

CHAPTER 7	Predicting and Balancing Single and Double Replacement Reactions	BLM 7.0.6
ASSESSMENT		

Write balanced equations for the following chemical reactions. Use the reminders below so that the correct states can be included.

Acids are always soluble in water and will always be aqueous (aq).

Ionic compounds are always solid, (s), when pure. They may dissolve if exposed to water, however, to become (aq) if they are soluble. To determine whether they are soluble, consult a solubility table.

1. Liquid bromine reacts with a sodium iodide solution.
2. Barium nitrate solution reacts with potassium sulphate solution.
3. Calcium chloride solution reacts with ammonium sulphide solution.
4. Cobalt metal is dropped into copper(II) acetate solution and a reaction occurs.
5. Ethanoic acid reacts with a solution of potassium hydroxide.
6. Mercury(I) chlorate solution reacts with sodium acetate solution.
7. Magnesium metal is put into a silver nitrate solution.
8. Cadmium perchlorate solution is poured onto a piece of chromium metal.
9. Silver nitrate solution is mixed with a lithium chloride solution.
10. Hydrocyanic acid, HCN(aq) , is neutralized by a solution of barium hydroxide. (Assume that barium cyanide is soluble in water.)
11. Aluminium metal is added to a chromium(II) sulfate solution.
12. Sodium hydroxide solution is mixed with magnesium iodide solution.
13. Aqueous chlorine is mixed with a solution of sodium selenide.
14. Perchloric acid is neutralized with a solution of strontium hydroxide.