**TASK 1: Formula answers**

Use the information on the previous page to work out the following compound formulae:

1. Barium Chloride BaCl2
2. Silver (I) Nitrate AgNO3
3. Potassium Nitrate KNO3
4. Lead (II) Chloride PbCl2
5. Lithium Carbonate Li2CO3
6. Aluminium Iodide AlI3
7. Zinc (II) Sulphate ZnSO4
8. Ammonium Phosphate (NH4)3PO4
9. Copper (II) Sulphate CuSO4
10. Iron (II) Nitrate Fe(NO3)2
11. Iron (III) Chloride FeCl3
12. Ammonium Sulphate (NH4)2SO4
13. Lithium Hydroxide LiOH
14. Copper (I) Oxide Cu2O
15. Mercury (II) Oxide HgO
16. Potassium Sulphate K2SO4
17. Ammonium Hydroxide NH4OH
18. Magnesium Sulphate MgSO4
19. Calcium Oxide CaO
20. Iron (III) Nitrate Fe(NO3)3
21. Aluminium Phosphate AlPO4
22. Lead (II) Sulphate PbSO4
23. Strontium Nitrate Sr(NO3)2
24. Ammonium Carbonate (NH4)2CO3
25. Iron (III) hydroxide Fe(OH)3

TASK 2: answers

1. CH4 + 2O2 🡪 CO2 + 2H2O
2. 2Li + 2H2O 🡪 2LiOH + H2
3. 4Fe + 3O2 🡪 2Fe2O3
4. MgCO3 + 2HCl 🡪 MgCl2 + H2O + CO2
5. 2Pb(NO3)2 🡪 2PbO + 4NO2 + O2
6. N2 + 3H2 ⮀ 2NH3
7. 3Fe + 4 H2O ⮀ Fe3O4 + 4H2
8. 4NH3 + 5 O2 🡪 4 NO + 6 H2O
9. C2H6 + 2½ O2 🡪 2CO + 3H2O
10. H2O + C12H22O11 🡪 4C2H5OH + 4CO2

TASK 3: Now try to write balanced symbol equations from the following word equations:

1. hydrogen + copper (I) oxide 🡪 copper + water  
   H2 + Cu2O 🡪 2Cu + H20
2. carbon + carbon dioxide 🡪 carbon monoxide  
   C + CO2 🡪 2CO
3. magnesium + sulphuric acid 🡪 hydrogen + magnesium sulphate  
   Mg + H2SO4 🡪 H2 + MgSO4
4. copper + chlorine 🡪 copper (II) chloride  
   Cu + Cl2 🡪 CuCl2
5. Mercury + oxygen 🡪 mercury (II) oxide  
   2Hg + O2 🡪 2HgO
6. Iron + sulphur 🡪 iron (II) sulphide  
   Fe + S 🡪 FeS
7. Sodium + oxygen 🡪 sodium oxide  
   4Na + O2 🡪 2Na2O
8. Calcium + water 🡪 calcium hydroxide + hydrogen  
   Ca + 2 H2O 🡪 Ca(OH)2 + H2
9. Iron + nitric acid 🡪 iron (II) nitrate + hydrogen  
   Fe + 2 HNO3 🡪 Fe(NO3)2 + H2
10. Iron + chlorine 🡪 iron (III) chloride  
    2Fe + 3Cl2 🡪 2FeCl3
11. Zinc + steam 🡪 zinc (II) oxide + hydrogen  
    Zn + H2O 🡪 ZnO + H2
12. Ammonia + hydrochloric acid 🡪 ammonium chloride  
    NH3 + HCl 🡪 NH4Cl