Reaction of metals with acids: Worksheet 4.5.2

Writing symbol equations

Many metals will displace two hydrogen ions from an acid:

Mg + H**2**SO4 → MgSO4 + H**2**

If the acid has only one hydrogen ion, then you use two ‘lots’ of acid:

Mg + **2**HCl → MgCl2 + H**2**

Complete these symbol equations:

1. Zn + H**2**SO4 → \_\_\_\_\_\_\_\_\_ + H**2**

2. Fe + **2**HCl → \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_

3. Ca + H**2**SO4 → \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_

4. \_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_ → NiSO4 + H**2**

5. \_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_ → CoCl2 + H**2**

6. Fe + \_\_\_\_\_\_\_\_\_\_ → FeSO4 + \_\_\_\_\_

7. Mn + H**2**SO4 → \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_

8. Ca + **2**HCl → \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_

9. Zn + \_\_\_\_\_\_\_\_\_\_ → ZnCl2 + \_\_\_\_\_

10. Ni + **2**HCl → \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_

11. Be + H**2**SO4 → \_\_\_\_\_\_\_\_\_ + \_\_\_\_\_