Ionic Equation Worksheet

Write balanced molecular, total ionic, and net ionic equations for each of the following.

1. Aqueous sodium hydroxide reacts with aqueous copper(II) sulfate to precipitate copper(II) hydroxide.

+20H - CubH)

2. Aqueous potassium carbonate reacts with aqueous silver nitrate to precipitate silver carbonate

2A2+ + CD22- -> A92 CD3

3. Sulfuric acid reacts to neutralize aqueous sodium hydroxide

H++0H- > H2

4. Hydrochloric acid dissolves solid aluminum hydroxide.

3H+ AlioHb -> Al3+ + 3Hm

5. Aqueous hydrofluoric acid (a weak acid) reacts with aqueous barium nitrate to form barium fluoride precipitate.

HF + Baz+ -> H+ BaFs

6. Solid nickel reacts with aqueous lead(II)-nitrate to form solid lead.

Ni + Pb 2+ - Ni 2+ + Pb

7. Sold magnesium reacts with iodic acid to release a gas

Mg +2H+ - Mgy + H2

8. Aqueous barium hydroxide reacts with sulfuric acid to precipitate barium sulfate

Ba + 5042 - +2H+ +2OH - > Paso4 +2H2O

9. Aqueous sodium phosphate reacts with aqueous calcium chloride to precipitate calcium phosphate

27042 +3Ca2+ -> Cas(POy)

10. Solid magnesium carbonate dissolves in nitric acid to produce a gas.

Mg Wz + 2H[†] -> H\pa+ \pa_2 + Mg^{2†}