Year 9 - Science						
Curriculum intent	All students will develop knowledge which helps them in their own lives and to understand the world in which they live. Students will be confident with their knowledge, allowing them to inform others and to problem solve through scientific enquiry. To prepare students for the future they will be curious and equipped to question and challenge information they are presented with. Through the curriculum, key themes of knowledge are revisited each year, with the knowledge being developed over time. The themes link to biology, chemistry and physics and are carefully sequenced in order to ensure that students have all of the powerful knowledge needed to move onto the next theme. This will ensure that students develop a secure long term memory over time with flexible knowledge that can be applied to different contexts.					
Term	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Knowledge	Students will learn about Growth and differentiation, and The Periodic table.	Students will learn about Periodic table (continued) and Acceleration.	Students will learn about Human interaction and Using Chemistry.	Students will learn about Heating and Genetics.	Students will learn about Using resources and Sound and Waves.	Students will learn about Sound and waves (continued) and Home electricity.
Skills	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements. Maths skills – handling data, graphs and using units.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements. Maths skills – handling data, graphs and using units.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements. Maths skills – handling data, graphs and using units.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements. Maths skills – handling data, graphs and using units.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements. Maths skills – handling data, graphs and using units.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements. Maths skills – handling data, graphs and using units.
Assessments	Mastery Application Tasks two per half	Mastery Application Tasks two per half	Mastery Application Tasks two per half	Mastery Application Tasks two per half	Mastery Application Tasks two per half	Mastery Application Tasks two per half

	term: compare prokaryotes and eukaryotes and draw a line graph for osmosis.	term: explain group 7 reactivity and describe how to calculate resultant forces.	term: describe methods to preserve biodiversity and evaluate the method of making salts.	term: method for thermal transfers and compare the advantages and disadvantages of the types of reproduction.	term: evaluate the method and compare types of waves.	term: describe how to measure velocity in waves and power calculation.
Curiosity	Books: https://www.amazon.co.uk/Women-Science-Fearless-Pioneers-Changed/dp/1526360519/ref=sr_1_5?dchild=1&keywords=science+book+aimed+for+14+years+old&qid=1624626761&s=books&sr=1-5 Home Science Experiments: https://kidadl.com/articles/twelve-easy-science-projects-for-teens-during-lockdown Science in the news: https://www.iflscience.com/ https://theday.co.uk/ https://www.bbc.co.uk/news/science_and_environment					