

Subject	Year	Term		
Science	10	1		
Topic				

C1 Atomic Structure and the Periodic Table

Content (Intent)

Prior Learning (Topic) 7C2: Elements and compounds, 8C1: Properties of elements, 8C2: Chemical reactions and earth.

- What are atoms, elements and compounds?
- What happens when elements react together to produce compounds?
- The structure of an atom.
- How the model of an atom has changed over time.
- Electron arrangement in atoms
- The layout of the periodic table
- The development of the periodic table over time
- The properties of metals compared to non-metals.
- The properties and reactions of Groups 1,7 and 0 elements

Future Learning (Topic) This topic underpins all chemistry at all levels. Particularly, C2 Structure and Bonding (y10), C3 Quantitative Chemistry (y11)

How will knowledge and skills be taught?	How will your understanding be assessed &
(Implementation)	recorded (Impact)
<u>Demos</u>	- 2 x standard homework (Written
Iron and sulfur reaction, reactions of alkali	feedback. Response expected.)
metals	-1 x end of topic test (Level given. Verbal
Practical work	feedback to class and individuals.)
Investigating metal properties, reactivity of	
group 1 and group 7 elements.	
Written	
Class notes	

How can parents help at home?

Look at the topic specific resources on the VLE

Use appropriate youtube channels: cognito, primrosekitten, khan academy, freesciencelessons.

Take an interest! Ask your children what they have learnt and be curious about their learning.

Helpful further reading/discussion				
Reading	Vocabulary Lists	Careers Links		
 Atoms and Ashes by 	Atom, element, molecule,	Environmental scientist		
Serhii Plokhy	compound, equation, plum	Chemical engineer		
	pudding model, electron	Medicine Veterinary Science		

Atoms Under the	arrangement,. Proton,	Chemist
Floorboards by Chris	neutron, alkali metal,	Biochemist
Woodford	halogen, noble gas	
The Periodic Table of		
Marvel by Melanie Scott		
 The Disappearing 		
Spoon and other true		
tales from the Periodic		
Table by Sam Kean		