ODM EDUCATIONAL GROUP
Changing your Tomorrow

ODM Teachers' Note

Class	VII	Subject	CHEMISTRY
PD	4	Chapter-3	ELEMENTS, COMPOUNDS AND MIXTURES
Recapitulation of the previous taught.	• Mixtures and its characteristics • Kinds of mixtures.		
Sub-Concepts	➤ Difference between compounds and mixtures. ➤ Formation of mixtures. ➤ Types of mixtures on the basis of states of components.		
Teaching Aid To be used	Smart Class, PowerPoint presentation, classroom objects, charts.		
Learning Outcome	✔ Difference between compounds and mixtures. ✔ Formation of mixtures. ✔ Types of mixtures based on states of components.		
Sl. No	Step Wise (What to be done)		
1 Introduction	For Achievers Teacher should initiate the discussion on following topics, which will revolve around the core topic of the chapter like, What's your view on the types of substances in this world? ➤ Vision to acquire knowledge of the symbols of the elements. ➤ They need to know of the various rules for writing the symbols. ➤ Vision to acquire knowledge of the characteristics of a	For Average ➤ They would made familiar with the symbols of elements. ➤ They would know of the characteristics of compounds.	

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<table>
<tr><td></td><td>compound.</td><td></td></tr>
<tr><td>2. Difference between compounds and mixtures.</td><td colspan="2">Difference between mixtures and compounds:
<table>
<tr><th>S. No.</th><th>Mixtures</th><th>Compounds</th></tr>
<tr><td>1.</td><td>Various elements just mix together to form a mixture and no new compound is formed.</td><td>Elements react to form new compounds.</td></tr>
<tr><td>2.</td><td>A mixture has a variable composition.</td><td>The compound has a fixed composition.</td></tr>
<tr><td>3.</td><td>A mixture shows the properties of its constituents.</td><td>Properties of a compound are totally different from those of its constituents.</td></tr>
<tr><td>4.</td><td>They do not have a fixed melting point, boiling point, etc.</td><td>They have a fixed melting point, boiling point, etc.</td></tr>
<tr><td>5.</td><td>The constituents can be separated easily by physical methods</td><td>The constituents can be separated only by chemical processes.</td></tr>
</table></td></tr>
<tr><td>3-Formation of Mixtures.</td><td colspan="2">Various types of mixtures can be formed by mixing solid, liquid, and gaseous substances in different proportions.
Mixtures may be any three states of matter i.e., solid, liquid or gas, depending on the physical states of its components</td></tr>
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<tr><td>4.Types of Mixtures.</td><td>
<table>
<tr><th>Sl. No</th><th>States of Components</th><th>Types of Mixtures</th><th>Examples</th></tr>
<tr><td>1</td><td>Solid + Solid</td><td>Heterogenous
Homogenous</td><td>Sand and sugar
Brass, Bronze</td></tr>
<tr><td>2</td><td>Solid + Liquid</td><td>Heterogenous
Homogenous</td><td>Sand and Water
Sugar in water</td></tr>
<tr><td>3</td><td>Liquid + Liquid</td><td>Heterogenous
Homogenous</td><td>Oil in water
Alcohol in water</td></tr>
<tr><td>4</td><td>Gas + Liquid</td><td>Homogenous</td><td>Aerated drinks</td></tr>
<tr><td>5</td><td>Gas + Gas</td><td>Homogenous</td><td>Pure air</td></tr>
<tr><td>6</td><td>Solid+ Gas</td><td>Heterogenous</td><td>Smoke</td></tr>
</table>
</td></tr>
<tr><td>5.Home Assignment</td><td>Objective Types all</td></tr>
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