

ACTIVITY ■ Chemical Reactions**Chemical Formulas and Equations**

Write the chemical formula for each of the following.

1. potassium chloride
2. sodium hydroxide
3. calcium oxide
4. calcium fluoride
5. silicon dioxide
6. aluminum oxide
7. silver nitrate
8. calcium carbonate
9. magnesium nitrate
10. sodium bicarbonate

Balance each of the following equations.

11. $P_4 + O_2 \rightarrow P_4O_{10}$
12. $Zn + HCl \rightarrow ZnCl_2 + H_2$
13. $Mg + O_2 \rightarrow MgO$
14. $KClO_3 \rightarrow KCl + O_2$
15. $FeS_2 + O_2 \rightarrow Fe_2O_3 + SO_2$

Write a balanced equation for each of the following.

16. Silver + Chlorine \rightarrow Silver chloride
17. Hydrogen + Chlorine \rightarrow Hydrogen chloride
18. Hydrochloric acid + Sodium hydroxide \rightarrow Sodium chloride + Water
19. Magnesium hydroxide + Hydrochloric acid \rightarrow Magnesium chloride + Water
20. Calcium carbonate \rightarrow Calcium oxide + Carbon dioxide

Name the types of reactions involved in questions 11 through 20 (synthesis, decomposition, single replacement, or double replacement).

21. (11) _____
22. (12) _____
23. (13) _____
24. (14) _____
25. (15) _____
26. (16) _____
27. (17) _____
28. (18) _____
29. (19) _____
30. (20) _____