ODM EDUCATIONAL GROUP
Changing your Tomorrow

ODM Teachers' Note

Class	VII	Subject	CHEMISTRY
PD	8	Chapter-3	ELEMENTS, COMPOUNDS AND MIXTURES
Recapitulation of the previous taught.	❖ Separation of Liquid-Liquid Mixtures. • By Separating Funnel • Fractional Distillation ❖ Separation of Gas-Liquid Mixtures.		
Sub-Concepts	• Modern Techniques ▪ Chromatography • Separation of constituents of the mixtures with more than one constituent		
Teaching Aid To be used	Smart Class, PowerPoint presentation, classroom objects, charts.		
Learning Outcome	✔ The students will be able to get knowledge of the modern method of separation like Chromatography. ✔ The students will be able to get knowledge Separation of constituents of the mixtures with more than one constituent		
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 separation of Liquid-Liquid mixtures? ➤ Vision to acquire knowledge of the need for the modern	For Average ➤ They would made familiar with the modern methods of separation like Chromatography. ➤ They would know of the process of separation of constituents of more	

	methods of separation. ➤ Vision to get knowledge of the process of Chromatography. ➤ They would know of the Separation of constituents of the mixtures with more than one constituent	than one constituents.
2.Chromatography	CHROMATOGRAPHY: - Chromatography is a method used to separate mixture that comprises solutes that dissolve in the same solvent. This method gets its name from the Greek word for colour —Kroma, as it was first used for separating colours. Principle: Chromatography is based on differential affinities of compounds towards two phases, i.e. stationary and mobile phase. The fraction with greater affinity towards stationary phase travels shorter distance while the fraction with less affinity towards stationary phase travels longer distance. Chromatography is used for separating colours in a dye, pigments from natural colours and drugs from blood.	
3- Advantages of Chromatography 4. Uses of Chromatography	ADVANTAGES OF CHROMATOGRAPHY • A very small quantity of the substance can be separated. • Components with very similar physical and chemical properties can be separated. • It identifies the different constituents of a mixture.	

	USE OF CHROMATOGRAPHY • Used to separate pigments from natural colours. • Drugs from blood. • Colours in the dye
4. Separation of constituents of the mixtures with more than one constituent	❖ Sand, Saw-dust and Salt: - It involves three methods i.e., Sedimentation, Decantation and Evaporation. ❖ Iron fillings, Sulphur and Common Salt: - It involves three methods i.e., Magnetic Separation, Filtration, and Evaporation
5.Home Assignment	Exercise -II Q8 a, b, c, d, e, f