

# Chemistry

## Recommended Time Table

### Class-9

Chapter Names	Concepts
<b>1. Matter and Its Classification (4hours)</b>	<ul style="list-style-type: none"> <li>• Classification of Elements • Compounds • Mixtures (1 hour)</li> <li>• Separation of mixtures (2 hours)</li> <li>• Exercises (2 hours)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>2. Language of Chemistry (5 hours)</b>	<ul style="list-style-type: none"> <li>• Symbols • Formulae • Valency etc. (1 hour)</li> <li>• Balancing chemical equations • Kinds of formulae (1 hour)</li> <li>• Exercises (2 hours)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>3. Atomic Structure (5 hours)</b>	<ul style="list-style-type: none"> <li>• Production of fundamental particles (1 hour)</li> <li>• Millikan's oil drop experiment (1 hour)</li> <li>• Various atomic models • Atomic number (1 hour)</li> <li>• Mass number isotopes etc. (1 hour)</li> <li>• Problems and exercises (2 hours)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>4. Classification of Elements (4 hours)</b>	<ul style="list-style-type: none"> <li>• Dobernier triads • Newland's law of Octaves • Mendeleev's periodic table • Modern periodic table (1 hour)</li> <li>• Characteristics of periods and groups • their gradation (1 hour)</li> <li>• Exercises (1 hour)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>5. Chemical Bonding (4 hours)</b>	<ul style="list-style-type: none"> <li>• Types of chemical bonds-ionic • covalent and dative (1 hour)</li> <li>• Exercises (2 hours)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>6. Study of Gas Laws (4 hours)</b>	<ul style="list-style-type: none"> <li>• Boyle's law, Charle's law • Avogadro's law • Graham's law of diffusion • Ideal gas equation (1 hour)</li> <li>• Problems and exercises (2 hours)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>7. Atoms, Molecules and Ions (5 hours)</b>	<ul style="list-style-type: none"> <li>• Atomic mass • Molecular mass • Gay-lussac's law • Avogadro's law (1 hour)</li> <li>• Formula mass • Mole concept • Molar volumes • Empirical and Molecular formulae (1 hour)</li> <li>• Problems and exercises (2 hours)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>8. Solutions (4 hours)</b>	<ul style="list-style-type: none"> <li>• Solutions • Its types • Solubility, Factors affecting solubility (1 hour)</li> <li>• Concentration • Methods of expressing concentration (1 hour)</li> <li>• Problems and Exercises (1 hour)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>9. Nitrogen (3 hours)</b>	<ul style="list-style-type: none"> <li>• Occurrence • Preparation • Properties of N<sub>2</sub> • Nitrogen cycle (1 hour)</li> <li>• Exercises (1 hour)</li> <li>• Doubts Clarification (1 hour)</li> </ul>
<b>10. Sulphur (4 hours)</b>	<ul style="list-style-type: none"> <li>• Occurrence • Allotropic forms and their transitions (1 hour)</li> <li>• Extraction of sulphur • Properties • uses (1 hour)</li> <li>• Exercises (1 hour)</li> <li>• Doubts Clarification (1 hour)</li> </ul>

Chapter	Concepts	
<b>11. Chlorine (3 hours)</b>	Occurrence • Preparation • Properties • Uses	(1 hour)
	• Exercises	(1 hour)
	• Doubts Clarification	(1 hour)
<b>12. Phosphorus and Its Compounds (4 hours)</b>	Occurrence • Allotropic forms • Properties and uses	(1 hour)
	$P_2O_5$ , $H_3PO_4$ and superphosphate of lime	(1 hour)
	• Exercises	(1 hour)
	• Doubts Clarification	(1 hour)
<b>13. Analytical Chemistry (3 hours)</b>	Qualitative Analysis • identification of gases • simple salts	
	• anions and cations	(1 hour)
	• Exercises	(1 hour)
	• Doubts Clarification	(1 hour)

Term - 1 (MCQ's: 50)

Chemistry: Chapters. 1 to 6

Term - 2 (MCQ's: 50)

Chemistry: Chapters. 7 to 10

Term - 3 (MCQ's: 50)

Chemistry: Chapters. 1 to 13