

CHEMISTRY FORM 4 2009-2010

Textbook: 'GCSE Chemistry' by *B. Earl & J. L. D. Wilford* (Second Edition)

FIRST TERM

- 1. Moles** Pages 70-78
 - a. Relative atomic masses and molecular masses
 - b. Molar mass and Avogadro's constant
 - c. Finding the empirical and molecular formula
 - d. Calculations and chemical equations
 - e. Concentration of solutions
 - f. Moles and gases
 - g. Combining gas laws Page 10

- 2. Acids Bases and Alkalis**
 - a. The pH scale
 - b. Strong and weak acids
 - c. Reactions of acids
 - d. Bases, alkalis, normal salts and acid salts
 - e. Preparation of salts
 - f. Volumetric Analysis

- 3. The Periodic Table**

Chemistry of : the Group 1 Alkali metals
the Group 2 Alkaline Earth metals
the Group 7 Halogens
the Group 0 Noble Gases
the Transition Elements

- 4. Action of Heat on materials**

4 practical sessions/experiments

SECOND TERM

- 5. Action of Electricity on materials** Page 80, 85, 88-92
 - a. The Ionic theory
 - b. Electrolysis
 - c. Quantitative aspects of electrolysis Pages 91-92
 - d. Electrochemical series
 - e. The simple cell transforming chemical energy to electrical energy

- 6. Ionic Equations**

- 7. Redox reactions** Pages 17, 130-131

Chemistry of Iron and Copper Pages 45
Pages 102, 117,
223-4, 232

6 practical sessions/experiments

THIRD TERM

- 8. Qualitative Analysis** Pages 45, 103-104
- 9a. Reactivity Series** Pages 127-131
- b. Extraction of Aluminium, Iron and Purification of Copper Pages 81-83, 88-89, 132-134
- c. Energy sources Pages 184-189
- 10. Sulfur and its compounds** Pages 228-234
- a. Allotropes of sulfur
- b. Uses of sulfur
- c. Sulfur dioxide
- d. Sulfur trioxide
- e. Sulfuric acid – industrial preparation, uses and properties
1 practical session/experiment + 1 investigation

ASSESSMENT MARK DESCRIPTION

TERM	<i>Classwork/ Homework (40%)</i>	<i>Practical Work (20%)</i>	<i>Effort (20%)</i>	<i>Participation (10%)</i>	<i>Behaviour (10%)</i>	<i>TOTAL MARK (100%)</i>
November	4	2	2	1	1	10
Mid Year	8	4	4	2	2	20
Annual	8	4	4	2	2	20