

Barnsley Academy – Y11- C8 Chemical Analysis Week 1
Scheme of Work – 2023-24

Term – Week ...				
	1	2	3	4
Lesson Focus	Pure substances and Formulations	Chromatography	Gas tests	
Prerequisite Knowledge	<ul style="list-style-type: none"> - Elements, Compounds and Mixtures - Percentage mass 	Chromatography C1- Separating mixtures	<ul style="list-style-type: none"> - Electrolysis (C4) - Covalent bonding (C2) 	
Core Knowledge	<ul style="list-style-type: none"> ▪ Identify pure and impure substances using diagrams or data ▪ Describe how to test for purity ▪ Describe and give examples of formulations 	<ul style="list-style-type: none"> ▪ Correctly set up a paper chromatography experiment to identify the components in a mixture ▪ Describe a method to confirm the identity of a substance ▪ Explain common mistakes in a chromatography experiment 	<ul style="list-style-type: none"> ▪ Describe the tests for oxygen, carbon dioxide, hydrogen and chlorine and their positive results ▪ Carry out gas tests to identify gases ▪ Predict the gaseous products of electrolysis and chemical reactions 	
Expert Model /Guided Practice/Agreed Approach (Procedural Knowledge)	<ul style="list-style-type: none"> - Steps for calculating percentage mass 	<ul style="list-style-type: none"> - Steps to calculating Rf value 		
Independent Practice	IP1- Describing pure elements and compounds IP2- Melting and boiling worksheet IP3- Formulation exam q	IP1- Method for Chromatography IP2- Identifying errors in chromatography exam q IP3- Analysing chromatogram and Rf exam q	IP1- Gas tests exam questions IP2- Exam q	
Assessment (Informal/Formal)	<ul style="list-style-type: none"> - Exam q - Whiteboard checks - Circulation - Targeted questioning 	<ul style="list-style-type: none"> - Exam q - Whiteboard checks - Circulation -Targeted questioning	<ul style="list-style-type: none"> - Exam q - Whiteboard checks - Circulation -Targeted questioning	

Resources				
Specific SEN(D)/EAL support				