

Year 9 Chemistry SoW and HW plan Autumn 2

Chapter and Topic	Lesson	Outcomes	Homework
C1 Atomic structure	Atoms	<ul style="list-style-type: none">• State the definition of an element• Describe the basic structure of the periodic table• Describe the basic structure of an atom	
	History of the atom	<ul style="list-style-type: none">• State how and why the atomic model has changed over time• Explain that scientific theories are revised or replaced by new ones in the light of new evidence	Draw a timeline to show the developments in the atomic model
	Structure of the atom	<ul style="list-style-type: none">• State the location, relative charge and relative mass of the protons, neutrons and electrons in an atom• Describe what the atomic number and mass number of an atom represent• Explain why atoms have no overall charge	
	Ions, atoms and isotopes	<ul style="list-style-type: none">• Describe how to work out the number of protons, neutrons and electrons in an ion• Define isotopes	Identify the number of electrons, neutrons and protons in an atom
	Electronic structures	<ul style="list-style-type: none">• Describe how the electrons are arranged in an atom• Present the electronic structures of the first 20 elements in the periodic table	Draw out the electronic structure of Li, K and Mg
	Chemical equations	<ul style="list-style-type: none">• Describe what happens to the atoms in a chemical reaction• Describe how the mass of reactants compares with the mass of the products	

		<ul style="list-style-type: none"> • Construct balanced symbol equations, including state symbols, to represent reactions 	
	Separating mixtures	<ul style="list-style-type: none"> • State what a mixture is • How to separate the components in a range of mixtures by <ul style="list-style-type: none"> ○ Filtration ○ Crystallisation ○ Simple distillation 	Kerboodle interactive quiz – separating mixtures
	Fractional distillation and paper chromatography	<ul style="list-style-type: none"> • Explain why fractional distillation is needed to separate some liquids • Describe how fractional distillation works • Describe how paper chromatography works 	