Year 7 - 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 Cells and Particles.	Students will learn about Forces and Reproduction.	Students will learn about Atoms, Elements and compounds, and Space	Students will learn about Space (continued) and Interdependence.	Students will learn about Mixtures and Energy.	Students will learn about Energy (continued) and Electric circuits: current and voltage.				
Skills	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.  Maths skills –	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.  Maths skills –	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.  Maths skills –	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.  Maths skills –	Working scientifically: developing scientific attitudes, experimental skills and investigations, analysis and evaluation and using a range of measurements.  Maths 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.	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: compare animal and plant cells and density calculation	Mastery Application Tasks two per half term: forces - describe a graph and compare asexual and sexual reproduction.	Mastery Re Application Tasks two per half term: compare metals and non-metals and weight calculation.	Mastery Application Tasks two per half term: compare solar and lunar eclipses and explain when to use systematic and random sampling.	Mastery Application Tasks two per half term: draw line graph for a phase diagram and draw a bar chart for energy in foods.	Mastery Application Tasks two per each half: Method for conduction in rods and describe how to measure current and voltage in circuits.
Curiosity	Books: The illustrated Scien	ce Book				

https://www.amazon.co.uk/dp/1409539105/?ref=cm sw r pi dp Jmakvb0FBK7MH

Bad Science-Ben Goldacre

https://www.amazon.co.uk/gp/product/000728487X?ref=cm\_sw\_r\_awd\_8h0cvb10ARC15

Why is snott green?

https://www.amazon.co.uk/dp/0330448528/?ref=cm\_sw\_r\_pi\_dp\_7lakvb0C0NBZV

World of Science

https://www.amazon.co.uk/World-Science-Various/dp/1842368036/ref=sr 1 1?s=books&ie=UTF8&qid=1432298879&sr=1-1

Horrible Science of Everything

https://www.amazon.co.uk/Horrible-Science-Everything-Nick-Arnold/dp/1407115499/ref=pd bxgy b img y

Home Science Experiments:

Cool Science Tricks

https://www.amazon.co.uk/gp/product/1907554696?ref=cm\_sw\_r\_awd\_G4Zcvb1PP9WE3

Science experiments to do at home

https://www.sciencefun.org/kidszone/experiments/

Science in the news:

https://www.iflscience.com/

https://theday.co.uk/

https://www.bbc.co.uk/news/science\_and\_environment