St. Benedict's Primary School Science Overview 2022-2023

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1 **Daily Dashboard** To be taught over the year: **Sc SC 1** Observe changes across the four seasons. **Sc SC 2** Observe and describe weather associated with the seasons and how day length varies.	**Enchanted Woodlands** **Focus; Science:** Plants and Animals **We are animal detectives** **Sc A 1 Y1** Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. **Sc A 2 Y1** Identify and name a variety of common animals that are carnivores, herbivores and omnivores. **Sc A 3 Y1** Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). **Sc P 1 Y1** Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. **Sc P 2 Y1** Identify and describe the basic structure of a variety of common flowering plants, including trees. **Sc WS 2 KS1** Observe closely, using simple equipment. **Sc WS 4** KS1 Identify and classify.	**Bright Lights Big City** **Focus; Geography:** The UK, maps and direction **Science:** Materials **We are builders** **Sc EM 1** Distinguish between an object and the material from which it is made. **Sc WS 5** Use their observations and ideas to suggest answers to questions. **The POS below can be taught through The Great Fire of London. **Sc EM 2** Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. **Sc EM 3** Describe the simple physical properties of a variety of everyday materials. **Sc EM 4** Compare and group together a variety of everyday materials on the basis of their simple physical properties. **Companion Projects** How do you make bread? How does it move?	**Superheroes** **Focus; PE:** Fantasy and real heroes. The senses **Science**: The human body **We are superheroes** **Sc A 4** Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. **Sc WS 5** Use their observations and ideas to suggest answers to questions. **Sc WS 6** Gather and record data to help in answering questions. **Companion Projects** Can you be a superhero?	**Beachcombers** **Focus; Science:** Seashore **We are beachcombers** **Sc WS 1** Ask simple questions and recognise that they can be answered in different ways. **Sc WS 2** Observe closely, using simple equipment. **Sc WS 3** Perform simple tests. **Sc WS 4** Identify and classify. **Sc WS 5** Use their observations and ideas to suggest answers to questions. **Sc WS 6** Gather and record data to help in answering questions. Beachcombers is a Year 2 topic being taught in year 1. However, the skills taught will meet: **Sc A 1** Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. **Sc A 3** Describe and compare the structure of	**Paws Claws and Whiskers** **Focus; Art and Design:** **Science:** Animals and their features **We are zookeepers** **Sc A 1** Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. **Sc A 2** Identify and name a variety of common animals that are carnivores, herbivores and omnivores. **Sc A 3** Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). **Sc A 4** Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. **Sc WS 3** Perform simple tests. **Sc WS 4** Identify and classify. **Sc WS 5** Use their observations and ideas to	**Dinosaur Planet** **Focus; History:** **Science:** Dinosaurs and their features. Mary Anning and fossils **We are palaeontologists** **Sc A 1** Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. **Sc A 2** Identify and name a variety of common animals that are carnivores, herbivores and omnivores. **Sc A 3** Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). **Sc P 1** Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. **Sc P 2** Identify and describe the basic structure of a variety of common flowering plants, including trees. **Sc WS 2** Observe closely, using simple equipment. **Sc WS 4** Identify and classify. **Sc WS 5** Use their observations and ideas to suggest answers to questions.

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	Sc WS 5 KS1 Use their observations and ideas to suggest answers to questions. **<u>Companion Projects</u>** What's in a bud? How do leaves change? Do pine cones know it's raining?			a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). **<u>Companion Projects</u>** How many arms does an octopus have?	suggest answers to questions. **Sc WS 6** Gather and record data to help in answering questions. **<u>Companion Projects</u>** What is camouflage for? Can you leap like a frog? What can our hands do? What can worms sense?	**<u>Companion Projects</u>** Whose poo? Why do we have teeth?
Year 2 To be taught during health/ sports week. **Sc A 3** Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	**Street Detectives** **Focus; Geography:** Exploring the local community **Science:** Identifying plants in the local area **<u>We are builders</u>** **Sc EM 1** Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. **Sc P 1 Y2** Observe and describe how seeds and bulbs grow into mature plants. **Sc WS 4** Identify and classify. **<u>Companion Projects</u>** How do plants grow in the winter?	**Land Ahoy** **Focus; Geography:** Captain Cook, boats and sea rescues **Science:** Everyday materials **<u>We are ship builders</u>** **Sc EM 1** Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. **Sc EM 2** Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. **Sc WS 1 KS1** Ask simple questions and recognise that they can be answered in different ways. **Sc WS 2 KS1** Observe closely, using simple equipment. **Sc WS 3 KS1** Perform simple tests.	**Muck, Mess and Mixtures** **Focus; Science/Art**: Materials and their properties through art **<u>We are investigators</u>** **Sc EM 1** Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. **Sc EM 2** Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. **Sc WS 1** Ask simple questions and recognise that they can be answered in different ways. **Sc WS 2** Observe closely, using simple equipment.	**Towers, Tunnels and Turrets** **Focus; D&T/History** Castles, towers and tunnels. Building structures **Science:** Living things and their habitats **<u>We are engineers</u>** **Sc EM 1** Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. **Sc LT 2** Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants and	**Scented Gardens** **Focus; Science:** Flowers and their parts, growing things **<u>We are gardeners</u>** **Sc EM 2** Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. **Sc LT 3** Identify and name a variety of plants and animals in their habitats, including micro-habitats. **Sc P 1** Observe and describe how seeds and bulbs grow into mature plants. **Sc P 2** Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	**Wriggle and Crawl** **Focus; Science:** Minibeasts and their habitats **<u>We are minibeast hunters</u>** **Sc A 1** Notice that animals, including humans, have offspring which grow into adults. **Sc A 2** Find out about and describe the basic needs of animals, including humans, for survival (water, food and air). **Sc LT 2** Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. **Sc LT 3** Identify and name a variety of plants and animals in their habitats, including micro-habitats.

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		Sc WS 4 KS1 Identify and classify. **Sc WS 5** KS1 Use their observations and ideas to suggest answers to questions. **Sc WS 6** KS1 Gather and record data to help in answering questions. **Companion Projects** Why do boats float? Can you find the treasure?	**Sc WS 3** Perform simple tests. **Sc WS 4** Identify and classify. **Sc WS 5** Use their observations and ideas to suggest answers to questions. **Sc WS 6** Gather and record data to help in answering questions. **Companion Projects** What shape is a bubble? How is mud made? Which stuff is stickier?	how they depend on each other. **Sc LT 3** Identify and name a variety of plants and animals in their habitats, including micro-habitats. **Sc WS 1** Ask simple questions and recognise that they can be answered in different ways. **Sc WS 2** Observe closely, using simple equipment. **Sc WS 3** Perform simple tests. **Sc WS 4** Identify and classify. **Sc WS 5** Use their observations and ideas to suggest answers to questions. **Sc WS 6** Gather and record data to help in answering questions. **Companion Projects** Where do worms like to live?	**Sc WS 2** Observe closely, using simple equipment. **Sc WS 4** Identify and classify. **Sc WS 5** Use their observations and ideas to suggest answers to questions. **Sc WS 6** Gather and record data to help in answering questions. **Companion Projects** How does grass grow? Can seeds grow anywhere? What's on your wellies?	**Sc LT 4** Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. **Sc WS 1** Ask simple questions and recognise that they can be answered in different ways. **Sc WS 2** Observe closely, using simple equipment. **Sc WS 3** Perform simple tests. **Sc WS 4** Identify and classify. **Sc WS 5** Use their observations and ideas to suggest answers to questions. **Sc WS 6** Gather and record data to help in answering questions. **The POS should be included: **Sc LT 1** Explore and compare the differences between things that are living, dead, and things that have never been alive. **Companion Projects** Do insects have a favourite colour? What is the life cycle of the ladybird? Do snails have noses? Where do snails live?

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Year 3	Heroes and Villains	Predator	Tremors	Mighty Metals	Scrumdiddlyumptious!	Tribal Tales
	Focus; Music/ History **Science:** Research famous scientists, including British scientists and learn about their contributions to science. How did they change the world? **We are historians** Science: LTI **Companion project:** Are all mushrooms deadly? **Synopsis** Children learn about fungi, compare a range of edible mushrooms then make spore prints to see if all mushrooms are harmful. **Investigation** Children learn about fungi and how they have positive and negative roles in our everyday lives. They explore the mushroom, the fruiting body of fungi that grows in the wild, and identify common parts that all mushrooms have. Children get to examine a range of edible mushrooms, identify their main parts and compare them to find similarities and differences. They then choose a suitable mushroom	**Focus; Science:** Skeletal system; Muscles; Bones **We are predators** **Sc A 1** Identify that animals, including humans, need the right types of nutrition, and that they cannot make their own food; they get nutrition from what they eat. **Sc A 2** Identify that humans and some other animals have skeletons and muscles for support, protection and movement. **Sc R 2** Describe in simple terms how fossils are formed when things that have lived are trapped within rocks. **Sc P 1** Identify and describe the different functions of different parts of flowering plants: roots, stem/ trunk, leaves and flowers. **Sc P 3** Investigate the way in which water is transported within plants. **Sc WS 3 LKS2** Make systematic and careful observations and, where appropriate, take accurate measurements using standard	**Focus; Geography /History:** natural disasters, earthquakes and volcanoes **Science:** Grouping/ Comparing/ Analysing rocks (fossils) and soils. **We are geologists** **Sc R 1** Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. **Sc WS 2** Set up simple practical enquiries, comparative and fair tests. **Sc WS 8** Identify differences, similarities or changes related to simple scientific ideas and processes. **The POS below needs to be covered in the topic: **Sc R 3** Recognise that soils are made from rocks and organic matter. **Companion Projects** What is sand?	**Focus; Science:** materials, forces, magnets and robots **We are investigators** **Sc FM 1** Compare how things move on different surfaces. **Sc FM 2** Notice that some forces need contact between two objects, but magnetic forces can act at a distance. **Sc FM 3** Observe how magnets attract or repel each other and attract some materials and not others. **Sc FM 4** Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. **Sc FM 5** Describe magnets as having two poles. **Sc FM 6** Predict whether two magnets will attract or repel each other, depending	**Focus: D&T:** Food, nutrition and cooking **Science:** Human Nutrition **We are chefs** **Sc A 1** Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. **Sc WS 4** Gather, record, classify and present data in a variety of ways to help in answering questions. **Sc WS 8** Identify differences, similarities or changes related to simple scientific ideas and processes. **Companion Projects** Which is the juiciest fruit? Is it safe to eat?	Focus; History: Stone Age, Bronze Age and Iron Age history **Science:** Light and Dark; Shadows; Reflections; Sun Safety **We are explorers and observers** **Sc L 4** Recognise that shadows are formed when the light from a light source is blocked by a solid object. **Sc L 5** Find patterns in the way that the size of shadows change. **Sc P 4** Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. **Sc WS 1** Ask relevant questions and using different types of scientific enquiries to answer them. **Sc WS 5** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. **The POS below are not covered in the topic but

	that has prominent gills to produce spore prints.	units, using a range of equipment, including thermometers and data loggers. **Sc WS 4** Gather, record, classify and present data in a variety of ways to help in answering questions. **Sc WS 5** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. **Sc WS 6** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. **Sc WS 8 LKS2** Identify differences, similarities or changes related to simple scientific ideas and processes. **The POS below needs to be covered in the topic: **Sc P 2** Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. **Companion Projects**		on which poles are facing. **Sc WS 2** Set up simple practical enquiries, comparative and fair tests. **Sc WS 3** Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. **Sc WS 5** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. **Sc WS 8** Identify differences, similarities or changes related to simple scientific ideas and processes. **Sc WS 9** Use straightforward scientific evidence to answer questions or to support their findings.		need to be taught through standalone Science lessons or linked to topic: **SC L 1** Recognise that they need light in order to see things and that dark is the absence of light. **Sc L 2** Notice that light is reflected from surfaces. **Sc L 3** Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. **Companion Projects** Do plants have legs?

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		What are flowers for? How do fossils form? What are our joints for? What do owls eat? Why are trees tall? How do worms move?		**Companion Projects** Can you block magnetism? How mighty are magnets? Why do magnets attract and repel? What does friction do?		
Year 4	**I Am Warrior** **Focus; History** - The Roman Empire **Science:** Standalone lessons needed to teach Electricity PoS below. **We are electricians** **Sc E 1 Y4** Identify common appliances that run on electricity. **Sc E 2 Y4** Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. **Sc E 3 Y4** Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. **Sc E 4 Y4** Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. **Sc E 5 Y4** Recognise some common conductors and	**Potions** **Focus; Science** - Solids, Liquids and Gas **We Are Chemists** **Sc SM 1 Y4** Compare and group materials together, according to whether they are solids, liquids or gases. **Sc SM 2 Y4** Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (iC). **Sc WS 2 LKS2** Set up simple practical enquiries, comparative and fair tests. **Sc WS 3 LKS2** Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. **Sc WS 4 LKS2** Gather, record, classify and present data in a variety of ways to help in answering questions.	**Traders and Raiders** **Focus; History/ DT** - Here Come the Saxons **Science: How can we change a sound – Learn to Investigate** **Sc S 1 Y4** Identify how sounds are made, associating some of them with something vibrating. **Sc S 2 Y4** Recognise that vibrations from sounds travel through a medium to the ear. **Sc S 3 Y4** Find patterns between the pitch of a sound and features of the object that produced it. **Sc S 4 Y4** Find patterns between the volume of a sound and the strength of the vibrations that produced it. **Sc S 5 Y4** Recognise that sounds get fainter as the	**Burps, Bottoms and Bile** **Focus; Science** - Inside your body **We are physiologists** **We are Dentists** **Sc A 1 Y4** Describe the simple functions of the basic parts of the digestive system in humans. **Sc A 2 Y4** Identify the different types of teeth in humans and their simple functions. **Sc WS 1 LKS2** Ask relevant questions and using different types of scientific enquiries to answer them. **Sc WS 2 LKS2** Set up simple practical enquiries, comparative and fair tests. **Sc WS 3 LKS2** Make systematic and careful observations and, where appropriate, take accurate measurements using standard units,	**Misty Mountain Sierra** **Focus; Geography** - Mighty Mountains **We are water conservationists** **Sc SM 2 Y4** Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (iC). **Sc SM 3 Y4** Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. **Sc WS 1 LKS2** Ask relevant questions and using different types of scientific enquiries to answer them. **Sc WS 2 LKS2** Set up simple practical enquiries, comparative and fair tests.	**Blue Abyss** **Focus; Geography/ Science**: The Ocean World **We are marine biologists** **Sc A 3 Y4** Construct and interpret a variety of food chains, identifying producers, predators and prey. **Sc E 2 Y4** Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. **Sc LT 1 Y4** Recognise that living things can be grouped in a variety of ways. **Sc LT 2 Y4** Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. **Sc LT 3 Y4** Recognise that environments can change and that this can sometimes pose dangers to living things. **Sc WS 1 LKS2** Ask relevant questions and using different types of scientific enquiries to answer them.

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	insulators, and associate metals with being good conductors. **Companion Projects** Did the Romans use toilet roll?	**Sc WS 5 LKS2** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. **Sc WS 6 LKS2** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. **Sc WS 7 LKS2** Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. **Sc WS 9 LKS2** Use straightforward scientific evidence to answer questions or to support their findings. **Companion Projects** Are all liquids runny? Is custard a liquid?	distance from the sound source increases. **Companion Projects** How did Vikings dye their clothes?	using a range of equipment, including thermometers and data loggers. **Sc WS 4 LKS2** Gather, record, classify and present data in a variety of ways to help in answering questions. **Sc WS 5 LKS2** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. **Sc WS 6 LKS2** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. **Sc WS 7 LKS2** Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. **Sc WS 8 LKS2** Identify differences, similarities or changes related to simple scientific ideas and processes. **Sc WS 9 LKS2** Use straightforward scientific evidence to answer questions or to support their findings.	**Sc WS 3 LKS2** Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. **Sc WS 4 LKS2** Gather, record, classify and present data in a variety of ways to help in answering questions. **Sc WS 5 LKS2** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. **Sc WS 6 LKS2** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. **Sc WS 7 LKS2** Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. **Sc WS 8 LKS2** Identify differences, similarities or changes related to simple scientific ideas and processes.	**Sc WS 2 LKS2** Set up simple practical enquiries, comparative and fair tests. **Sc WS 3 LKS2** Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. **Sc WS 4 LKS2** Gather, record, classify and present data in a variety of ways to help in answering questions. **Sc WS 5 LKS2** Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. **Sc WS 6 LKS2** Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. **Sc WS 9 LKS2** Use straightforward scientific evidence to answer questions or to support their findings. **Companion Projects** How does pollution affect habitats? Are all sea creatures the same?

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				<u>Companion Projects</u> How do smells get up your nose? What is spit for? How does toothpaste protect teeth?	**Sc WS 9 LKS2** Use straightforward scientific evidence to answer questions or to support their findings. **<u>Companion Projects</u>** What do squirrels eat? Why does it flood? Where does water go? Can worms sense danger?	
Year 5	**Stargazers Space** **Focus; Science:** The Solar System and Space **<u>We are astronomers</u>** **S7** Use test results to make predictions to set up further comparative and fair tests. S7 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. S7 Identify scientific evidence that has been used to support or refute ideas or arguments. S1 Describe the movement of the Moon relative to the Earth. S5 Take measurements, using a range of scientific equipment, with increasing	**Off With Her Head** The Tudors **Focus; History** **Science**: Stand alone lesson LTI **Companion Project**: Why does a compass always point north? **Synopsis** Children learn why compasses point north and make and improve simple compasses.	**Alchemy Island** A fantasy world **Focus; Music** **Science:** Stand alone lessons Forces: Explain that objects fall to Earth due to the force of gravity. S5 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. S7 Use test results to make predictions to set up further comparative and fair tests. S7 Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as	**Beast Creator** **Focus; Science** Classifying minibeasts, interpreting data S7 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. S6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. S2 Develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics. S3 Describe the differences in the life	**Pharohs** Ancient Egypt **Focus; History** **Science:** Stand alone lesson LTI **Companion Project**: Why does milk go off? **Synopsis** Children test different types of milk to find out how quickly they spoil at room temperature. **Investigation** Children keep different types of milk at room temperature and one control sample in a fridge. They observe the milk samples each day for up to five days, comparing and recording any changes in colour, smell, consistency and acidity.	Allotment Food origins and farming **Focus; Geography** **Science:** Plants – germination and propagation S6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. S7 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. S5 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. S3 Describe the life process of reproduction in some plants and animals.

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	accuracy and precision, taking repeat readings when appropriate. S1 Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. S6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. S5 Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. S1 Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. **Companion Projects** Why do planets have craters? How clean are your hands? How do levers help us? How does the Moon move? How do rockets lift off? How do we know the Earth is round? Can we track the Sun? Why are zip-wires so fast?		displays and other presentations. S7 Identify scientific evidence that has been used to support or refute ideas or arguments. S6 Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. **Companion Projects** Can you clean dirty water? Will it erupt? Which materials conduct heat? Do all solids dissolve?	cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals. **Companion Projects** How do worms reproduce? Why do birds lay eggs?	Build upon knowledge and skills from previous ILP by completing more of the companion projects from Stargazers Space.	**Companion Projects** Do dock leaves cure a sting? How many potatoes can you grow?

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Year 6	**A Child's War** **Focus;History** **World War 2** **Can you send a coded message? LTI** Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit Compare and give reasons for variations in how components function, including brightness of bulbs, the loudness of buzzers and the off/on position of switches Use recognised symbols when representing a simple circuit in a diagram	**Blood Heart** **Focus; Science** **Human circulatory system** **We are physicians** **Sc A 3 Dissection** Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. **Sc A 3 The heart** Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. **Sc E 3 Scatter Graphs** Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. **Sc A 2 Components of blood** Describe the ways in which nutrients and water are transported within animals, including humans.	**Frozen Kingdom** **Focus:Geography** **Polar Regions** **We are scientists** **Sc H 1 Classification** Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. Give reasons for classifying plants and animals based on specific characteristics. **Sc Ev 4 Adaptations** Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. **Sc E 11 Polar adaptations**	**Darwin's Delight** **Focus:Science** **Evolution and Inheritance** **We are explorers** **Sc E 4 Specimen Studies** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. **Sc H 1 Collecting specimens** Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. **Sc E 11 Sampling**	**Hola Mexico** **Focus:History/Music** **Mayan Civilisation** **We are investigators** **SC Light 2 The feathered serpant – shadows** Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them **Companion Project – LTI How do we make red? An investigation.**	**Gallery Rebels** **Focus:Art and Design** **Significant Artists** **Sc E 11Colour Investigation** Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. **Sc Light 2 Changes in light** Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

		Sc E 11 Blood groups Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. **Sc E 3 Acceleration/Deceleration** Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. **Sc 2 Unhealthy Lifestyle** Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. **Sc E 11 Blood Flow - investigation** Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. **Sc 2 A Stop motion animation** Describe the ways in which nutrients and water are transported within animals, including humans.	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. **Sc E 11 Investigating icebergs** Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.	Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. **Sc E 4 Study Fossils** Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs. **Sc Ev 3 Variation in pigeons** Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents **Sc E 11Darwin's investigations** Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.		

				Sc E 11 Strawberry DNA **Sc Ev 3 Inheritence** **Sc Ev 3 Artificial Inheritance**		