

Net Ionic Equations WS III

2003 & 2004
Net Ionic Equations WS iii.doc

Name _____

Date _____

Period _____

Write the formulas to show the reactants and the products for the laboratory situations described below. In all cases, a reaction occurs. Assume solutions are aqueous unless otherwise indicated. Represent substances in solution as ions if the substances are extensively ionized. Omit formulas for any ions or molecules that are unchanged by the reaction. You need not balance the equations.

Example: A strip of magnesium is added to a solution of silver nitrate.

Answer to example: $\text{Mg} + \text{Ag}^+ \rightarrow \text{Mg}^{2+} + \text{Ag}$

1. A solution of copper(II) sulfate is spilled onto a sheet of freshly polished aluminum metal.
2. Dimethyl ether is burned in air.
3. A 0.1 *M* nitrous acid solution is added to the same volume of a 0.1 *M* sodium hydroxide solution.
4. Hydrogen iodide gas is bubbled into a solution of lithium carbonate.
5. An acidic solution of potassium dichromate is added to a solution of iron(II) nitrate.
6. Excess concentrated aqueous ammonia is added to a solution of nickel(II) bromide.
7. A solution of sodium phosphate is added to a solution of aluminum nitrate.
8. Concentrated hydrochloric acid is added to a solution of sodium sulfide.
9. A solution of potassium phosphate is mixed with a solution of calcium acetate.
10. Solid zinc carbonate is added to 1.0 *M* sulfuric acid.
11. A solution of hydrogen peroxide is exposed to strong sunlight.
12. A 0.02 *M* hydrochloric acid solution is mixed with an equal volume of a 0.01 *M* calcium hydroxide solution.
13. Excess concentrated aqueous ammonia is added to solid silver chloride.
14. Magnesium ribbon is burned in oxygen.
15. A bar of strontium metal is immersed in a 1.0 *M* copper(II) nitrate solution.
16. Solid dinitrogen pentoxide is added to water.