

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	Topic: Separating Mixtures and Types of Change Key ideas: Describe how mixtures may be separated. Understand that changes of state are reversible.	Topic: Materials Key ideas: Compare and group materials based on their properties.	Topic: Earth and Space Key ideas: Describe the Sun, Earth and Moon.	Topic: Forces Key ideas: Identify the effects of air resistance, water resistance, friction and gravity.	Topic: Life Cycles Key ideas: Describe the differences in the life cycles of a mammal, an amphibian and a bird.	Topic: Life Cycles Key ideas: Describe the differences in the life cycles of a mammal, an amphibian and a bird.
	Know that some materials form a solution and how to recover a substance from a solution. Explain that some changes results in new materials that are irreversible.	Give reasons, based on evidence, for the uses of everyday materials.	Explain night and day on Earth.	Recognise some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	Describe the processes of reproduction in some plants and animals. Describe the changes as humans develop to old age.	Describe the processes of reproduction in some plants and animals. Describe the changes as humans develop to old age.
Year 6	Topic: Our Bodies Key ideas: Identify and name the parts of the circulatory system and describe the functions of the heart, blood vessels and blood.	Topic: Classifying Living Things Key ideas: Describe how living things are classified into broad groups.	Topic: Light and Sight Key ideas: Recognise that light appears to travel in straight lines. Explain why shadows have the same shape as the objects that cast them.	Topic: Evolution and Inheritance Key ideas: Recognise that living things have changed over time and that fossils provide information about previous living things.	Topic: Changing Circuits Key ideas: Use symbols to represent components in a simple circuit.	Topic: Sound KS3 ready Key ideas: Echoes, reflection and absorption of sound. Sound is caused by vibrations.
	Describe the ways in which nutrients and water are transported within animals. Recognise the impact of diet, exercise, drugs and lifestyle on the body. Link with P.E Health related fitness module.	Give reasons for classifying plants, animals and micro-organisms.	Explain that we see things because light travels from light sources to our eyes or from light sources to objects then to our eyes. Explain that objects are seen because they give out or reflect light into the eye. Combine with Maths to work on accurate graph drawings.	Recognise that living things produce offspring of the same kind but vary to their parents. Identify how animals and plants are adapted to their environment and may lead to evolution.	Associate the brightness of a lamp or the volume of a buzzer with the number of cells used in a circuit. Compare variations in how components function.	Explain that we hear things due to particles vibrating. Understand how sound reaches our ears and the anatomy of the ear. Topic: BIG DATA Link with Computing and Maths.

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Year 7	Topic: Matter 1 Key ideas: Particle model and separating mixtures. Texts Used: AQA KS3 Pupil Book 1. FIXED	Topic: Electromagnets 1 Key ideas: Voltage, Resistance and Current. Texts Used: AQA KS3 Pupil Book 1. Possibilities to combine: Technology	Topic: Energy Costs Key ideas: Energy costs and Transfers. Texts Used: AQA KS3 Pupil Book 1. Combine with Maths on Unit 6 statistics.	Topic: Reactions 1 Key ideas: Metals, non-metals, acids and alkalis. Texts Used: AQA KS3 Pupil Book 1.	Topic: Organisms 1 Key ideas: Movement and cells. Texts Used: AQA KS3 Pupil Book 1.	Topic: Genes 1 Key ideas: Variation and human reproduction. Texts Used: AQA KS3 Pupil Book 1. Combine with PSHE unit on body image.
	Topic: Forces 1 Key ideas: Speed and Gravity. Texts Used: AQA KS3 Pupil Book 1. Combine with Maths on Unit 6 statistics.		Topic: Waves 1 Key ideas: Sound and light. Texts Used: AQA KS3 Pupil Book 1. Combine with music using sound waves.		Topic: Ecosystem 1 Interdependence and plant reproduction. Texts Used: AQA KS3 Pupil Book 1.	Topic: Earth 1 Earth structure and the Universe. Texts Used: AQA KS3 Pupil Book 1.
Year 8	Topic: Forces 2 Key ideas: Contact forces and pressure. Texts Used: AQA KS3 Pupil Book 2.	Topic: Energy Work Key ideas: Work done and heating and cooling. Texts Used: AQA KS3 Pupil Book 2.	Topic: Waves 2 Key ideas: Wave effects and wave properties. Texts Used: AQA KS3 Pupil Book 2.	Topic: Reactions 2 Key ideas: Chemical energy and types of reaction. Texts Used: AQA KS3 Pupil Book 2. Combine with Computing using Minecraft on particle reactions and the periodic table.	Topic: Organisms 2 Key ideas: Breathing and Digestion. Texts Used: AQA KS3 Pupil Book 2.	Topic: Genes 2 Key ideas: Evolution and Inheritance. Texts Used: AQA KS3 Pupil Book 2.
	Topic: Electromagnets 2 Key ideas: Electromagnets and magnetism. Texts Used: AQA KS3 Pupil Book 2.		Topic: Matter 2 Key ideas: Periodic table and Elements. Texts Used: AQA KS3 Pupil Book 2. Combine with Computing on particle reactions and the periodic table.		Topic: Ecosystem 2 Key ideas: Respiration and Photosynthesis. Texts Used: AQA KS3 Pupil Book 2. Combine with PE health related fitness unit.	Topic: Earth 2 (Homework topic) Key ideas: Climate and Earth Resources. Work covered in Humanities on global warming.