

Student Name: _____ Period: _____ Date: _____

Activity

Writing Symbolic Equations from Word Equations

Write balanced symbolic equation for each of the chemical reactions described below.

1. aqueous beryllium chloride reacts with aqueous silver nitrate, forming aqueous beryllium nitrate and solid silver chloride
2. iso-propanol (C_3H_8O) burns in oxygen and produces carbon dioxide and water
3. aqueous sodium hydroxide reacts with sulfuric acid, producing aqueous sodium sulfate and water
4. fluorine gas comes in contact with calcium metal at high temperatures and yields solid calcium fluoride
5. sodium metal reacts with aqueous iron (II) chloride, producing iron metal and aqueous sodium chloride
6. aqueous sodium chloride reacts with aqueous lead (II) nitrate to yield a lead (II) chloride precipitate and aqueous sodium nitrate
7. aqueous barium nitrate reacts with sulfuric acid [$H_2SO_4(aq)$] to yield a barium sulfate precipitate and nitric acid [$HNO_3(aq)$]
8. silver nitrate reacts in solution with potassium chromate to yield a silver chromate precipitate and soluble potassium nitrate
9. solid calcium carbonate reacts with hydrochloric acid [$HCl(aq)$] to yield aqueous calcium chloride, carbon dioxide gas, and liquid water
10. aqueous zinc chloride reacts with dihydrogen monosulfide gas to yield a zinc sulfide precipitate and hydrochloric acid
11. magnesium nitrate reacts in solution with potassium hydroxide to yield a magnesium hydroxide precipitate and soluble potassium nitrate
12. solid aluminum hydroxide reacts with nitric acid to yield soluble aluminum nitrate and liquid water
13. aqueous lead (IV) nitrate reacts with aqueous sodium sulfate to yield a lead (IV) sulfate precipitate and soluble sodium nitrate
14. aqueous sodium hydroxide reacts with carbon dioxide gas to yield soluble sodium carbonate and liquid water
15. solid magnesium oxide reacts with hydrochloric acid to yield a solution of magnesium chloride and liquid water
16. solid zinc metal reacts with sulfuric acid to yield aqueous zinc sulfate and hydrogen gas
17. solid ferric oxide reacts with solid aluminum metal to yield solid aluminum oxide and solid iron metal