DETAILED CONTENTS

Each chapter of the book consists of the following exercises in various forms

BE PROMPT
- Filling in the blanks
- True or False
- Multiple choice questions (MCQs)
- Identifying the error(s) in the given statements
- Matching the columns

SHORT AND PRECISE
- Flowcharts
- Giving reasons
- Short answer questions

AT LENGTH
- Explaining the terms
- Differentiating between concepts
- Long answer questions
- Identifying the error(s)

Chapter Name	Details of Contents	Activities	Some More Assessment Tools
4. Atomic Structure	• ATOMS AND MOLECULES — Atoms, Molecules • WHAT HAPPENS WHEN TWO ATOMS COMBINE • ATOMICITY • VALENCY • IONS • RADICALS • DIFFERENCES BETWEEN ATOMS, MOLECULES AND RADICALS • PERIODIC TABLE • WRITING THE CHEMICAL FORMULA OF A COMPOUND — Rules for Writing the Chemical Formula, Significance of Chemical Formula		• Observe and Perform: Observing the Periodic table and answering the questions • Apply Your Learning: Questions based on thinking skills • Life Skills: Questions based on life skills (critical thinking and observational skills) • Integrate Your Learning: Integrating learning with Physics • Projects and Activities: Creating a presentation and card game • Review Your Learning: Worksheet
5. Language of Chemistry	• CHEMICAL REACTIONS • TYPES OF CHEMICAL REACTIONS — Combination Reactions, Decomposition Reactions • CONDITIONS NECESSARY FOR CHEMICAL REACTION TO OCCUR • CHARACTERISTICS OF CHEMICAL REACTIONS • CHEMICAL EQUATIONS — Steps to Write a Chemical Equation	5.1 To show that some substances react when mixed in a solution form 5.2 To show that heating is necessary for some chemical reactions to occur 5.3 To show that chemical reaction may involve a change in colour 5.4 To show that chemical reaction may involve evolution of gas 5.5 To show that evolution of gas occurs on adding dilute HCl to solid sodium carbonate 5.6 To show the reaction between potassium iodide (KI) and lead acetate ($Pb(CH_3COO)_2$)	• Observe and Perform: Observing the image and answering the questions • Apply Your Learning: Questions based on thinking skills • Life Skills: Questions based on life skills (critical thinking and observational skills) • Integrate Your Learning: Integrating learning with Physics • Projects and Activities: Creating a presentation and card game • Review Your Learning: Worksheet
6. Metals and Non-Metals	• METALS — Occurrence of Metals, Properties of Metals, Noble Metals, Corrosion in Metals, Rusting of Iron, Uses of Metals • NON-METALS — Sources of Non-metals, Properties of Non-metals, Uses of Non-metals • COMPARISON BETWEEN METALS AND NON-METALS • METALLOIDS — Properties of Metalloids, Metalloids and their Uses	6.1 To show that metals are malleable 6.2 To show that metals are lustrous 6.3 To show that metals are sonorous 6.4 To show that metals are hard 6.5 To show that metals are good conductors of electricity 6.6 To show that both air and water are necessary for rusting to occur 6.7 To show the basic nature of rust	• Observe and Perform: Observing the image and answering the questions • Apply Your Learning: Questions based on thinking skills • Life Skills: Questions based on life skills • Integrate Your Learning: Integrating learning with Physics and Geography • Projects and Activities: Making a chart, creating a presentation and making a project • Review Your Learning: Worksheet
7. Air and Atmosphere	• ATMOSPHERE • NATURE AND COMPOSITION OF AIR • AIR IS A MIXTURE AND NOT A COMPOUND • VARIOUS COMPONENTS OF AIR — Oxygen, Nitrogen, Carbon Dioxide, Water Vapour, Inert Gases • AIR QUALITY — Methods of Reducing Air Pollution	7.1 To show that air contains carbon dioxide 7.2 To show that air contains water vapour 7.3 To test the physical properties of oxygen 7.4 To show that sodium burns in oxygen to form sodium oxide 7.5 To show that sulphur reacts with oxygen to produce sulphur dioxide 7.6 To show that magnesium increases in mass on burning in air 7.7 To observe that carbon dioxide is heavier than air and non-supporter of combustion	• Observe and Perform: Observing the image and answering the questions • Apply Your Learning: Questions based on thinking skills • Life Skills: Questions based on life skills • Integrate Your Learning: Integrating learning with Physics, Geography, Biology and Language • Projects and Activities: Making a report and creating a presentation • Review Your Learning: Worksheet