

For each of the following, state the type of reaction and write the balanced reaction.

1. A chunk of zinc is dropped in a beaker of phosphoric acid.
2. Aqueous manganic sulfite is mixed with aqueous potassium chromate.
3. Solid cobaltic carbonate is heated.
4. Fluorine gas is bubbled through a solution of calcium bromide.
5. Butane gas,  $C_4H_{10}$ , is completely combusted.
6. Cupric chlorate is heated.
7. Aluminum foil is immersed in iodine vapors.
8. Mercuric oxide is heated.
9. Carbonic acid is heated.
10. Lithium metal is placed in water.
11. A current is passed through sodium chloride.
12. Tin(IV) metal is placed in a solution of magnesium chloride.
13. Ferric hydroxide is heated.
14. Aluminum hydroxide is heated.
15. Hexane,  $C_6H_{14}$ , is completely combusted.
16. Stannous hydroxide is heated.
17. Calcium nitrate solution is mixed with potassium oxalate solution.
18. Solid silver is placed in sulfuric acid.
19. Chromium(III) metal is placed in a nickel(II) chlorite solution.
20. Plumbic oxide is heated.
21. Sulfuric acid is heated.
22. Silver metal is oxidized.

23. Water is electrolyzed.
24. Fluorine gas is exposed to sodium bromide.
25. Cadmium carbonate is heated.
26. Ferric chlorate is heated.
27. Calcium metal is placed in water.
28. Solid iron(II) metal is placed in phosphoric acid.
29. Silver metal and sulfur are heated together.
30. Propane,  $C_3H_8$ , is completely combusted.
31. Copper(II) metal is placed in hydrobromic acid.
32. Chlorine gas is passed through a solution of calcium bromide.
33. Cadmium chlorate is heated.
34. Ammonium sulfate solution is poured into plumbous nitrate solution.
35. Rubidium metal is placed in water.
36. Sodium chloride is electrolyzed.
37. Stannic carbonate is heated.
38. Zinc hydroxide is heated.
39. Aluminum metal is placed in a solution of nickelous sulfate.