AP Chemistry

Name _____
Date ___/___/___

Predicting Reactions

SUBSTANCES

Write the chemical symbol for the following formulas.
If the substance exists mainly as separate ions, write the separate ions.

solid aluminum oxide	
a solution of sodium hydroxide	
solid calcium oxide	
sulfur trioxide gas	
0.1-molar sulfuric acid	
0.1-molar potassium hydroxide	
calcium metal	
nitrogen gas	
solid copper(II) sulfide	
oxygen gas	
concentrated solution of hydrochloric acid	
powdered manganese dioxide	
concentrated solution of ammonia	
a solution of zinc iodide	
a solution of copper(II) sulfate	
a solution of barium hydroxide	
a solution of magnesium nitrate	
solid lithium hydride	
water	
a solution of ammonia	
a solution of hydrofluoric acid	
a piece of aluminum metal	
a solution of silver nitrate	
a solution of potassium iodide	
solid potassium oxide	
an excess of nitric acid solution	

tetraamminecopper(II) sulfate	
carbon dioxide gas	
a suspension of calcium carbonate	
a strip of copper	
dilute nitric acid	
potassium permanganate solution	
an acidic solution of hydrogen peroxide	
solid manganese (II) sulfide	
chlorine gas	
hot iron filings	
solid magnesium nitride	
sulfur dioxide gas	
a suspension of silver chloride	
a solution of tri-potassium phosphate	
a solution of zinc nitrate	
sodium cyanide solution	
a solution of manganese(II) sulfate	
a solution of ammonium sulfide	
phosphorus(V) oxide powder	
solid ammonium carbonate	
solid potassium permanganate	
a small piece of sodium metal	
a solution of potassium dichromate	
an acidified solution of iron(II) chloride	
ethanol	
solid barium oxide	

a solution of iron(II) nitrate	
solid calcium phosphate	
hydrogen sulfide gas	
a solution of mercury(II) chloride	
solid calcium hydride	
a bar of zinc metal	
solid calcium carbonate	
a piece of nickel metal	
a solution of disodium hydrogen phosphate	
a solution of sodium bromide	
ammonia gas	
a solution of ethanoic (acetic) acid	
solid ammonium carbonate	
a saturated solution of barium hydroxide	
drops of liquid dinitrogen trioxide	
a solution of sodium oxalate	
a solution of aluminum nitrate	
an acidified solution of potassium bromate	
phosphine (phosphorus trihydride) gas	
liquid boron trichloride	
hydrogen gas	
hot iron(II) oxide powder	
solid potassium amide	
a strip of magnesium metal	
a solution of nickel chloride	
a solution of sodium sulfide	
a solution of tin(II) chloride	

a solution of iron(III) chloride	
a solution of cobalt(II) nitrate	
ethane gas	
a solution of phosphoric acid	
solid calcium sulfite	
a solution of diamminesilver(I) nitrate	
solid sodium oxide	
a solution of 6.0-molar hydrobromic acid	
butanol	
a solution of nickel(II) sulfate	
a solution of copper(II) chloride	
a solution of tin(II) nitrate	
a solution of potassium hydrogen carbonate	
powdered strontium oxide	
hot iron(III) oxide	
carbon monoxide gas	
a drop of potassium thiocyanate solution	
a solution of iron(III) nitrate	
a piece of copper wire	
a solution of propanoic acid	
an acidified solution of sodium dichromate	
a solution of potassium bromide	
powdered magnesium carbonate	
a solution of strontium nitrate	
a solution of sodium sulfate	