



## Year 9 Chemistry

	Key content (knowledge)	Key skills	Assessments	Challenge and enrichment
Autumn half term 1	Atomic Structure	Draw the electronic diagram Numeracy-balance equation Define the key terms		Find out about more advanced models of the atom that includes subshells, and orbitals. Watch <a href="#">Quantum Physics: The Science That Defies All Logic   Secrets Of Quantum Physics   Progress (youtube.com)</a>
Autumn half term 2	The Periodic Table	Literacy writing –identify and explain the pattern Using the correct command words	Atomic Structure test	Look in to uses of the halogens, such as exactly how is chlorine used in swimming pools, why is sea weed a good source of iodine.
Spring half term 1	Structure and Bonding	State the physical and chemical properties of transition metals Recap the structure of ions Model and learn detail about the ionic compound	The Periodic Table	Find out: Is there any evidence for crystals having mystic healing properties.  Find out about X-ray crystallography. <a href="#">T1 WeeMore   Football   UK   Hero 30s   16x9 (youtube.com)</a>

Spring half term 2	Continue Structure and Bonding	Model and learn detail about the covalent and metallic bond Explain the properties of different molecules		Find out about covalent molecules that have ionic character, and ionic substances that have covalent character.
Summer half term 1	Finish Structure and Bonding	Investigation techniques Recap bonding	Structure and Bonding test	Taking action to make improvement Try more exam past papers
Summer half term 2	Chemical calculations	Calculations Percentage yield and atom economy		Research acid base reactions and analytical methods such as titrations. How is yield used in industry.