



Year 9 Chemistry Learning Journey

When?	Knowledge	Understanding	Assessment
Rotation 1 Topic 1	Topic 1: Atomic Structure and the periodic table Will be able to: <ul style="list-style-type: none">• describe mixtures and compounds and how they can be separated using separation techniques.• draw and explain the structure of the atom and be able to calculate information from atomic and mass numbers.• explain evidence for the history of the atom and periodic table.• Describe and explain the trends in the groups of the periodic table	Students will carry out a range of practical experiments during these topics. Atomic Structure key vocabulary: aqueous solution atom atomic number balanced symbol equation biofuel chromatography compound electron electronic structure element ion isotope mass number neutron proton shell symbol equation Periodic table key vocabulary: Period Group Noble gases Halogens Transition elements	Atomic Structure test (30 marks) and the Periodic table Test (30 marks)

When?	Knowledge	Understanding	Assessment
<p>Rotation 2</p> <p>Topic 2</p>	<p>Topic 2: Structure and Bonding</p> <p>Will be able to:</p> <ul style="list-style-type: none"> Describe the different types of bonding: covalent, ionic and metallic. Describe and explain the properties of giant covalent, ionic, simple molecular and metallic structures. Describe and explain the properties of nanoparticles, polymers and allotropes of carbon. 	<p>Students will carry out a range of practical experiments during these topics.</p> <p>Structure and Bonding key vocabulary:</p> <p>alloy covalent bond delocalised electron dot and cross diagram fullerene intermolecular forces ionic bond nanoscience polymer solids states of matter metallic bond</p>	<p>Topic 2 Structure and Bonding interim Test (30 marks) and Structure and Bonding test (30 marks)</p>