			Year 8 - 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 the 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 Tissues and organs, and Acids and Alkalis.	Students will learn about Movement and Pressure, Respiration and Photosynthesis.	Students will learn about Changing substances and Magnetism.	Students will learn about Life diversity and Earth systems.	Students will learn about Nutrition and Light.	Students will learn about Light (continued) and Electric circuits: resistance.			
Skills	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.	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.	Maths skills – handling data, graphs and using units.	Maths skills – handling data, graphs and using units.	Maths skills – handling data, graphs and using units.	Maths skills – handling data, graphs and using units.	Maths skills – handling data, graphs and using units.			

Assessments	Mastery Application Tasks two per half term: method on muscle strength and method for making crystals.	Mastery Application Tasks two per half term: speed calculation and compare respiration and photosynthesis.	Mastery Application Tasks two per half term: compare chemical and physical changes and method on electromagnets.	Mastery Application Tasks two per half term: describe the process of selective breeding and explain the water cycle.	Mastery Application Tasks two per half term: explain the role of organs in the digestive system and draw a reflection line graph.	Mastery Application Tasks two per half term: resistance calculation and describe a graph for resistance.			
Curiosity	Books: The Science Book http://www.amazon.co.uk/Science-Book-Ideas-Simply- plained/dp/1409350150/ref=pd sim b 2?ie=UTF8&refRID=084B30VXA9G72PJ80PVE Home Science Experiments: https://www.sciencefun.org/kidszone/experiments/ https://www.science-sparks.com/category/primary-science/key-stage-3-science/ https://www.weareteachers.com/easy-science-experiments/								
	Science in the news: https://www.iflscience.com/ https://theday.co.uk/ https://www.bbc.co.uk/news/science_and_environment								