

Subject	Year	Term
Chemistry	9	2

Topic

Further Separation Techniques and Analysis

Content (Intent)

Prior Learning (Topic) Atomic Structure

Students will have improved their investigative SKILLS by identifying simple techniques for separating mixtures: filtration, evaporation, distillation and chromatography, The identification of pure substances.

Students will have learnt new KNOWLEDGE about describing the structure of different states of matter using keywords. They will now be able to Identify elements, compounds and mixtures and know how to separate them.

Students should be able to demonstrate their UNDERSTANDING of elements, compounds and mixtures and their properties.

Future Learning (Topic)

The Atmosphere

What Knowledge and Skills will be taught (Implementation)

Knowledge –Recall the tests for gases. To apply and explain the principles of chromatography. To identify the properties of pure and impure substances. To recall the definition of a formulation.

In year 10 –Separate science (interleaving content) - To use and recall a range of qualitative tests to detect specific chemicals (anions and cation tests). To justify the use of Instrumental methods by recalling they provide fast, sensitive and accurate means of analysing chemicals, and are particularly useful when the amount of chemical being analysed is small.

Mathematical Skills

Use of ratio's, fractions, decimals and significant figures in calculations for chromatography.

Practical Skills

All pupils to execute and recall the practical 'Chromatography'

Higher set pupils to perform the practical 'identification of ions in compounds'.

How will your understanding be assessed & recorded (Impact)

Formative Feedback Task (End of Unit tests)

Pupils given formative feedback on: Chemistry – Further Separation Techniques and Analysis

Assessment 2 (June):

Summative assessment including:

- Further Separation Techniques and Analysis
- Reactions (Acid and Alkali's)

Cumulative assessment will include Matter (Particle model and Separating mixtures) from year 7. Matter (Periodic table and Reactions) from Year 8.

How can parents help at home?

Ensure all class work is completed and homework submitted on time.

Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.

Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters. Ensure all pupils have all their resources required for science lessons, including knowledge organisers, exercise books, pens and calculators

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading	Vocabulary Lists	
EDUCAKE online learning platform.	Formulation	Flame Test
BHHS Knowledge organisers	Distillation	Mobile Phase
Resources on TEAMS	Condensing	Stationary Phase
Glossaries	Rf value	