

# CHEMISTRY FORM 5

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

## FIRST TERM

- 1. The Reactivity Series and Extraction of Metals** pg. 127-131, 81-83, 88-89, 132-134, 184-189
- 2.1 Extraction of Iron
  - 2.2 Purification of Copper
  - 2.3 Environmental Problems related to mining
  - 2.4 Recycling
- 2. Organic Chemistry**
- 2.1 Saturated hydrocarbons – The Alkanes pg. 175-178
  - 2.2 Unsaturated hydrocarbons – The Alkenes and Alkynes pg. 178-180
  - 2.3 Petroleum pg.172-174
  - 2.4 Alcohols pg. 203-206
  - 2.5 Ethanoic Acid pg. 207-208
  - 2.6 Polymerisation pg. 197-202
- 3. Energetics** pg. 190 -192
- 3.1 Energy changes.
  - 3.2 Energy changes in particular chemical reactions
  - 3.3 Determination of the Heat of Combustion.
  - 3.4 Principle of Conservation of energy.
- 4. Rates of Reaction** pg. 161 -169
- 4.1 Kinetic Theory for rates of reaction
  - 4.2 Factors affecting the rate of reaction: concentration, pressure, temperature, surface area, light and catalysts
- 5. Equilibria** pg. 193, 202
- 5.1 Reversibility of reactions.
  - 5.2 Equilibrium.
  - 5.3 Le Chatelier's Principle.
  - 5.4 Industrial Examples – The Haber Process.  
The Contact Process.

*3 practical sessions (experiments) + 1 investigation*

## SECOND TERM

- 6. Carbon and its compounds**
- 6.1 Special Properties of carbon
  - 6.2 Allotropes of carbon pg. 62 – 64
  - 6.3 Reactions of Carbon
  - 6.4 Carbon dioxide – Preparation and properties. pg. 121-123
  - 6.5 Carbon monoxide - Preparation and properties.
- 7. Sulfur and its compounds** pg. 228-234
- 7.1 Uses of sulfur
  - 7.2 Allotropes of sulfur
  - 7.3 Sulfur dioxide
  - 7.4 Sulfur trioxide
  - 7.5 Sulfuric acid - industrial preparation, uses and properties

**8. Nitrogen and its compounds**

- 8.1 Nitrogen – properties and extraction  
8.2 Ammonia – Preparation and properties.  
8.3 Nitric Acid – Preparation and properties  
8.4 Nitrogen monoxide and Nitrogen dioxide.

pg. 150-151  
pg. 220-222  
pg. 223-224

**9. Halogens and their compounds**

- 9.1 The halogens and their properties.  
9.2 Chlorine – preparation, extraction its compounds.

pg. 45-48  
pg. 86-87

**10. Common place products of the chemical industry**

*3 practical sessions (experiments) + 1 investigation*

- Revision
- Exams

## ASSESSMENT MARK DESCRIPTION TERM BY TERM

<b>TERM</b>	<b><i>Classwork/ Homework/ Tests</i></b>	<b><i>Practical Work</i></b>	<b><i>Effort</i></b>	<b><i>Participation</i></b>	<b><i>Test/s</i></b>	<b><i>TOTAL MARK</i></b>
<b>November</b>	10		5	5	30	<b>50</b>
<b>Annual</b>	15	15	10	10		<b>50</b>