

# CHEMISTRY FORM 4

Textbook: 'Complete Chemistry' by *R. M. Gallagher & P. Ingram*

## FIRST TERM

- 1. Moles** Pages 62-75, 78- 83
  - 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
  
- 2. Acids Bases and Alkalis** Pages 138-153
  - 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** Pages 32-39, 292-293

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

3 practical sessions/experiments

## SECOND TERM

- 4. Action of Heat on materials** Page 196 + 'notes'
  
- 5. Action of Electricity on materials** Page 104-117, 197, 296
  - a. The Ionic theory
  - b. Electrolysis
  - c. Quantitative aspects of electrolysis
  - d. Electrochemical series
  - e. The simple cell transforming chemical energy to electrical energy
  
- 6. Ionic Equations** refer to 'notes'
  
- 7. Redox reactions** Pages 92-93 + 'notes'

4 practical sessions/experiments

## THIRD TERM

8. Chemistry of Iron and Copper Pages 90, 93, 192-194 + 'notes'
9. Qualitative Analysis Pages 326-327,
- 10a. Reactivity Series Pages 192-196
- b. Extraction of Aluminium, Iron and Purification of Copper Pages 162-171, 200-204, 206-209

2 practical sessions/experiments + 1 investigation

## 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>Mid Year</b>	15	15	10	10		<b>50</b>
<b>Annual</b>	15	15	10	10		<b>50</b>