FAIRFAX
SINCERITAS LABORIS

YEAR 9 CURRICULUM INFORMATION – Chemistry		
	Autumn 1	Autum 2
What will students be learning?	**Atomic structure** Students will develop their understanding of the differences between compounds and mixtures, and how mixtures can be separated using techniques such as filtration, crystallisation, distillation, and chromatography. Students will learn about the development of the atomic model, specifically around the development and use of models within science. Students will be able to describe the evidence that led to each new stage in the development of the atomic model.	**Atomic structure** Students will develop their understanding of the differences between compounds and mixtures, and how mixtures can be separated using techniques such as filtration, crystallisation, distillation, and chromatography. Students will learn about the development of the atomic model, specifically around the development and use of models within science. Students will be able to describe the evidence that led to each new stage in the development of the atomic model.
How will students be assessed?	C1 (Atomic structure) Milestone	C1 (Atomic structure) Milestone
Literacy – What keywords will be taught?	Atom, Element, Compound, Filtration, Mixture, Distillation, Nucleus, Chromatography, Shells, Ion, Electrons, Isotope, Protons, Atomic number, Neutrons, Relative mass number	Atom, Element, Compound, Filtration, Mixture, Distillation, Nucleus, Chromatography, Shells, Ion, Electrons, Isotope, Protons, Atomic number, Neutrons, Relative mass number
What employability skills are being developed?	Skills such as investigative and analytical which can lead to careers as: Chemist, Material scientist, Medicine, Chromatographer, Analytical Chemist, Chemical, Engineer, Environmental Chemist, Forensic Scientist, Particle physicist, Nuclear Physicist, Astrometry, Astrophysicist	Skills such as investigative and analytical which can lead to careers as: Chemist, Material scientist, Medicine, Chromatographer, Analytical Chemist, Chemical, Engineer, Environmental Chemist, Forensic Scientist, Particle physicist, Nuclear Physicist, Astrometry, Astrophysicist
Wider Curriculum Links?	History of the atom History of Scientists and their discoveries DT/Food Science and separation/evaporation in food Physical models of the Universe	History of the atom History of Scientists and their discoveries DT/Food Science and separation/evaporation in food Physical models of the Universe
What useful websites are there for this topic?	 Free science lessons  Primrose Kitten  Seneca  BBC Bitesize	 Free science lessons  Primrose Kitten  Seneca  BBC Bitesize

What wider reading could be done for this topic?	Textbooks: AQA Chemistry for GCSE Combined Science: Trilogy (Oxford) Textbooks: AQA Chemistry for GCSE Separate Science: Trilogy (Oxford)	Textbooks: AQA Chemistry for GCSE Combined Science: Trilogy (Oxford) Textbooks: AQA Chemistry for GCSE Separate Science: Trilogy (Oxford)
What else can students be doing independently to develop their understanding of this topic?	Exam questions Numeracy practice	Exam questions Numeracy practice