

Key Stage 3 SCIENCE

Year 7

TERM 1 content and skills	TERM 2 content and skills	TERM 3 content and skills	EXTENDED CURRICULUM (trips/visits/after school activities)
Core skills: Be safe in a science lab, plot a graph from experiment data. Being a Scientist – pupils practise the skills a scientist needs in carrying out an investigation from the planning to the evaluation. Core Science – Biology, Chemistry and Physics. Pupils cover the key ideas and vocabulary needed for KS3 science	Reproduction – What is an organism, organ systems, life processes and fertilisation to birth. Space – Planets in our solar system and their motions, forces and eclipses. Simple Chemical reactions - elements, compounds, naming compounds and the periodic table	Heating and cooling – Conduction, convection, radiation, insulators, particle theory, changes in state and evaporation rates. Separating mixtures – What is the difference between molecules, atoms and compounds? Particle theory and separation techniques. The Living world – Habitats, adaptations, variations and feeding relationships	STEM Club
Assessment:	Assessment:	Assessment:	

Year 8

Food and Digestion – students learn about tissues, organs, the role of enzymes, food groups and ecosystems. Periodic table – discover why the periodic table is laid out how it is. You also consider oxidation reactions. Sound and Waves – describe waves using correct terms and know the parts of the ear.	Light – Reflection, refraction, dispersion, white light, sound waves, how we see and hear. Health and Fitness - What is fitness? Skeletons, muscles, joints, breathing and respiration. Reactions of Acids – pH scale, neutralisation, and flame tests.	Breathing and Respiration – How do we breathe? Why do we breathe? Environmental Chemistry – greenhouse effects, carbon cycle and recycling are covered in this topic. Forces and motion – balanced and unbalanced forces, motion graphs, moments and pressure.	Science and STEM club. Various trips take place throughout the year
Assessment:	Assessment:	Assessment:	

Year 9

Adaption and Variation – genes and DNA, together how species are formed are covered in this topic. Environmental Chemistry – greenhouse effects, carbon cycle and recycling are covered in this topic. Electricity and Magnetism – this is a	Cells – students look at the building blocks of life. Reactivity - exothermic and endothermic chemical reactions together with the role of catalysts is examined. Energy - the scientific notion of energy is considered, together with the principle of the conservation of energy.	Materials - exothermic and endothermic chemical reactions, polymers and composites. Pressure and Moments – pressure in fluids is considered using the particles model.	Science and STEM club and various trips take place throughout the year.
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large topic where students learn about electric circuits and how magnets work. Photosynthesis – students explore this reaction and its importance to life.			
Assessment:	Assessment:	Assessment:	