

Name \_\_\_\_\_

Honors Chemistry

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### Chapter 6 Reaction Practice II

For each of the following reactions, write a balanced equation for the reaction. Coefficients should be in terms of lowest whole numbers.

1. Magnesium metal is burned in nitrogen gas.
2. Lead foil is immersed in silver nitrate solution.
3. A solution of ammonium sulfate is added to a solution of barium hydroxide.
4. Ethanol( $C_2H_5OH$ ) is completely burned in air.
5. Solutions of zinc sulfate and sodium phosphate are mixed.
6. Solutions of silver nitrate and lithium bromide are mixed.
7. A solution of ammonium thiocyanate is added to a solution of iron(II) chloride.
8. Carbon disulfide vapor is burned in excess oxygen.
9. A solution of sodium hydroxide is added to a solution of ammonium chloride.
10. A strip of magnesium is added to a solution of silver nitrate.

11. Ethyne( $C_2H_2$ ) gas is burned in air.
12. Solid calcium is added to warm water.
13. Propanol( $C_3H_7OH$ ) is burned completely in air.
14. A piece of lithium metal is dropped into a container of nitrogen gas.
15. A solution of sodium sulfide is added to a solution of zinc nitrate.
16. Chlorine gas is bubbled into a solution of potassium iodide.
17. Sodium metal is added to water.
18. Solid calcium carbonate is heated.
19. A piece of solid bismuth is heated strongly in oxygen.
20. Solutions of silver nitrate and sodium chromate are mixed.
21. Solutions of sodium iodide and lead nitrate are mixed.
22. Calcium metal is heated strongly in nitrogen gas.

23. Solid aluminum oxide is added to a solution of sodium hydroxide.
24. A piece of aluminum metal is added to a solution of silver nitrate.
25. An excess of sodium hydroxide solution is added to a solution of magnesium nitrate.
26. Solutions of potassium phosphate and zinc nitrate are mixed.
27. Liquid bromine is shaken with a sodium iodide solution.
28. A mixture of powdered iron(III) oxide and powdered aluminum metal is heated strongly.
29. Solutions of cobalt(II) nitrate and sodium hydroxide are mixed.
30. Ethene( $C_2H_4$ ) gas is burned in air.
31. Solid potassium chlorate is heated strongly.
32. Solid calcium carbonate is strongly heated.
33. A strip of zinc is added to a solution of hydrobromic acid (HBr).

34. A strip of magnesium metal is heated strongly in pure nitrogen gas.
35. A solution of nickel(II) chloride is added to a solution of sodium sulfide.
36. A piece of nickel metal is immersed in a solution of copper(II) sulfate.
37. Chlorine gas is bubbled into a solution of sodium bromide.
38. Solid ammonium carbonate is added to a saturated solution of barium hydroxide.
39. A bar of zinc metal is immersed in a solution of copper(II) sulfate.
40. A solution of sodium cyanide is added to a solution of silver nitrate.
41. A small piece of lithium metal is added to distilled water.
42. Excess chlorine gas is passed over hot iron filings.
43. Solid magnesium sulfate heptahydrate is gently heated.
44. Propane ( $C_3H_8$ ) is burned completely in excess oxygen gas.