Prior Learning	Particles, states of matter elements, compounds, mixtures, properties of metal and non-metals				
Lesson Number	AQA Spec	Title	Content	Assessment/ Homework	
1	4.1.11	Elements and compounds	<ul> <li>Identify symbols of elements from the periodic table (First 20)</li> <li>Recognise the properties of elements and compounds.</li> <li>Identify the elements in a compound</li> <li>Use formulae to write equations.</li> </ul>		
2	4.1.12 4.8.1.1	Mixtures	<ul> <li>Recognise that all substances are chemicals</li> <li>Understand that mixtures can be separated into their components</li> <li>Suggest suitable separation and purification techniques for mixtures.</li> </ul>		
3	4.1.1.3	Changing ideas about atoms	<ul> <li>Learn how models of the atom changed as scientists gathered more data.</li> <li>Consider the data Rutherford and Marsden collected.</li> <li>Link their data to our model of the atom</li> </ul>	Key concept: sizes of particles and orders of magnitude  Feedback: self-assessment	
4	4.1.1.4. 4.1.1.5	Modelling the atom- Atomic structure	<ul> <li>Explore the structure of atoms.</li> <li>Consider the sizes of atoms.</li> <li>Compare protons, neutrons and electrons.</li> <li>Find out why atoms are neutral</li> </ul>		
5	4.1.1.5	Sub-atomic particles- Isotopes	<ul> <li>Find out what the periodic table tells us about each element's atoms.</li> <li>Learn what isotopes are.</li> <li>Use symbols to represent isotopes.</li> </ul>	Maths skills: standard form and making estimates Feedback: Self assessment	
6	4.1.1.7	Electronic structure	<ul> <li>Find out how electrons are arranged in atoms.</li> <li>Recognise that the number of electrons in an element's atoms outer shell corresponds to the element's group number</li> <li>Explore the way atomic radius changes with position in the periodic table</li> </ul>	Assessment 1: Multiple choice quiz: 20 questions on content so far  Feedback: self-assessment	
			<ul> <li>Explain how the electronic structure of atoms follows a pattern.</li> </ul>		

## CHEMISTRY C1 ATOMIC STRUCTURE LEARNING JOURNEY

7	4.1.2.2	The periodic table	<ul> <li>Find out how the periodic table has changed over the years.</li> <li>Explore Mendeleev's role in its development.</li> <li>Consider the accuracy of Mendeleev's predictions.</li> </ul>			
8	4.1.2.4	Exploring Group 0	<ul> <li>Explore the properties of noble gases.</li> <li>Find out how the mass of their atoms affects their boiling points.</li> <li>Relate their chemical properties to their electronic structures.</li> </ul>	Assessment 2: 15 mark extended question Feedback: Teacher		
9	4.1.2.5	Exploring Group 1	<ul> <li>Explore the properties of Group 1 metals.</li> <li>Compare their reactivity.</li> <li>Relate their reactivity to their electronic structures.</li> </ul>			
10	4.1.2.6	Exploring Group 7	<ul> <li>Explain why Group 7 non-metals are known as halogens.</li> <li>Compare their reactivity.</li> <li>Relate their reactivity to their electronic structures</li> </ul>			
11 Triple Only	4.1.3.1 4.1.3.2	Transition metals	<ul> <li>Compare the properties of transition metals with those of Group 1 metals.</li> <li>Explore the uses of transition metals.</li> <li>Find out why they can form compounds with different colours.</li> </ul>			
End of Unit test Assessment: Teacher						
Where we will use these ideas again	Structure and bonding, Rates of reaction, electrolysis, Moles					