

 Kettering Science Academy	<h2>7E Mixtures and Separation</h2>	
1. Mixtures		
Mixture	<p>Two or more substances jumbled together but not joined together.</p>	<p>Solute The substance that has dissolved in a liquid to make a solution.</p>
Suspension	<p>A mixture of a solid and liquid, where the solid bits are heavy enough to settle out if the mixture is left to stand.</p>	<p>Dissolve When a substance breaks up into such tiny pieces in a liquid that it can no longer be seen and forms a solution.</p>
Opaque	<p>Cannot be seen through- colloids are opaque / cloudy.</p>	<p>Soluble Describes a substance that can dissolve in a liquid.</p>
Solution	<p>When a substance has dissolved in a liquid.</p>	<p>Conservation of Mass The total mass of a solution is the same as the mass of the dissolved substance plus the mass of the liquid at the start.</p>
Transparent	<p>Light can pass through and it can be seen through- solutions are transparent.</p>	<p>Saturated A solution that contains so much dissolved solute that no more solute can dissolve in it.</p>
Filter	<p>Something through which a liquid is passed to remove suspended pieces of solid.</p>	<p>Solubility The amount of a substance that dissolves in a particular solvent at a particular temperature to make a saturated solution.</p>
2. Solutions		<p>3. Evaporation</p>
Solvent	<p>The liquid in which a substance dissolves to make a solution.</p>	<p>Evaporation When a liquid changes into a gas. Can be used to separate a liquid from the solid dissolved in it.</p>
		<p>Boiling When there is liquid turning into a gas in all parts of a liquid- creates bubbles of gas in the liquid.</p>
		<p>Boiling Point The temperature at which a liquid boils.</p>
		<p>4. Chromatography</p>
		<p>Chromatography Used to separate substances dissolved in a mixture.</p>
		<p>Concentrated A solution that contains a large amount of solute dissolved in a small amount of solvent.</p>
		<p>Chromatogram The results of chromatography such as a dried piece of paper for paper chromatography showing when the dissolved solids have been separated.</p>
		<p>How chromatography works Different substances in a mixture are carried at different speeds, depending on how soluble they are, which separates them out from each other.</p>
		<p>5. Distillation</p>
		<p>Distillation The process of separating a liquid from a mixture by evaporating the liquid and then condensing it to be collected.</p>
		<p>Steam Water as a gas.</p>
		<p>Condenses When a substance changes from its gas state into its liquid state.</p>
		<p>Pure A single substance that does not have anything else in it. (Pure water only contains water and no dissolved solutes)</p>