

KS3 Science
Curriculum Content - Long term plan

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Topic	Animals including Humans - Ourselfs (PSHE Link)	Electricity It's Electric!	Everyday Materials Let's Build	Seasonal Changes Wonderful Weather	Everyday Materials Marvellous Materials	Plants What's Growing in our Garden
Key focus		Pupils learn that animals and humans belong to phylums. They learn for the first time that animals can be classified into groups. Pupils also learn that humans are also animals and we have a responsibility to preserve the natural world.	This unit looks at electricity and the benefits around the home and workplace. Pupils learn about the health and safety aspects and design a poster to be posted around the school.	This unit is investigating the most common building materials used for the construction of houses. Pupils get to handle and describe the different properties of brick, tile, wood and plastic. Pupils learn why different materials are chosen for a specific task.	This unit invites pupils to discuss, investigate and understand seasonal change and its impact on the natural world. They learn that seasonal change is important for weather and how this in turn aids growth and life.	Pupils explore puddles, carry out simple investigations using ice and melting. The puddles invite pupils to measure these and how they change under different situations - i.e. after rain, then days later with no rain. Pupils learn how to measure these puddles and record using a simple chart.	In this scheme, pupils explore the grounds of the school, it's flower beds, allotment and ponds. They develop an understanding that things grow and many growing plants are seasonal.
Year 8	Topic	Animals including Humans - Keeping Healthy (PSHE Link)	Light Light and Shadows	Rocks Rocks and Fossils	Forces and Magnets Amazing Magnets	Uses of Everyday Materials - Squash, bend, twist, stretch	Plants Artful flowers, fruits and seeds
Key focus		This unit is closely linked to PSHE where pupils learn about exercise and healthy eating. They perform simple exercises and measure heart and breathing rates. These are recorded on charts and illustrated by graphs.	This unit invites pupils to learn about light and how it creates shadows. Pupils learn about the properties of light, colour mixing, colour separating and applying it to a shadow puppet production. Pupils are also introduced to the human eye and will carry out an experiment by making one artificially!	This wonderful unit introduces Mary Anning and her wonderful discoveries in Dorset. Pupils have an opportunity to make their own fossils in clay/plaster, learn how they occur naturally and what fossils can tell us about a previous life.	This unit allows the pupil to investigate magnets, what materials are magnetic and those which are not. Pupils make a compass and carry out simple experiments with magnet rods that repel or attract, learning about magnetic poles.	This exciting unit allows pupils to experiment with different materials looking at their bounce, stretch and tear qualities. Pupils begin to understand the physics of different properties.	This unit invites dissection of flowers and plants. Pupils classify plants by fruits, flowers and roots. Pupils are introduced to the idea of pollination and the types of animals that aid plants and us in this process.

Year 9	Topic	Living Things and their Habitats The Art of Living	Forces May the forces be with you	Properties and changing of materials Music Festival Materials	Earth and Space Space	Properties and changes of materials Changing materials education pack.	Plants Roots and Shoots
Key focus		This unit is about life cycles and pupils are introduced to flow charts and diagrams. Pupils will be expected to create their own diagrams and flowcharts and deliver a talk about their discoveries. The investigation based on animal or plant life cycles will be sourced using a variety of materials from books to google searches.	Pupils in this unit learn about forces and how they govern movement. They learn that there are pulling and pushing forces, and that forces can be affected by friction. Pupils are introduced to pulleys, levers and inclines. They are introduced to terms like gravity and newton forces. Pupils get to carry out scaled investigations into movement of remote control cars on different surfaces and measure distance, speed and time.	This unit looks at materials one would commonly see at a music venue. Pupils have to decide on the best materials to carry a hot drink in, chips and other venue fast food. Pupils will be looking at insulators and conductors and carrying out a simple investigation. For example, what is the best material to use for coffee? Pupils will be recording findings on charts. They will be using equipment like thermometers and safety gear.	This unit invites pupils to learn about space and earths relationship to it in terms of size and position. This challenging unit allows pupils for the first time to discover the scale of the solar system, the ratio of planetary sizes and simple facts about stars.	This unit looks at solutions that separate, are soluble and those that may change in appearance. Pupils are expected to present their findings at the conclusion of the unit of work.	Pupils deepen their understanding of plants and how we depend on them for survival. This unit invites pupils to build and cultivate an allotment under the theme of supporting alien life.