

Worksheet: Writing Equations

Write equations for the following reactions:

- 1) The reaction of ammonia with iodine to form nitrogen triiodide (NI_3) and hydrogen gas.
- 2) The combustion of propane (C_3H_8).
- 3) The incomplete combustion of propane to form CO and water.
- 4) The reaction of nitric acid with potassium hydroxide.
- 5) The reaction of copper (II) oxide with hydrogen to form copper metal and water.
- 6) The reaction of iron metal with oxygen to form iron (III) oxide.
- 7) The complete combustion of 2,2-dimethylpropane (C_4H_{10}) in oxygen.
- 8) The reaction of AlBr_3 with $\text{Mg}(\text{OH})_2$
- 9) The decomposition of hydrogen peroxide to form water and oxygen.
- 10) The reaction of ammonia with sulfuric acid.

In the following problems, write some equation in which the following product might be formed:

11) carbon dioxide

12) ammonium hydroxide

13) copper (I) acetate

14) vanadium (V) fluoride

15) silver carbonate

16) carbonic acid (H_2CO_3)

17) acetic acid

18) antimony (III) chloride

19) calcium hydroxide

20) calcium phosphate