## Barnsley Academy – (Year and Subject) Curriculum Scheme of Work – 2023-24

Term – Week					
	1	2	3	4	
Lesson Focus	Elements and Compounds	Mixtures	Separation by Distillation	Chromatography	
Prerequisite Knowledge	8CP- Elements and compounds	7CP- Particle model and separation	8- CP- Distillation 7CP- Distillation	7CP/ 8CP separating mixtures	
Core Knowledge	Elements- A substance that contains one type of atom Compound – A substance that contains two or more different elements that are chemically bonded	<ul> <li>Define, identify and describe mixtures</li> <li>Explain the steps in the separation of mixtures of soluble and insoluble substances</li> <li>Explain how mixtures of soluble and insoluble substances are represented and recognised</li> </ul>	<ul> <li>Name the equipment used in distillation</li> <li>Describe how to separate a mixture of two or more liquids</li> <li>Apply particle theory to distillation</li> </ul>	<ul> <li>Describe the process of chromatography</li> <li>Carry out the chromatography of inks</li> <li>Interpret chromatograms</li> </ul>	
Expert Model /Guided Practice/Agreed Approach (Procedural Knowledge)	<ul> <li>Model how to name compounds</li> <li>Model steps for conservation of mass</li> </ul>	<ul> <li>Identifying mixtures</li> <li>Steps for crystallisation and Filtration</li> </ul>	<ul> <li>Practical demonstration of distillation</li> </ul>	<ul> <li>Steps for Chromatography</li> <li>Steps to interpret chromatography results</li> </ul>	
Independent Practice	IP1- Elements and compounds exam question IP2- Naming compounds IP3- Conservation of mass exam question	IP1- Identifying mixtures exam question IP2- Filtration and Crystallisation exam question IP3- Practical steps (Time dependent)	IP1- Distillation equipment exam question IP2- Describe explain the steps for the distillation of Ink and water IP3- Distillation exam questions	IP1- Method for Chromatography exam Q IP2- Complete practical on Chromatography IP3- Interpreting results from chromatography exam q	

Assessment (Informal/Formal)	Independent practice tasks – exam question incorporated. Learning checks on WB Students to self- assess all tasks. Teacher to circulate and check for misconceptions.	<ul> <li>Independent practice tasks</li> <li>Whiteboard checks</li> <li>Targeted questioning</li> </ul>	<ul> <li>Independent practice tasks</li> <li>Whiteboard checks</li> <li>Targeted questioning</li> </ul>	Independent practice tasks – exam question incorporated. Learning checks on WB Students to self- assess all tasks. Teacher to circulate and check for misconceptions.
Resources				
Specific SEN(D)/EAL support		<ul> <li>Colour highlighted key steps in the expert model</li> <li>Answers shown on the board that match the questions</li> </ul>	- Sentence starters	