

## Year 7 Curriculum Map

### Science

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Unit of Learning	Working scientifically through enquiry.	Small builds big!	Our place in the universe.	Electrical energy and paying for it!	Chemicals in our home and in the ecosystem.	Forces: Heavy or light and fast or slow?
Unit Focus	Laboratory and investigative skills.  Particle theory.	Cells & organs.  Movement.	Earth & climate.  Universe.	Electricity & current.	Interdependence  Acids & alkalis.	Mass & weight.  Speed & resistance.
Key Knowledge	Practical skills.  Safety & managing risks in the lab.  Producing valid results.  Constructing graphs.  How to write conclusion & evaluations.  Changing states of matter.  Calculating density.	Specialised cells in humans & plants.  Diffusion of particles.  Organ systems.  Skeleton, joints & muscles.	Rock cycle.  Carbon cycle.  Climate change.  Structure of the universe & Earth.  Sun, Earth & Moon. Changing seasons.	Series & parallel circuits.  Measuring current & voltage.  Calculating the cost of energy.	Impact of humans on biodiversity.  Adaptation for survival. Interpreting secondary data.  Investigating pH values of different substances.  Practical skills.  Safety & managing risks.	Calculating mass.  Resultant forces.  Force diagrams.  Calculating speed.  Distance-time graphs.
SMSC	Wonder as the basis of science.  Discovering the limits of experimentation.	Regularity and order in science.  The impact of scientific achievements.	The universe and beyond: Creationism versus the big bang theory?	Discovering the limits of experimentation.  The impact of scientific achievements (light bulb moment).	Wonder as the basis of natural science.  Beliefs in science and the faith of scientists (Darwin's story).	The impact of scientific achievements (Galileo experiments).
Experiences /CEIAG	Skills needed to work in a scientific laboratory.	Microbiology laboratory work, physiotherapy (NHS).	How to enter the industry of aerospace.	Problem solving like an electrician.	Local, national, and global issues regarding climate change and impact of humans as consumers on biodiversity.	Debate around national speed limits and their consequences.
Examples of how you can help your child at home	Home baking/cooking – how to follow a recipe.	Exploring different smells at home and beyond.	Creating a 3D model of the solar system or observing the phases of the lunar cycle.	Opportunity to explore/discuss energy bills (reference to kWh).	Investigating the acidity of drinks on an eggshell.	Investigating the speed of homemade parachutes.