

Subject	Year	Term
Chemistry	9	1

Topic

Atomic Structure

Content (Intent)

Prior Learning (Topic)

KS3 Science National Curriculum

Students will have learnt SKILLS such as balancing equations, performing practicals safely, identifying trends in reactivity based on the periodic table.

Students will have learnt and built upon their KNOWLEDGE about the concepts of chemical symbols, the periodic table, formulae for elements and compounds, the history around the structure of the atom and the creation of the modern periodic table.

Students will have UNDERSTOOD the concept of how elements in group 1, 7 and 0 react based on their atomic structure.

Future Learning (Topic) Further Separation Techniques and Analysis

What Knowledge and Skills will be taught (Implementation)

Knowledge

Recall the periodic table, historical development of the periodic table. Recall the historic and current model of the atom. The arrangement of elements in the modern periodic table can be explained in terms of their electron arrangement and how that links to their chemical reactivity.

Specific reference to the chemical reactivity of group 1, 7 and 0 in the periodic table.

Practical Skills – To study, make and recall observations during practicals when reviewing reactivity of group 1, 7 and 0.

Maths Skills – use of linear equations to calculate relative atomic mass, significant figures.

Calculation of Relative Atomic mass with reference to isotopes and their relative abundance.

How will your understanding be assessed & recorded (Impact)

Formative Feedback Task (End of Unit tests)

Pupils given formative feedback on: Chemistry – Atomic Structure

Assessment 1 and 2 (December and June):

Summative assessment including:

- Atomic Structure
- Reactions (Acids and Metals year 8)

Cumulative assessment will include Matter (Elements, atoms and compounds, Periodic Table) from year 7 and Reactions (Acids and Alkali's, Acids and Metals) 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	Plum Pudding Model
EDUCAKE online learning platform.	Atomic Number	Nuclear Model
BHHS Knowledge organisers	Atomic Mass Number	The Noble Gases
Resources on TEAMS	Isotope	The Transition Metals
Glossaries	Alkali Metal	Relative Atomic Mass
	The Halogens	