oxide → .....  
.....
- 36) hydrofluoric acid + calcium hydroxide → .....  
.....

• Scan the QR code below for the answers to this assignment.



[http://www.chemist.sg/acids/acids\\_chemical\\_equations\\_ans.pdf](http://www.chemist.sg/acids/acids_chemical_equations_ans.pdf)