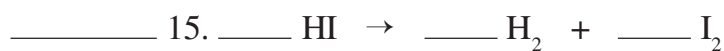
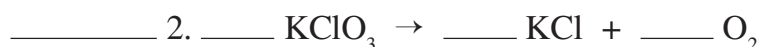
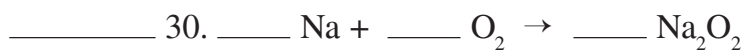
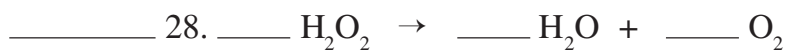
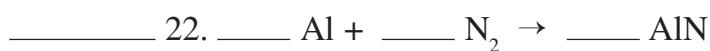
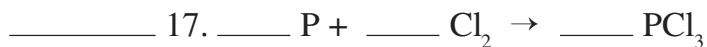


Use with textbook pages 256–267.

Classifying chemical reactions

Classify each of the following reactions as synthesis (S), decomposition (D), single replacement (SR), double replacement (DR), neutralization (N), or combustion (C). Place the correct letter representing the reaction type in the space provided. Then **balance** the chemical equation by placing the correct coefficients in the equation.





Use with textbook pages 256–267.

Types of chemical reactions—Word equations

Classify each of the following chemical reactions as synthesis (S), decomposition (D), single replacement (SR), double replacement (DR), or neutralization (N). Then **write a balanced equation** for each word equation.

_____ 1. magnesium + sulphur → magnesium sulphide

_____ 2. potassium hydroxide + sulphuric acid → water + potassium sulphate

_____ 3. chlorine + potassium iodide → potassium chloride + iodide

_____ 4. aluminum chloride + sodium hydroxide → aluminum hydroxide + sodium chloride

_____ 5. lead(II) oxide → lead + oxygen

_____ 6. magnesium + silver nitrate → silver + magnesium nitrate

_____ 7. cadmium(II) nitrate + ammonium sulphide → cadmium(II) sulphide + ammonium nitrate

_____ 8. tin(IV) hydroxide + hydrogen bromide → water + tin(IV) bromide

_____ 9. sodium + oxygen → sodium oxide

_____ 10. sodium nitride → sodium + nitrogen

Name _____

Date _____

**Applying
Knowledge**

Section 6.1

_____ 11. calcium hydroxide + phosphoric acid → water + calcium phosphate

_____ 12. barium chloride + sodium carbonate → barium carbonate + sodium chloride

_____ 13. zinc + nickel(II) nitrate → zinc nitrate + nickel

_____ 14. antimony + iodine → antimony(III) iodide

_____ 15. carbon dioxide → carbon + oxygen

_____ 16. iron(III) sulphate + lead → lead(II) sulphate + iron

_____ 17. barium nitrate + ammonium carbonate → ammonium nitrate + barium carbonate

_____ 18. zinc hydroxide + hydrochloric acid → water + zinc chloride

_____ 19. ammonium carbonate + magnesium chloride → ammonium chloride + magnesium carbonate

_____ 20. rubidium hydroxide + sulphuric acid → water + rubidium sulphate

Use with textbook pages 256–267.

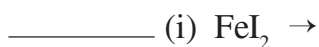
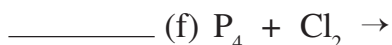
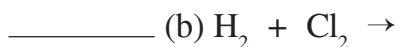
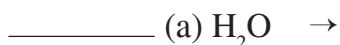
Predicting the products

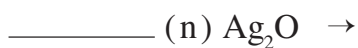
1. For each of the following:

I. predict the products

II. classify the reaction as synthesis (S), decomposition (D), single replacement (SR), double replacement (DR), neutralization (N), or combustion (C)

III. write a balanced equation





2. For each of the following:

I. complete the word equation by predicting the products

II. classify the reaction as synthesis (S), decomposition (D), single replacement (SR), double replacement (DR), or neutralization (N)

III. write a balanced equation for each word equation

