

## Page 49:

Solution 58:

- (a) Ferrous sulphate.
- (b) Decomposition reaction.

(c)

2FeSO4 Heat Pecomposition Fe2O3 + SO2 + SO3

Solution 59:

- (a) Lead nitrate.
- (b) Nitrogen dioxide.
- (c)

Solution 60:

- (a) Combination reaction.
- (b) Decomposition reaction.

Solution 61:

- (b) Copper (Cu)
- (c) Copper sulphate (CuSO<sub>4</sub>)
- (d) Displacement reaction;

 $CuSO_4$  (aq) + Zn (s)  $\rightarrow ZnSO_4$  (aq) + Cu (s)

(e) Brass

Solution 62:

- (a) Copper (Cu)
- (b) Hydrogen (H<sub>2</sub>)
- (c) Copper oxide (CuO)
- (d) Water  $(H_2O)$
- (e) CuO + H<sub>2</sub>  $\rightarrow$  Cu + H<sub>2</sub>O
- (f) Displacement reaction (which is also a redox reaction).

Solution 63:

- (a) Silver (Ag)
- (b) Silver nitrate (AgNO<sub>3</sub>)
- (c) Silver chloride (AgCl)
- (d)  $AgNO_3(aq) + NaCl(aq) \rightarrow AgCl(s) + NaNQ(aq)$
- (e) Double displacement reaction.

## Page 50:

Solution 64:

- (a) Metal X: Copper; Metal Y: Sodium
- (b) Copper sulphate, CuSO<sub>4</sub>
- (c) Sodium sulphate, Na<sub>2</sub>SO<sub>4</sub>
- (d) Barium sulphate, BaSO<sub>4</sub>
- (e) Copper chloride, CuCl<sub>2</sub>

Solution 65:

(a) Copper sulphate.

- (b) Blue colour.
- (c) Copper sulphide.
- (d)  $CuSO_4$  (aq) +  $H_2S$  (g)  $\rightarrow$  CuS (s) +  $H_2SO_4$  (aq)
- (e) Double displacement reaction.

Solution 66:

- (a) Copper.
- (b) Silver nitrate.
- (c) Silver.
- (d) Copper nitrate.
- (e) Displacement reaction.

Solution 67:

- (a) Silver.
- (b) Chlorine.
- (c) Silver chloride.
- (d) Silver nitrate and Sodium chloride.
- (e) Decomposition reaction;