

6. 250.0 mL of 0.60 M HCl is added to 300.0 mL of 1.0 M HBr. What is the final concentration of each ion in solution?

7. Write a formula equation, complete ionic equation and net ionic equation for the following reactions:

a. Magnesium sulphide and zinc chloride

b. Sodium carbonate and barium sulphide

c. H_2SO_3 (aq) and CaCl_2 (aq)

8. A solution contains the following ions. Using a flow chart, show what compounds could be added and in what order to separate these ions.

a. Cu^{2+} , Ba^{2+} and Ag^+ .

b. Cl^- , SO_4^{2-} , S^{2-}

9. A titration was performed that required 14.7 mL of 0.102 M NaOH to titrate 25.00 mL of a hydrochloric acid, HCl, solution. Determine the concentration of the hydrochloric acid.
10. If 46.2 mL of 2.50 M NaOH is required to neutralize 1.54 M of a phosphoric acid, H_3PO_4 , solution, what volume of phosphoric acid was needed to reach the equivalence point?
11. If 8.6 mL of 0.0994 M HNO_3 is required to neutralize 25.00 mL of a strontium hydroxide solution, what is the molarity of the strontium hydroxide?