Net Ionic Equations WS II

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Net Ionic Equations WS ii.doc

Name _____
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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: $\mathbf{Mg + Ag^{+} \rightarrow Mg^{2+} + Ag}$

1. Solutions of tin(II) chloride and iron(III) chloride are mixed.
2. Solutions of cobalt(II) nitrate and sodium hydroxide are mixed.
3. Ethene gas is burned in air.
4. Equal volumes of equimolar solutions of phosphoric acid and potassium hydroxide are mixed.
5. Solid calcium sulfite is heated in a vacuum.
6. Excess hydrochloric acid is added to a solution of diamminesilver(I) nitrate.
7. Solid sodium oxide is added to distilled water.
8. A strip of zinc is added to a solution of 6.0-molar hydrobromic acid.
9. Excess potassium hydroxide solution is added to a solution of aluminum nitrate.
10. A solution of sodium bromide is added to an acidified solution of potassium bromate.
11. Sulfur dioxide gas is bubbled into distilled water.
12. Phosphine (phosphorus trihydride) gas is bubbled into liquid boron trichloride.
13. Hydrogen gas is passed over hot iron(II) oxide powder.
14. Solid potassium amide is added to distilled water.
15. A strip of magnesium metal is heated strongly in pure nitrogen gas.
16. A solution of nickel chloride is added to a solution of sodium sulfide.
17. Solid calcium carbonate is strongly heated.
18. A piece of nickel metal is immersed in a solution of copper(II) sulfate.
19. Equal volumes of equimolar solutions of disodium hydrogen phosphate and hydrochloric acid are mixed.
20. Chlorine gas is bubbled into a solution of sodium bromide.
21. Ammonia gas is bubbled into a solution of ethanoic (acetic) acid.
22. Solid ammonium carbonate is added to a saturated solution of barium hydroxide.
23. Drops of liquid dinitrogen trioxide are added to distilled water.
24. Solutions of potassium permanganate and sodium oxalate are mixed.