The Magdalen Church of England / Methodist School : Science Curriculum Map

	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
EYFS	**Dough babies** Unit 9 – In this topic, the children observe what happens when raw ingredients are mixed together and heated. They use their senses to explore the mixture at different stages of the process and begin to communicate their observations using simple scientific vocabulary.	**Frozen** Unit 12 – In this topic, the children explore and experiment with ice and what makes it freeze and melt. They have opportunities to design a super-sled. They will learn about snowy places around the world and think about what it must be like for humans and other animals to live in the Arctic or the Antarctic.	**Is it nearly Spring yet?** In this topic, the children will explore the seasons – they will be taught the names of the seasons and the main features of each season – using their own experiences and observations of the way in which the seasons affect their own lives and their environment.	**Save the Gingerbread Man** Unit 4 - In this topic, we will use the traditional story The Gingerbread Man – but give it a twist that leads to problem-solving scenarios drawing heavily on children's understanding of the world, particularly science. Changing the story encourages children to build a raft, or a bridge or a life jacket for the Gingerbread Man.	**Pets & Vets** Unit 5 – In this topic, the children will learn about animals and what they need to stay healthy. It also helps children to make the connection between what animals need and what they, themselves need to stay healthy.	**Whatever the Weather** Unit 16 – In this topic, we find out that the weather is really fascinating – we encourage children to ask questions about what they see and experience.
	Why this? Why Now?	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**
	This topic uses play dough as it is a key feature of continuous provision. We will encourage the children to use their senses to articulate what they see in context as the playdough is made. This topic will prepare the children for the topics Who	**This topic introduces the children to changes in materials that they will study through the topic Polar Places as they move into Year 1. They will talk about what they see happening and link this to their own experience.**	**This topic will lay the foundations for studying Seasonal Changes throughout Year 1 and Year 2. It will start with what the children already know and use science to explain what is happening around them.**	**This topic looks at the story of the Gingerbread Man in a scientific way. It encourages the children to apply their knowledge of materials, and in process, gain a greater understanding of the properties of materials. This step will be important as the children extend their**	**This topic uses pets as a starting point and introduces the idea that humans are animals. It prepares the children for the Year 1 topics Polar Places, On Safari and Who am I? as well as the Year 2 topic Healthy Me.**	**This topic builds on the work on seasons in the topic Is it nearly Spring yet? It will also prepare the children for further study of Seasonal Changes throughout Year 1 and Year 2. It will support the children to be comfortable with asking**

	am I? in Year 1 and Squash, Bend and Stretch in Year 2.			**learning in the Year 1 topic Celebrations Year 2 topics Material Monsters and Squash, Bend and Stretch**		**questions, making predictions and recording simple information.**
	Key Vocabulary	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**
	Ingredients, heat, cool, thicken, change	**Ice, melt, freeze, change, frozen**	**Seasons, spring, summer, autumn, winter, change**	**Float, sink, materials, waterproof**	**Nutrition, sleep, food, exercise, comfort**	**Forecast, months of the year, names of seasons**
Year 1	**Polar Places** In this topic, children plan an expedition to the polar regions, learning about properties of different materials, and a range of living things in the polar regions.	**On Safari** Children go on safari to explore invertebrates and other plants and animals in the local area.	**Who am I?** In this topic, children will learn about the basic parts of the human body and explore their five senses using a wide range of activities.	**Plants and animals where we live.** In this topic, children explore the school grounds to find out about the plants and animals that live in the locality. Children will learn to name and identify common wild and garden plants, including trees, so they are familiar with common names.	**Celebrations** The theme of celebrations is used to explore a number of curriculum areas, including everyday materials, plants and light.	**Holidays** In this topic, children will plan what they need to pack for a holiday, and explore the different animals they might encounter at the seaside and the human impact on the environment.
	Why this? Why Now?	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**
	This topic introduces the children to the properties of materials for the children. It will prepare them for the Celebrations topic that they will be completing in Term 4.	**This Topic will introduce the children to plants in the local area, which links to changes to plants and animals where we live in term 4 in order to compare and contrast.**	**This topic will give the children basic information before learning the topic, Healthy Me in Year 2. It will also introduce the children to using simple equipment such as hand lenses,**	**This topic lays the foundations of learning for Young Gardeners topic in Year 2 and How does your Garden Grow topic in Year 3. They should begin to use simple charts to identify plants**	**The children will understand the difference between objects and the materials they are made from. It will prepare the children for the topic Light and Shadows in Year**	**The children will use the knowledge that they have gained about materials and animals earlier in in the year in order to consider what they would need to take with them and the reasons behind this.**

			colour paddles and periscopes.		**3 and Year 6 topic Light.**	
	Key Vocabulary	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**
	Arctic, Antarctic, carnivore, herbivore, omnivore, flexible, habitat, waterproof	**Insect, head, abdomen, antennae, food chain, exoskeleton**	**Elbow, thigh, hips, joints, spine, vertebrae**	**Animals, birds, fish, reptile, habitat, identify, amphibians, flowers, stem, tree**	**Light source, shadow, reflect, liquid, observe**	**Beech, habitat, sunburn, sunscreen, pollution, protect, rubbish, recycle**
	Seasonal Changes Record the weather using symbols. Look at how the length of the day changes and how the weather affects what we wear and what we do. Look at what happens to the trees over the year. Consider what the children need to do to stay safe in summer?					
	Why this? Why Now?					
	This topic can be weaved into learning of the above topics in order for children to begin to understand how our environments change throughout the year. They will begin to see how this is linked to the changes to the weather. They will also start to think about how clothing choices change and how our choices are made due to the properties of these materials.					
	Vocabulary					
	Autumn, winter, spring, summer, weather, day length, breezy, changing, chilly, cloudy, cool, cooler, darker, fog, fruits, rainy, warm, windy, nest, animal babies, temperature, planting, invertebrates.					
Year 2	**Our Local Environment** This topic brings together study of living things, habitats and growing plants and is strongly focussed on outdoor learning and investigations.	**Healthy Me** In this topic, children explore the importance of exercise, diet and good hygiene, building on the Who am I? topic in Year 1.	**Material Monsters** This topic explores the properties and uses of everyday materials, set in the context of meeting, talking to and feeding the Materials Monster.	**Squash, Bend and Stretch** In this unit, children explore how the shapes of objects can be changed by squashing, bending, twisting and stretching. In doing this they raise questions, perform simple tests, and gather and record data.	**Young Gardeners** This topic brings together study of living things and habitats and is strongly focussed on outdoor learning and investigations.	**Little Masterchefs** This topic explores food, including making healthy food choices, and cooking various different foods.
	Why this? Why Now?	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**
	This topic will extend the children's understanding about	This topic builds upon the Year 1 topic: **Who am I?** It provides the	This topic builds on **Celebrations** in Year 1. It will also provide	This topic further extends the pupils understanding of	This topic links to work completed in year 1 through the	This topic further develops the children's

	our environment and things that are living, dead, never been alive. This will link to prior learning during the topics: **Plants and animals where we live** and is preparation for the topic: **Living Things** in Year 4	foundations for the children to learn about **Food and our Bodies** in Year 3 where the children will learn about the need for the right types and amounts of nutrition.	the children with the knowledge they will need to compare and group together different types of **rocks, soils and fossils** in Year 3 as well as considering properties of materials as they complete work on **Forces and Magnets**.	materials that they will complete in the Year 1 **Celebrations** topic and Year 2 **Material Monsters** topic as well as providing them with prior knowledge which will prepare them for the Year 5 topics: **Material World** and **Amazing Changes**, where the children will further consider properties of materials.	topics: **On Safari** and **plants and animals where we live.** The children will need to gain this knowledge so that they have a sound understanding of plants to prepare them for Year 3 topic: **How does your Garden Grow?**	understanding of the **Healthy Me** topic, completed in Term 2. It also continues to prepare them for the **Food and our Bodies** topic in Year 3.
	Key Vocabulary	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**
	Alive, dead, food chain, habitat, microhabitat, predator, prey, carnivore, herbivore, omnivore, never alive	**Health, healthy, exercise, hygiene, hygienic, germs, fitness, food, fruit, vegetables**	**Materials, properties, bend, brittle, flexible, absorbent, man-made materials, natural, rough, shiny, smooth, recycle**	**Bend, squash, stretch, twist, push, squeeze**	**Annual, compost, flower, fruit, germinate, fruit, health, healthy, plant, root, seed, leaf, stem, soil, properties**	**Hygiene, bones, bread, chopping board, cook, dehydrate, digest, energy, ingredients, temperature**
	Seasonal Changes The children will use equipment to take measurements in the local environment. They will consider how their environment changes over the year and link this to topics covered as far as possible.					
	Vocabulary **Autumn, change, collect, daylight, dispersal, fruit, sunrise, sunset, weather, bulb, coniferous, deciduous, dormant, hibernate, hibernation, torrential, cold, coldest, freezing point, icy, liquid, melt, solid, bird watch, data, direction, east, west, information, materials, nests, north, south, flowers, insects, shadows, sun, sunburn, temperature**					
Year 3	**Rocks, Soils and Fossils**	**Food and Our Bodies**	**Forces and Magnets**	**Light and Shadows**	**How does your Garden Grow?**	**The Nappy Challenge**

	In this topic children work scientifically on a variety of quick investigations and longer tasks to learn about rocks. This topic covers the properties and uses of rocks, the rock family, soils and fossils.	Children work scientifically on a variety of quick challenges and longer tasks to learn about food and their bodies. This topic looks at where animals get food from and why it is important, and skeletons, muscles and joints.	This topic looks at magnets and their uses, and what makes magnetic poles special, along with the idea that some forces such as magnetic force can act without contact – unlike pushes and pulls, which require direct contact.	Children work scientifically on a variety of quick challenges and longer tasks to learn about the wonders of light, including reflections and shadows.	Children work scientifically on a variety of quick challenges and longer tasks to learn about plants. They learn about the different parts of plants, what plants need to live, water transportation in plants and pollination.	This topic looks at disposable nappies and provides opportunities for children to ask their own questions and make decisions on how to answer their questions using different scientific enquiry activities.
	Why this? Why Now?	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**
	This topic builds on the Material Monsters topic from Year 2 and will prepare the children for the Yr 6 topic of Evolution and Inheritance. It will also prepare them for KS 3 where they will learn about the structure of the earth and further their knowledge about the rock cycle.	**This topic builds on the Year 1 topic, Who am I? and the Healthy Me and Little Masterchefs topic in Year 2. This topic leads on to the Teeth and Eating topic in Year 4 and the Year 6 topic: Healthy Bodies**	**This topic builds on pupil knowledge from the Year 2 topic: Squash, Bend and Stretch. It will support the pupils understanding of the Year 5 topics, Out of this World and Let's Get Moving. The topic will also prepare the children for KS 3 when they will be looking at magnetic fields, the Earth's magnetism and, compass and navigation.**	**This topic links to the Yr 1 topics, Celebrations and sets the foundations for the children to further develop their understanding of this area of science as they further their knowledge during the Year 6 topic of Light.**	**This topic builds on the Year 2 topic: Young Gardeners It will also prepare the children for the Year 5 topic Circle of Life where the children will be able to use their understanding to understand the process of reproduction in plants. This knowledge will also lay the foundations for the children to investigate some seed dispersal mechanisms as they work through the**	**This topic builds on the Year 1 topic Polar Places and Year 2 topic Materials Monsters. It develops the children's understanding that material choices for products are based on their properties. It prepares the children for the Year 5 topic, Material World, where they will test properties of materials.**

					science curriculum in KS 3.	
	Key Vocabulary	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**
	Mineral, rock, permeable, impermeable, crystals, magma, sediment, sedimentary, igneous, metamorphic, fossils, extinct, soil, limestone, granite, clay, flint…	**Balanced diet, biceps, carbohydrates, contract, relax, exoskeleton, fats, femur, humerus, joint, muscles, nutrients, protein, skeleton, triceps, vertebrate,**	**Attract, compass, contact, force, iron, magnet, magnetic, magnetic north, non-contact, non-magnetic, pole, prediction, repel**	**Description, dull, explanation, light source, mirror, observation, opaque, reflect, shadow, shiny, translucent, transparent.**	**Carpel, flower, germinate, leaves, life cycle, nutrients, ovary, ovule, petal, photosynthesis, pollen, pollination, root, root hairs, seed dispersal, sepals, stamen, stem, style, stigma, veins.**	**Absorb, absorbent, cloth, cotton, disposable, elastic, liquid, material, nappy, plastic, properties, Velcro, waterproof**
Year 4	**What's that Sound?** Children will encounter how sounds are made on a variety of instruments and how they can be changed in volume, pitch and over distance. They will explore making sounds on a range of objects that aren't instruments, in order to investigate how sounds are created to make music.	**Looking at States** Children will compare and group materials together, according to whether they are solids, liquids or gases. They will observe that some materials change state when heated or cooled, and they will identify the part played by evaporation and condensation in the water cycle.	**Teeth and Eating** Children learn about digestion and different types of teeth, before moving on to explore deadly predators and their prey, in their exploration of food chains. They work scientifically throughout the topic, using enquiry, practical experiments and hands-on research to answer questions and investigate how we eat, why we eat and what we eat.	**Living Things** This topic teaches the children to recognise that living things can be grouped in a variety of ways. They explore and use keys to identify and name a variety of living things. They look at how changes to habitats can pose dangers to living things.	**Power it Up** Children revisit some uses of electricity and the importance of safety before constructing simple circuits. Understanding how to change a circuit by changing its components makes up the third part of this topic, leading in a final application of knowledge and skills when the children design and make an alarm using their knowledge of circuits.	**The Big Build** In this topic, children learn about building towers and bridges, starting with constructing tall towers, then exploring bridges, next they look at animals as builders and finally engage in researching famous engineers and architects and the structures they built. Children will already know many things about the materials they will encounter, how different materials

						stretch and their uses.
	Why this? Why Now?	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**
	This topic, is linked to prior knowledge learned through the Year 1 topic Who am I? The knowledge that the children. As the children progress through KS 3, the knowledge that the children have gained through this topic will help them to understand frequencies of sound waves, the auditory range of humans and animals.	**This topic builds on the children's understanding of the properties of materials that they studied in the Year 1 topic, Celebrations, and the Year 2 topics Material Monsters and Squash, Bend and Stretch. It also prepares the children for the Year 5 topics Material World and Amazing changes which will further their understanding of changes to materials.**	**This topic is linked to the Year 1 topic Who am I?, the Year 2 topic Healthy Me, the Year 3 topic, Food and Our Bodies. This topic will then lead on to the children studying the Year 6 topic Healthy Bodies, where the children will continue to learn about how their bodies function, the impact of life style choices on the body and the way nutrients are transported around the body.**	**This topic builds on the Year 1 topics On Safari and Plants and animals where we live, as the Year 2 topic Our local Environment. It also prepares the children for the Year 5 topic Circle of Life and the Year 6 topic Classifying Living Things when the children will look at the classification system in more detail.**	**This topic lays the foundations for the children to continue their studies during the Electricity topic in Year 6, when they will compare and give reasons for variations in how components function.**	**This topic continues to build on the children's knowledge of materials, building on their understanding of materials building on knowledge through the topics, Celebrations, Material monsters, Squash, bend and Stretch, as well as the Year 4 topic, Looking at States.**
	Key Vocabulary	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**
	Pitch, sound source, vibration, volume, decibel	**Boiling point, boiling, condensing, evaporation, freezing, freezing point, gas, liquid, matter, material, melting, melting point, solid, temperature, thermometer, water cycle**	**Canine, canines, carnivores, decay, digestion, enamel, energy, herbivore, incisor, incisors, large intestine, molar, molars, mouth, nutrients, oesophagus,**	**Amphibian, bird, centipede, classify, fish, flowering plant, habitat, insects, invertebrate, key, mammal, organism, reptile, vertebrate**	**Battery, bulb, cell, circuit, components, conductor, insulator, mains rechargeable, switch, terminals, wires**	**Structure, tower, observation, measurement, research**

			omnivores, small intestine, stomach			
Year 5	**Out of this world** In this topic, children learn about space. Starting with the Solar System, they look next at how ideas about space have changed over time before they explore what causes us to experience night and day on Earth.	**Material World** In this topic, the children learn about materials and how they change. First, they test properties of materials before looking at how materials dissolve, what a solution is and evaporation. Finally, children compare reversible and irreversible changes.	**Let's get Moving** In this topic children learn about forces and machines. They start with the force of gravity then study friction forces, including air and water resistance, before investigating how simple machines work.	**Circle of Life** In this topic children look at the life cycles of various species including mammals, amphibians, fish and birds. They also look at and describe the life process of reproduction in plants and animals.	**Growing up and Growing old** In this topic, children look at and describe the changes as humans develop to old age. Pupils draw a timeline to indicate stages in the growth and development of humans and learn about the changes experienced in puberty.	**Amazing changes** In this topic, the children learn about materials, how they change and which changes are reversible and irreversible. The topic concludes by looking at how these properties are applied in the real world.
	Why this? Why Now?	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**
	This topic builds on the topic Seasonal Changes, studied throughout Years 1 and 2. This will lead on to the children understanding differences in gravitational field strength on other stars and planets, learning about the sun and other stars as well as furthering their understanding about seasons, the Earth's tilt, day length in different	**This topic builds on the children's understanding of materials through the Year 1 topic, Celebrations, and the Year 2 topics Material Monsters and Squash, Bend and Stretch, as well as the Year 4 topic, Looking at States. They will use this knowledge to further their understanding of materials to prepare them for work on chemical reactions**	**This topic build on the Year 3 topic Forces and Magnets. It will lay the foundations for the children to learn about balanced and unbalanced forces, using force arrows in diagrams and resistance between surfaces, air and water as the children move to Key Stage 3.**	**This topic builds on the Year 2 topic, Our Local Environment. It will also further the children's knowledge when they stidined the topic How does Your Garden Grow, when the y learned about life cycles of flowering plants in Year 3.** **This topic also gives the children the foundations for learning about reproduction in plants and animals as they further their**	**This topic builds on the Year 2 topic, Our Local Environment. It will also prepare the children for their learning in Key Stage 3 where they will learn about reproductive systems and the effects of maternal lifestyle on the foetus through the placenta.**	**This topic builds on the children's understanding of materials through the Year 1 topic, Celebrations, and the Year 2 topics Material Monsters and Squash, Bend and Stretch, as well as the Year 4 topic, Looking at States. They will use this knowledge to further their understanding of materials to prepare them for work on chemical reactions**

	hemispheres a different times of the year and the light year as a unit of astronomical distance as the children continue the science curriculum in Key Stage 3.	**and rearrangement of atoms, representing chemical reactions using formulae and equations as they move into Key Stage 3.**		**knowledge in Key Stage 3.**)		**and rearrangement of atoms, representing chemical reactions using formulae and equations as they move into Key Stage 3.**
	Key Vocabulary	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**
	Daytime, geocentric, heliocentric, night-time, orbit, planet, solar system, star, sun, time zone.	**Dissolve, elastic, electrical conductor, evaporate, filter, flexible, hard, insoluble, mixture, plastic, rigid, soluble, solute, solution, solvent, strong, thermal conductor, thermal insulator, tough**	**Air resistance, force meter, friction, gravity, Newton, non-contact force, reliable, water resistance, weight**	**Asexual reproduction, bulb, external fertilisation, fertilisation, gestation, internal fertilisation, larva, metamorphosis, pollination sexual reproduction.**	**Adolescence, adolescent, adult, arthritis, gestation period, life expectancy, menstruation, pregnant, puberty, teenager.**	**Burning, irreversible/ chemical change, reversible/ physical change, rust, acid**
Year 6	**Healthy Bodies** In this topic children build on learning from Years 3 and 4 about the main body parts and internal organs (skeletal, muscular and digestive system). It considers life processes that are internal to the body, such as the circulatory system.	**Light** The topic introduces the concept of light travelling in straight lines. It starts by looking at beams of light and how light travels to enable children to understand how we see things. This understanding is then applied to the production of shadows and starts	**Electricity** This topic builds on the Year 4 work on electricity, taking it into the scientific use of symbols for components in a circuit, as well as considering the effect in more detail of changing components in a circuit. The children have the opportunity to apply their	**Classifying Living things** Children build on their learning about grouping living things in Year 4 by looking at the classification system in more detail. The topic is divided into two units, Children first revisit their knowledge of classification and creating keys, before developing	**Evolution and Inheritance** Building on what they learned about fossils in Year 3, children find out more about how living things have changed over time. They are introduced to the idea that characteristics are passed from parent to their offspring, but that they are not	**The Titanic** Children engage in a different approach to their science in this topic. They use their science and link it to an historical event in context; the sinking of the Titanic. This topic is based around applying the working scientifically skills that they have learned so far in

	The impact of lifestyle on bodies, particularly of humans, is also considered. Scientists are continually finding out what is good and bad for us, and their ideas do change as more research is carried out.	to look at how light is reflected. The topic then takes the learning into the realm of coloured light and rainbows, using scientific skills to raise and answer questions. It builds on the work carried out in Year 3 on light, shadows and reflection.	learning by creating an electronic game.	their knowledge by looking at fungi and bacteria. Children also look at the work of Carl Linnaeus, the scientist who first made important the function of naming and classifying to 'identify' organisms.	exactly the same. They should also appreciate that variation over time can make animals more or less likely to survive in particular environments (adaptation). Children look at evolution and Charles' Darwin's theory of natural selection, as well as palaeontologist Mary Anning's work with fossils.	their science lessons, to explore some of the scientific concepts behind the Titanic, e.g. floating and sinking. It is a good opportunity to embed, assess and observe working scientifically skills, as well as laying foundations for transition to KS3 science.
	Why this? Why Now?	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**	**Why this? Why Now?**
	This topic builds on the Year 2 topic Healthy Me, the Year 3 topic Food and our Bodies and the Year 4 topic Teeth and Eating. It will prepare the children to understand the consequences of imbalances in the diet, the effects of behaviour and lifestyles, the structure and functions of the gas exchange system, the mechanism of	**This topic build on the Year 3 Topic Light and Shadows as well as the Material World topic in Year 5. This topic will prepare the children for Key Stage 3 where they will learn about the similarities and differences between light rays in matter, the speed of light, light transferring energy from source to absorber, as well as colours and the**	**This topic build on the Year 4 Topic Power it Up building on the understanding of constructing simple circuits and materials that are electrical conductors or insulators. This topic will also prepare the children for Key Stage 3, where the children will develop their understanding of measuring electrical current in amperes, series and parallel**	**This topic builds on the Year 4 topic Living Things where the children will develop their understandings of the ways in which living things are grouped in a variety of ways. It also builds on the Year 5 topic Circle of Life to develop their understanding of life cycles and life processes. This topic also prepares the children for KS 3 where they will learn about**	**This topic build on the Year 2 topic Our Local Environment, the Year 3 topics, Rocks, Soils and Fossils and How does your Garden Grow?, the Year 4 topic Living Things and the Year 5 topic Circle of Life. This topic also prepares the children for KS 3, when they will learn about heredity as the process by which genetic information is transmitted from one**	**This topic builds on many aspects of knowledge built up over the children's time in our school. It will particularly support them to understand their knowledge of materials studied through the Year5 topic Let's get Moving as well as balanced and unbalanced forces as they move into Key Stage 3.**

	breathing as the children move to Key Stage 3.	**different frequencies of light**	**circuits, flow of charge, measuring potential difference, differences in resistance between conducting and insulating components and static electricity.**	**differences between species.**	**generation to the next, a simple model of chromosomes, genes and DNA and the variation between species and individuals of the same species which can drive natural selection. And environmental changes which could lead less well adapted species to extinction.**	
	Key Vocabulary	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**	**Key Vocabulary**
	Aorta, artery, atrium, blood, capillaries, carbon dioxide gas, circulatory system, de-oxygenated, exercise, heart, lungs, nicotine, addiction, oxygen, oxygenated, pulse, respiration, vein, ventricles	**Cornea, iris, lens, pupil, rainbow, reflection symmetry**	**Battery, blow, cell, complete, component, electrons, filament, fuse**	**Amphibian, bacteria, bird, fauna, fermentation, fish, flora, fungi, genus, insect, invertebrate, mammal, microbe, mushrooms, organisms, reptile, species, toadstool, vertebrate**	**Adaptation, dinosaur, evolution, fossil, inherited, natural selection, prehistoric, variety**	**Buoyancy, density, floating, hypothermia, iceberg, sink, thermal insulation, upthrust**