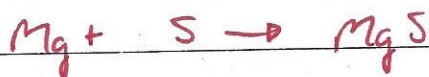


Use with textbook pages 256-267.

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.

S 1. magnesium + sulphur → magnesium sulphide



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



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



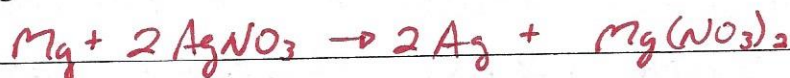
DR 4. aluminum chloride + sodium hydroxide → aluminum hydroxide + sodium chloride



D 5. lead(II) oxide → lead + oxygen



SR 6. magnesium + silver nitrate → silver + magnesium nitrate



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



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



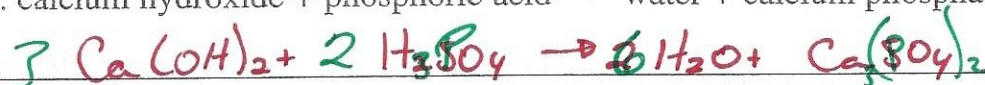
S 9. sodium + oxygen → sodium oxide



D 10. sodium nitride → sodium + nitrogen



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



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



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



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



D 15. carbon dioxide → carbon + oxygen



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



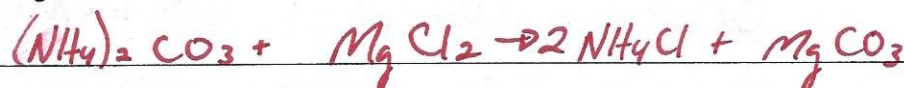
DR 17. barium nitrate + ammonium carbonate → ammonium nitrate + barium carbonate



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



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



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

