Newton Bluecoat C of E Primary School

Science

Key Learning	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working Scientifically Skills **Year 1&2** **Asking simple questions and recognising that they can be answered in different ways.** **Year 3&4** **Asking relevant questions and using different types of scientific enquiries to answer them.**	While exploring the world, the children develop their ability to ask questions (such as what something is, how things are similar and different, the ways things work, which alternative is better, how things change and how they happen). Where appropriate, they answer these questions. • The children answer questions developed with the teacher often through a scenario. • The children are involved in planning how to use resources provided to answer the	While exploring the world, the children develop their ability to ask questions (such as what something is, how things are similar and different, the ways things work, which alternative is better, how things change and how they happen). Where appropriate, they answer these questions. • The children answer questions developed with the teacher often through a scenario. • The children are involved in	The children consider their prior knowledge when asking questions. They independently use a range of question stems. Where appropriate, they answer these questions. • The children answer questions posed by the teacher. • Given a range of resources, the children decide for themselves how to gather evidence to answer the question. They recognise when secondary sources can be	The children consider their prior knowledge when asking questions. They independently use a range of question stems. Where appropriate, they answer these questions. • The children answer questions posed by the teacher. • Given a range of resources, the children decide for themselves how to gather evidence to answer the question. They recognise when secondary sources	Children independently ask scientific questions. This may be stimulated by a scientific experience or involve asking further questions based on their developed understanding following an enquiry. • Given a wide range of resources the children decide for themselves how to gather evidence to answer a scientific question. They choose a type of	Children independently ask scientific questions. This may be stimulated by a scientific experience or involve asking further questions based on their developed understanding following an enquiry. • Given a wide range of resources the children decide for themselves how to gather evidence to answer a scientific question. They choose a type of

<u>Year 5&6</u> **Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.**	questions using different types of ***enquiry***, helping them to recognise that there are different ways in which questions can be answered.	planning how to use resources provided to answer the questions using different types of ***enquiry,*** helping them to recognise that there are different ways in which questions can be answered.	used to answer questions that cannot be answered through practical work. They identify the type of enquiry that they have chosen to answer their question.	can be used to answer questions that cannot be answered through practical work. They identify the type of enquiry that they have chosen to answer their question.	enquiry to carry out and justify their choice. They recognise how secondary sources can be used to answer questions that cannot be answered through practical work. • The children select from a range of practical resources to gather evidence to answer their questions. They carry out fair tests, recognising and controlling variables. They decide what observations or measurements to make over time and for how long. They look for patterns and relationships using a suitable sample.	enquiry to carry out and justify their choice. They recognise how secondary sources can be used to answer questions that cannot be answered through practical work. • The children select from a range of practical resources to gather evidence to answer their questions. They carry out fair tests, recognising and controlling variables. They decide what observations or measurements to make over time and for how long. They look for patterns and relationships using

						a suitable sample.
<u>Year 1&2</u> **Observing closely, using simple equipment.** **<u>Year 3&4</u>** **Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers**	Children explore the world around them. They make careful observations to support identification, comparison and noticing change. They use appropriate senses, aided by equipment such as magnifying glasses or digital microscopes, to make their observations. • They begin to take measurements, initially by comparisons, then using non-standard units	Children explore the world around them. They make careful observations to support identification, comparison and noticing change. They use appropriate senses, aided by equipment such as magnifying glasses or digital microscopes, to make their observations. • They begin to take measurements, initially by comparisons, then using non-standard units	The children make systematic and careful observations. • They use a range of equipment for measuring length, time, temperature and capacity. They use standard units for their measurements.	The children make systematic and careful observations. • They use a range of equipment for measuring length, time, temperature and capacity. They use standard units for their measurements.	The children select measuring equipment to give the most precise results e.g. ruler, tape measure or trundle wheel, force meter with a suitable scale. • During an enquiry, they make decisions e.g. whether they need to: take repeat readings (fair testing); increase the sample size (pattern seeking); adjust the observation period and frequency (observing over time); or check further secondary	The children select measuring equipment to give the most precise results e.g. ruler, tape measure or trundle wheel, force meter with a suitable scale. • During an enquiry, they make decisions e.g. whether they need to: take repeat readings (fair testing); increase the sample size (pattern seeking); adjust the observation period and frequency (observing over time); or check further secondary

and data loggers. **<u>Year 5&6</u>** **Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate**					sources (researching); in order to get accurate data (closer to the true value).	sources (researching); in order to get accurate data (closer to the true value).
<u>Year 1&2</u> **Performing simple tests.** **<u>Year 3&4</u>** **Setting up simple practical enquiries, comparative and fair test**	The children use practical resources provided to gather evidence to answer questions generated by themselves or the teacher. They carry out: tests to classify; comparative tests; pattern seeking enquiries; and	The children use practical resources provided to gather evidence to answer questions generated by themselves or the teacher. They carry out: tests to classify; comparative tests; pattern seeking	The children select from a range of practical resources to gather evidence to answer questions generated by themselves or the teacher. • They follow their plan to carry out:	The children select from a range of practical resources to gather evidence to answer questions generated by themselves or the teacher. • They follow their plan to carry out:	The children decide how to record and present evidence. They record observations e.g. using annotated photographs, videos, labelled diagrams, observational drawings,	The children decide how to record and present evidence. They record observations e.g. using annotated photographs, videos, labelled diagrams, observational

<u>Year 5&6</u> **Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs**	make observations over time.	enquiries; and make observations over time.	observations and tests to classify; comparative and simple fair tests; observations over time; and pattern seeking. ***Explanatory note***: A comparative test is performed by changing a variable that is qualitative e.g. the type of material, shape of the parachute. This leads to a ranked outcome. A fair test is performed by changing a variable that is quantitative e.g. the thickness of the material or the area of the canopy. This leads to establishing a causative relationship.	observations and tests to classify; comparative and simple fair tests; observations over time; and pattern seeking. ***Explanatory note*:** A comparative test is performed by changing a variable that is qualitative e.g. the type of material, shape of the parachute. This leads to a ranked outcome. A fair test is performed by changing a variable that is quantitative e.g. the thickness of the material or the area of the canopy. This leads to establishing a causative relationship.	labelled scientific diagrams or writing. They record measurements e.g. using tables, tally charts, bar charts, line graphs and scatter graphs. They record classifications e.g. using tables, Venn diagrams, Carroll diagrams and classification keys. • Children present the same data in different ways in order to help with answering the question.	drawings, labelled scientific diagrams or writing. They record measurements e.g. using tables, tally charts, bar charts, line graphs and scatter graphs. They record classifications e.g. using tables, Venn diagrams, Carroll diagrams and classification keys. • Children present the same data in different ways in order to help with answering the question.
<u>Year 1&2</u>	Children use their observations and	Children use their observations and	The children record their	The children record their	Identifying scientific	Identifying scientific

Identifying and classifying **<u>Year 3&4</u>** **Gathering and recording data to help in answering questions** **<u>Year 5&6</u>** **The children decide how to record and present evidence. They record observations e.g. using annotated photographs, videos, labelled diagrams, observational**	testing to compare objects, materials and living things. They sort and group these things, identifying their own criteria for sorting. • They use simple secondary sources (such as identification sheets) to name living things. They describe the characteristics they used to identify a living thing.	testing to compare objects, materials and living things. They sort and group these things, identifying their own criteria for sorting. • They use simple secondary sources (such as identification sheets) to name living things. They describe the characteristics they used to identify a living thing.	observations e.g. using photographs, videos, drawings, labelled diagrams or in writing. • They record their measurements e.g. using prepared tables, pictograms, tally charts and block graphs. • They classify using simple prepared tables and sorting rings.	observations e.g. using photographs, videos, drawings, labelled diagrams or in writing. • They record their measurements e.g. using prepared tables, pictograms, tally charts and block graphs. • They classify using simple prepared tables and sorting rings.	evidence that has been used to support or refute ideas or arguments.	evidence that has been used to support or refute ideas or arguments

drawings, labelled scientific diagrams or writing. They record measurements e.g. using tables, tally charts, bar charts, line graphs and scatter graphs. They record classifications e.g. using tables, Venn diagrams, Carroll diagrams and classification keys. • Children present the same data in different ways in order to help						

with answering the question.						
<u>Year 1&2</u> **Using their observations and ideas to suggest answers to questions** **<u>Year 3&4</u>** **Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions** **Recording findings using simple scientific language, drawings, labelled diagrams, keys,**	Children use their experiences of the world around them to suggest appropriate answers to questions. They are supported to relate these to their evidence e.g. observations they have made, measurements they have taken or information they have gained from secondary sources. • The children recognise 'biggest and smallest', 'best and worst' etc. from their data	Children use their experiences of the world around them to suggest appropriate answers to questions. They are supported to relate these to their evidence e.g. observations they have made, measurements they have taken or information they have gained from secondary sources. • The children recognise 'biggest and smallest', 'best and worst' etc. from their data	The children sometimes decide how to record and present evidence. They record their observation e.g. using photographs, videos, pictures, labelled diagrams or writing. They record their measurements e.g. using tables, tally charts and bar charts (given templates, if required, to which they can add headings). They record classifications e.g. using tables, Venn diagrams, Carroll diagrams. • Children are supported to present the same data in different	The children sometimes decide how to record and present evidence. They record their observation e.g. using photographs, videos, pictures, labelled diagrams or writing. They record their measurements e.g. using tables, tally charts and bar charts (given templates, if required, to which they can add headings). They record classifications e.g. using tables, Venn diagrams, Carroll diagrams. • Children are supported to present the same data in different	Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. When doing this, they discuss whether other evidence e.g. from other groups, secondary sources and their scientific understanding, supports or refutes their answer. • They talk about how their scientific ideas change due to new evidence that they have gathered. • They	Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. When doing this, they discuss whether other evidence e.g. from other groups, secondary sources and their scientific understanding, supports or refutes their answer. • They talk about how their scientific ideas change due to new evidence that they have

bar charts, and tables **<u>Year 5&6</u>** **Identifying scientific evidence that has been used to support or refute ideas or arguments**			ways in order to help with answering the question.	ways in order to help with answering the question.	talk about how new discoveries change scientific understanding	gathered. • They talk about how new discoveries change scientific understanding
<u>Year 3&4</u> **Using straightforward scientific evidence to answer questions or to support their findings**			Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. The answers are consistent with the evidence	Children answer their own and others' questions based on observations they have made, measurements they have taken or information they have gained from secondary sources. The answers are consistent with the evidence.		
<u>Year 3&4</u>			Children interpret their	Children interpret their data to generate simple	In their conclusions, children: identify	In their conclusions, children: identify

Identifying differences, similarities or changes related to simple scientific ideas and processes **<u>Year 5&6</u>** **Reporting and presenting 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**			data to generate simple comparative statements based on their evidence. They begin to identify naturally occurring patterns and causal relationships.	comparative statements based on their evidence. They begin to identify naturally occurring patterns and causal relationships.	causal relationships and patterns in the natural world from their evidence; identify results that do not fit the overall pattern; and explain their findings using their subject knowledge. • They evaluate, for example, the choice of method used, the control of variables, the precision and accuracy of measurements and the credibility of secondary sources used. • They identify any limitations that reduce the trust they have in their data. • They communicate their findings to an audience using relevant	causal relationships and patterns in the natural world from their evidence; identify results that do not fit the overall pattern; and explain their findings using their subject knowledge. • They evaluate, for example, the choice of method used, the control of variables, the precision and accuracy of measurements and the credibility of secondary sources used. • They identify any limitations that reduce the trust they have in their data. • They communicate their findings to

					scientific language and illustrations	an audience using relevant scientific language and illustrations
<u>Year 3&4</u> **Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions** **<u>Year 5&6</u>** **Using test results to make predictions to set up further comparative and fair tests**			They draw conclusions based on their evidence and current subject knowledge. • They identify ways in which they adapted their method as they progressed or how they would do it differently if they repeated the enquiry. • Children use their evidence to suggest values for different items tested using the same method e.g. the distance travelled by a car on an additional surface.	They draw conclusions based on their evidence and current subject knowledge. • They identify ways in which they adapted their method as they progressed or how they would do it differently if they repeated the enquiry. • Children use their evidence to suggest values for different items tested using the same method e.g. the distance travelled by a car on an additional surface. • Following a scientific	Children use the scientific knowledge gained from enquiry work to make predictions they can investigate using comparative and fair tests.	Children use the scientific knowledge gained from enquiry work to make predictions they can investigate using comparative and fair tests.

			• Following a scientific experience, the children ask further questions which can be answered by extending the same enquiry.	experience, the children ask further questions which can be answered by extending the same enquiry.		
<u>Year 3&4</u> **Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions**			They communicate their findings to an audience both orally and in writing, using appropriate scientific vocabulary	They communicate their findings to an audience both orally and in writing, using appropriate scientific vocabulary		
<u>Key Learning:</u> **Plants**	**Introducing common names , basic structure & on-going nature journals** Growing locally, there will be a vast	**Growing Plants** Plants may grow from either seeds or bulbs. These then germinate and grow into seedlings which then continue to grow into mature plants. These	**Functions of plant parts & growth** Many plants, but not all, have roots, stems/trunks, leaves and			

	array of plants which all have specific names. These can be identified by looking at the key characteristics of the plant. Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.	mature plants may have flowers which then develop into seeds, berries, fruits etc. Seeds and bulbs need to be planted outside at particular times of year and they will germinate and grow at different rates. Some plants are better suited to growing in full sun and some grow better in partial or full shade. Plants also need different amounts of water and space to grow well and stay healthy.	flowers/blossom. The roots absorb water and nutrients from the soil and anchor the plant in place. The stem transports water and nutrients/minerals around the plant and holds the leaves and flowers up in the air to enhance photosynthesis, pollination and seed dispersal. The leaves use sunlight and water to produce the plant's food. Some plants produce flowers which enable the plant to reproduce. Pollen, which is produced by the male part of the flower, is transferred to the			

			female part of other flowers (pollination). This forms seeds, sometimes contained in berries or fruits which are then dispersed in different ways. Different plants require different conditions for germination and growth.			
ACTIVITIES:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Plants	**Introducing common names , basic structure & on-going nature journals** Can you make close observations of leaves, seeds, flowers etc.? Can you compare two leaves, seeds, flowers etc? Can you classify leaves, seeds,	**Growing Plants** Can you make close observations of seeds and bulbs? Can you classify seeds and bulbs? Can you research and plan when and how to plant a range of seeds and bulbs? Can we look after the plants as they grow? weeding,	**Functions of plant parts & growth** Can we observe what happens to plants over time when the leaves or roots are removed? What is the effect of putting cut white carnations or celery in coloured water? Can we investigate what			

	flowers etc. using a range of characteristics? Can you identify plants by matching them to named images? Can you make observations of how plants change over a period of time? When further afield, can you spot plants that are the same as those in the local area studied regularly, describing the key features that helped them? **Theme continued with a block at the end of the year as well as throughout the year.**	thinning, watering etc. Can we make close observations and measurements of their plants growing from seeds and bulbs? What comparisons can we make between plants as they grow?	happens to plants when they are put in different conditions? e.g. in darkness, in the cold, deprived of air, different types of soil, different fertilisers, varying amount of space. Can we spot flowers, seeds, berries and fruits outside throughout the year? Can we observe flowers carefully to identify the pollen? Can we observe flowers being visited by pollinators e.g. bees and butterflies in the summer? Can we observe seeds being blown from the trees e.g. sycamore seeds? Can we research			

			different types of seed dispersal? How can we classify seeds in a range of ways, including by how they are dispersed? Can you create a new species of flowering plant?			
Key Vocabulary	Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud Names of trees in the local area Names of garden and wild flowering plants in the local area	***As for Year 1*** ***Plus:*** light, shade, sun, warm, cool, water, grow, health	Photosynthesis, pollen, insect/wind pollination, seed formation, seed dispersal (wind dispersal, animal dispersal, water dispersal)			

<u>Key Learning:</u> Animals Including humans	**Humans: basic structure & senses** Animals vary in many ways having different structures e.g. wings, tails, ears etc. They also have different skin coverings e.g. scales, feathers, hair. These key features can be used to identify them. Animals eat certain things - some eat other animals, some eat plants, some eat both plants and animals. Humans have key parts in common, but these vary from person to person. Humans (and other animals) find out about the world using their senses. Humans have five senses – sight, touch, taste,	**Health Humans: Grow & Stay Healthy** Animals, including humans, have offspring which grow into adults. In humans and some animals, these offspring will be young, such as babies or kittens, that grow into adults. In other animals, such as chickens or insects, there may be eggs laid that hatch to young or other stages which then grow to adults. The young of some animals do not look like their parents e.g. tadpoles. All animals, including humans, have the basic needs of feeding, drinking and	**Skeletons and movement** **Health & Nutrition** Animals, unlike plants which can make their own food, need to eat in order to get the nutrients they need. Food contains a range of different nutrients – carbohydrates (including sugars), protein, vitamins, minerals, fats, sugars, water – and fibre that are needed by the body to stay healthy. A piece of food will often provide a range of nutrients. Humans, and some other animals, have skeletons and muscles which	**Teeth & Digestion** Food enters the body through the mouth. Digestion starts when the teeth start to break the food down. Saliva is added and the tongue rolls the food into a ball. The food is swallowed and passes down the oesophagus to the stomach. Here the food is broken down further by being churned around and other chemicals are added. The food passes into the small intestine. Here nutrients are removed from the food and leave the digestive system to be used elsewhere in the	**Animals including humans (Y5 Human lifecycles)** When babies are young, they grow rapidly. They are very dependent on their parents. As they develop, they learn many skills. At puberty, a child's body changes and develops primary and secondary sexual characteristics. This enables the adult to reproduce. This needs to be taught alongside PSHE. The new statutory requirements for relationships and health education can be found below:	

	hearing and smelling. These senses are linked to particular parts of the body. **Other Animals: Basic Structure**	breathing that must be satisfied in order to survive. To grow into healthy adults, they also need the right amounts and types of food and exercise. Good hygiene is also important in preventing infections and illnesses.	help them move and provide protection and support.	body. The rest of the food then passes into the large intestine. Here the water is removed for use elsewhere in the body. What is left is then stored in the rectum until it leaves the body through the anus when you go to the toilet. Humans have four types of teeth: incisors for cutting; canines for tearing; and molars and premolars for grinding (chewing).	statutory guidance on Physical health and mental wellbeing (primary and secondary). **Useful guidance includes** Joint briefing on teaching about puberty in KS2 from PHSE Association and Association for Science Education Briefing on humans development and reproduction in the Primary Curriculum from PHSE Association and Association for Science	

Activities: Animals Including humans	**Humans: basic structure & senses** Can you make first-hand, close observations of animals from each of the groups? How can we compare two animals from the same or different groups? Can we classify animals using a range of features? Can we Identify animals by matching them to named images? Can we classify animals according to what they eat? Can we make first-hand close observations of parts of the body e.g. hands, eyes? Can we compare two people?	**Health Humans: Grow & Stay Healthy** Can you ask people questions and use secondary sources to find out about the life cycles of some animals.? Can we observe animals growing over a period of time e.g. chicks, caterpillars, a baby? Can you ask questions of a parent about how they look after their baby? Can we ask pet owners questions about how they look after their pet? What is the effect of exercise on their bodies? Can you classify food in a range of ways, including	**Skeletons and movement Health & Nutrition** Can we classify food in a range of ways? Can you use food labels to explore the nutritional content of a range of food items? Can we use secondary sources to find out the types of food that contain the different nutrients? Can you use food labels to answer enquiry questions e.g. How much fat do different types of pizza contain? How much sugar is in soft drinks? How can we plan a daily diet to contain a good	**Teeth & Digestion** Can you research the function of the parts of the digestive system? Can we create a model of the digestive system using household objects? Explore eating different types of food to identify which teeth are being used for cutting, tearing and grinding (chewing)? Can we classify animals as herbivores, carnivores or omnivores according to the type of teeth they have in their skulls? Can you use food chains to identify producers, predators and	**Animals including humans (Y5 Human lifecycles)** ***Observe life cycles of plants & animals in the local environment throughout the year.*** ***Teach through PSHE lessons plus ideas incorporated into Living things & their habitats.*** This unit is likely to be taught through direct instruction due to its sensitive nature, although children can carry out a research enquiry by asking an expert e.g. school nurse to provide answers to questions that have been	**Circulatory system & Exercise** Can you create a role play model for the circulatory system? Can you carry out a range of pulse rate investigations: fair test – effect of different activities on my pulse rate? Pattern seeking – can we explore which groups of people may have higher or lower resting pulse rates? Using observation over time - how long does it take my pulse rate to return to my resting pulse rate? (recovery rate) Pattern seeking – Can

	Can we take measurements of parts of their body? Can we compare our own body parts? Can you look for patterns between people e.g. Do people with big hands have big feet? Can we classify people according to their features? Investigate human senses e.g. Which part of my body is good for feeling? which is not? Which food/flavours can I identify by taste? Which smells can I match?	using the Eatwell Guide? Can we Investigate washing hands, using glitter gel?	balance of nutrients? How many nutrients are contained in fast food? Use secondary sources to research the parts and functions of the skeleton. Investigate patterns asking questions such as: Can people with longer legs run faster? Can people with bigger hands catch a ball better?	prey within a habitat? Using secondary sources can we identify animals in a habitat and find out what they eat?	filtered by the teacher.	you explore recovery rates for different groups of people? Can we research the negative effects of drugs (e.g. tobacco) and the benefits of a healthy diet and regular exercise by asking an expert or using carefully selected secondary sources?
Key Vocabulary	Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves Names of animals experienced first-	Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly), exercise,	Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, joints, support, protect,	Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, teeth, incisor,	Puberty – the vocabulary to describe sexual characteristics	Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory

	hand from each vertebrate group Parts of the body including those linked to PSHE teaching (see joint document produced by the ASE and PSHE Association) Senses – touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue ***N.B. The children need to be able to name and identify a range of animals in each group e.g. name specific birds and fish. They do not need to use the terms mammal, reptiles etc. or know the key characteristics of each, although they will probably be able to identify birds and fish, based on their characteristics.***	heartbeat, breathing, hygiene, germs, disease, food types (examples – meat, fish, vegetables, bread, rice, pasta)	move, skull, ribs, spine	canine, molar, premolars, herbivore, carnivore, omnivore, producer, predator, prey, food chain		system, diet, exercise, drugs, lifestyle

<u>Key Learning:</u> Materials	**Everyday materials** All objects are made of one or more materials. Some objects can be made from different materials e.g. plastic, metal or wooden spoons. Materials can be described by their properties e.g. shiny, stretchy, rough etc. Some materials e.g. plastic can be in different forms with very different properties.	**Uses of everyday materials** All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside and waterproof so that it holds the water. When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying		**Material Properties & Material changes (States of Matter)** solid keeps its shape and has a fixed volume. A liquid has a fixed volume but changes in shape to fit the container. A liquid can be poured and keeps a level, horizontal surface. A gas fills all available space; it has no fixed shape or volume. Granular and powdery solids like sand can be confused with liquids because they can be poured, but when poured they form a heap and they do not keep a	**Material Properties & changes of materials (Testing Material Properties) (Reversible changes) (Irreversible changes)** Materials have different uses depending on their properties and state (liquid, solid, gas). Properties include hardness, transparency, electrical and thermal conductivity and attraction to magnets. Some materials will dissolve in a liquid and form a solution while others are	

		activities. A material can be suitable for different purposes and an object can be made of different materials. Objects made of some materials can be changed in shape by bending, stretching, squashing and twisting. For example, clay can be shaped by squashing, stretching, rolling, pressing etc. This can be a property of the material or depend on how the material has been processed e.g. thickness.		level surface when tipped. Each individual grain demonstrates the properties of a solid. Melting is a state change from solid to liquid. Freezing is a state change from liquid to solid. The freezing point of water is 0^oC. Boiling is a change of state from liquid to gas that happens when a liquid is heated to a specific temperature and bubbles of the gas can be seen in the liquid. Water boils when it is heated to 100^oC. Evaporation is the same state change as boiling (liquid to gas), but it happens slowly at lower temperatures and only at the surface	insoluble and form sediment. Mixtures can be separated by filtering, sieving and evaporation. Some changes to materials such as dissolving, mixing and changes of state are reversible, but some changes such as burning wood, rusting and mixing vinegar with bicarbonate of soda result in the formation of new materials and these are not reversible.	

				of the liquid. Evaporation happens more quickly if the temperature is higher, the liquid is spread out or it is windy. Condensation is the change back from a gas to a liquid caused by cooling. Water at the surface of seas, rivers etc. evaporates into water vapour (a gas). This rises, cools and condenses back into a liquid forming clouds. When too much water has condensed, the water droplets in the cloud get too heavy and fall back down as rain, snow, sleet etc. and drain		

				back into rivers etc. This is known as precipitation. This is the water cycle.		
ACTIVITIES	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Materials	• **Everyday materials** Can we classify objects made of one material in different ways e.g. a group of objects made of metal? Can we classify in different ways one type of object made from a range of materials e.g. a collection of spoons made of different materials? Can we classify materials based on their properties? Can we test the properties of objects e.g. absorbency of cloths, strength of	• **Uses of everyday materials** Can we classify materials? Can we make suggestions about alternative materials for a purpose that are both suitable and unsuitable? Can we test the properties of materials for particular uses? e.g. compare the stretchiness of fabrics to select the most appropriate for Elasti-girl's costume, Can we		**Properties & changes of materials (States of Matter)** Can we observe closely and classify a range of solids? Can we observe closely and classify a range of liquids? Can we explore making gases visible e.g. squeezing sponges under water to see bubbles, and showing their effect e.g. using straws to blow objects, trees	**Material Properties & changes of materials (Testing Material Properties) (Reversible changes) (Irreversible changes)** Can we investigate the properties of different materials in order to recommend materials for particular functions	

	party hats made of different papers, stiffness of paper plates, how waterproof are the shelters?	test materials for waterproofness to select the most appropriate for a rain hat?		moving in the wind? Can we classify materials according to whether they are solids, liquids and gases? Can you observe a range of materials melting e.g. ice, chocolate, butter? Can we Investigate how to melt ice more quickly? Can we observe the changes when making rocky road cakes or ice-cream? Can we Investigate the melting point of different materials e.g. ice, margarine, butter and chocolate? Can we explore freezing different liquids e.g. tomato	depending on these properties e.g. test waterproofness and thermal insulation to identify a suitable fabric for a coat? Can we explore adding a range of solids to water and other liquids e.g. cooking oil, as appropriate? Can we Investigate rates of dissolving by carrying out comparative and fair test? Can we separate mixtures by sieving, filtering and evaporation, choosing the most suitable method and equipment for each mixture? Can we explore a range of non-reversible	

				ketchup, oil, shampoo? Can you use a thermometer to measure temperatures e.g. icy water (melting), tap water, hot water, boiling water (demonstration)? Can we observe water evaporating and condensing e.g. on cups of icy water and hot water? Can we set up investigations to explore changing the rate of evaporation e.g. washing, puddles, handprints on paper towels, liquids in containers? Can we use secondary sources to find out about the water cycle.	changes e.g. rusting, adding fizzy tablets to water, burning? Can we carry out comparative and fair tests involving non-reversible changes e.g. What affects the rate of rusting? What affects the amount of gas produced? Can we research new materials produced by chemists e.g. Spencer Silver (glue of sticky notes) and Ruth Benerito (wrinkle free cotton)?	

Key Vocabulary	Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through	Names of materials – wood, metal, plastic, glass, brick, rock, paper, cardboard Properties of materials – as for Year 1 plus opaque, transparent and translucent, reflective, non-reflective, flexible, rigid Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching		Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle	Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/non-reversible change, burning, rusting, new material	
<u>Key Learning:</u> Living Things and their habitats		**Creative Context including key learning for Animals** All objects are either living, dead or have never been alive. Living things are plants (including seeds)		**Biodiversity, classification & care of environments** Living things can be grouped (classified) in different ways according to their features. Classification keys can be used to	**Observing life cycles/ reproduction in animals and plants** As part of their life cycle, plants and animals reproduce. Most animals reproduce	**Classification** Living things can be formally grouped according to characteristics. Plants and animals are two main groups but there are other livings things that do not fit into these groups e.g.

		and animals. Dead things include dead animals and plants and parts of plants and animals that are no longer attached e.g. leaves and twigs, shells, fur, hair and feathers (This is a simplification, but appropriate for Year 2 children.) An object made of wood is classed as dead. Objects made of rock, metal and plastic have never been alive (again ignoring that plastics are made of fossil fuels). Animals and plants live in a habitat to which they are suited, which means that animals have suitable features that help them move and find food and plants		identify and name living things. Living things live in a habitat which provides an environment to which they are suited (Year 2 learning). These environments may change naturally e.g. through flooding, fire, earthquakes etc. Humans also cause the environment to change. This can be in a good way (i.e. positive human impact, such as setting up nature reserves) or in a bad way (i.e. negative human impact, such as littering). These environments also change with the seasons; different living things can be found in a	sexually. This involves two parents where the sperm from the male fertilises the female egg. Animals, including humans, have offspring which grow into adults. In humans and some animals, these offspring will be born live, such as babies or kittens, and then grow into adults. In other animals, such as chickens or snakes, there may be eggs laid that hatch to young which then grow to adults. Some young undergo a further change before becoming adults e.g. caterpillars to butterflies. This is called a metamorphosis.	micro-organisms such as bacteria and yeast, and toadstools and mushrooms. Plants can make their own food whereas animals cannot. Animals can be divided into two main groups: those that have backbones (vertebrates); and those that do not (invertebrates). Vertebrates can be divided into five small groups: fish; amphibians; reptiles; birds; and mammals. Each group has common characteristics. Invertebrates can be divided into a number of groups, including insects, spiders, snails and worms.

		have suitable features that help them to grow well. The habitat provides the basic needs of the animals and plants – shelter, food and water. Within a habitat there are different micro-habitats e.g. in a woodland – in the leaf litter, on the bark of trees, on the leaves. These micro-habitats have different conditions e.g. light or dark, damp or dry. These conditions affect which plants and animals live there. The plants and animals in a habitat depend on each other for food and shelter etc. The way that animals obtain		habitat at different times of the year.	Plants reproduce both sexually and asexually. Bulbs, tubers, runners and plantlets are examples of asexual plant reproduction which involves only one parent. Gardeners may force plants to reproduce asexually by taking cuttings. Sexual reproduction occurs through pollination, usually involving wind or insects.	Plants can be divided broadly into two main groups: flowering plants; and non-flowering plants.

		their food from plants and other animals can be shown in a food chain.				
ACTIVITIES:	**Year 1**	**Year 2**	✓ **Year 3**	**Year 4**	**Year 5**	**Year 6**
Living Things and their habitats		**Creative Context including key learning for Animals** Can we explore the outside environment regularly to find objects that are living, dead and have never lived? Can we classify objects found in the local environment? Can we observe animals and plants carefully, drawing and labelling diagrams? Can we create simple food chains for a familiar local habitat from first-	✓	**Biodiversity, classification & care of environments** Can we observe plants and animals in different habitats throughout the year? Compare and contrast the living things observed. Use classification keys to name unknown living things. Classify living things found in different habitats based on their features. Create a simple identification key based on	**Observing life cycles/ reproduction in animals and plants** Use secondary sources and, where possible, first-hand observations to find out about the life cycle of a range of animals. Can we compare the gestation times for mammals and look for patterns e.g. in relation to size of animal or length of dependency after birth.	**Classification** Use secondary sources to learn about the formal classification system devised by Carl Linnaeus and why it is important. Use first-hand observation to identify characteristics shared by the animals in a group. Use secondary sources to research the characteristics of animals that belong to a group? Can we use information about the

		hand observation and research? Can we create simple food chains from information given e.g. in picture books (Gruffalo for example)?		observable features. Use fieldwork to explore human impact on the local environment e.g. litter, tree planting. Use secondary sources to find out about how environments may naturally change. Use secondary sources to find out about human impact, both positive and negative, on environments	Look for patterns between the size of an animal and its expected life span. Grow and observe plants that reproduce asexually e.g. strawberries, spider plants, potatoes. Take cuttings from a range of plants e.g. African violet, mint. Plant bulbs and then harvest to see how they multiply. Use secondary sources to find out about pollination.	characteristics of an unknown animal or plant to assign it to a group. Classify plants and animals, presenting this in a range of ways? e.g. Venn diagrams, Carroll diagrams and keys. Can you create an imaginary animal which has features from one or more groups?
Key Vocabulary		Living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed Names of local habitats e.g. pond, woodland etc.		Classification, classification keys, environment, habitat, human impact, positive, negative, migrate, hibernate	Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering, non-flowering

		Names of micro-habitats e.g. under logs, in bushes etc.				
<u>Key Learning:</u> **Forces & Magnets**			**Forces & Magnets** A force is a push or a pull. When an object moves on a surface, the texture of the surface and the object affect how it moves. It may help the object to move better or it may hinder its movement e.g. ice skater compared to walking on ice in normal shoes. A magnet attracts magnetic material. Iron and nickel and other materials containing these, e.g. stainless steel, are magnetic. The strongest parts of a magnet are the poles. Magnets have		**Forces** A force causes an object to start moving, stop moving, speed up, slow down or change direction. Gravity is a force that acts at a distance. Everything is pulled to the Earth by gravity. This causes unsupported objects to fall. Air resistance, water resistance and friction are contact forces that act between moving surfaces. The object may be moving through the air or water, or the air and water may be moving over a stationary object.	

			two poles – a north pole and a south pole. If two like poles, e.g. two north poles, are brought together they will push away from each other – repel. If two unlike poles, e.g. a north and south, are brought together they will pull together – attract.		A mechanism is a device that allows a small force to be increased to a larger force. The pay back is that it requires a greater movement. The small force moves a long	
ACTIVITIES:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Forces & Magnets			**Forces & Magnets** Can we carry out investigations to explore how objects move on different surfaces e.g. spinning tops/coins, rolling balls/cars, clockwork toys, soles of shoes etc? Can we explore what materials		**Forces** Can you investigate the effect of friction in a range of contexts? e.g. trainers, bathmats, mats for a helter-skelter. Can you Investigate the effects of water resistance in a range of	

			are attracted to a magnet? Can we classify materials according to whether they are magnetic? Can we explore the way that magnets behave in relation to each other? Can you use a marked magnet to find the unmarked poles on other types of magnets? Can you explore how magnets work at a distance? e.g. through the table, in water, jumping paper clips up off the table. Can you devise an investigation to test the strength of magnets?		contexts? e.g. dropping shapes through water and pulling shapes, such as boats, along the surface of water. Can you investigate the effects of air resistance in a range of contexts ? e.g. parachutes, spinners, sails on boats. Can you explore how levers, pulleys and gears work? Can you make a product that involves a lever, pulley or gear? Can you create a timer that uses gravity to move a ball? Can you research how the work of scientists such as Galileo Galilei and Isaac	

					Newton helped to develop the theory of gravitation?	
Key Vocabulary			Force, push, pull, twist, contact force, non-contact force, magnetic force, magnet, strength, bar magnet, ring magnet, button magnet, horseshoe magnet, attract, repel, magnetic material, metal, iron, steel, poles, north pole, south pole		Force, gravity, Earth, air resistance, water resistance, friction, mechanisms, simple machines, levers, pulleys, gears	
<u>Key Learning:</u> Rocks			**Rocks** Rock is a naturally occurring material. There are different types of rock e.g. sandstone, limestone, slate etc. which have different properties. Rocks can be hard or soft. They have			

			different sizes of grain or crystal. They may absorb water. Rocks can be different shapes and sizes (stones, pebbles, boulders). Soils are made up of pieces of ground down rock which may be mixed with plant and animal material (organic matter). The type of rock, size of rock pieces and the amount of organic matter affect the property of the soil. Some rocks contain fossils. Fossils were formed millions of years ago. When plants and animals died, they fell to the seabed. They became covered and squashed by other material.			

			Over time the dissolving animal and plant matter is replaced by minerals from the water.			
ACTIVITIES:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Rocks			**Rocks** Can you observe rocks closely? Can you classify rocks in a range of ways, based on their appearance? Can you devise a test to investigate the hardness of a range of rocks? Can you devise a test to investigate how much water different rocks absorb? Can you observe how rocks change over time e.g. gravestones or old building?			

			Can you research using secondary sources how fossils are formed? Can you observe soils closely? Can you classify soils in a range of ways based on their appearance? Can you devise a test to investigate the water retention of soils? Can you observe how soil can be separated through sedimentation. Can we research the work of Mary Anning?			
Key Vocabulary			Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat,			

			sandy/chalk/clay soil			
<u>Key Learning:</u> Light & Astronomy	**Seasonal Change** In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again. The weather also changes with the seasons. In the UK, it is usually colder and rainier in winter, and hotter and dryer in the summer. The change in weather causes many other changes. Some examples are: numbers of minibeasts found outside; seed and plant growth; leaves on trees; and type of clothes worn by people.		**Shadows & reflective surfaces** We see objects because our eyes can sense light. Dark is the absence of light. We cannot see anything in complete darkness. Some objects, for example, the sun, light bulbs and candles are sources of light. Objects are easier to see if there is more light. Some surfaces reflect light. Objects are easier to see when there is less light if they are reflective. The light from the sun can damage our eyes and therefore we should not look directly at the sun		**Earth and Space** The Sun is a star. It is at the centre of our solar system. There are 8 planets (can choose to name them, but not essential). These travel around the Sun in fixed orbits. Earth takes 365¼ days to complete its orbit around the Sun. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night). As the Earth rotates, the Sun appears to move across the sky. The Moon orbits the Earth. It takes about 28 days to	**Light** Light appears to travel in straight lines, and we see objects when light from them goes into our eyes. The light may come directly from light sources, but for other objects some light must be reflected from the object into our eyes for the object to be seen. Objects that block light (are not fully transparent) will cause shadows. Because light travels in straight lines the shape of the shadow will be the same as the outline shape of the object.

			and can protect our eyes by wearing sunglasses or sunhats in bright light. Shadows are formed on a surface when an opaque or translucent object is between a light source and the surface and blocks some of the light. The size of the shadow depends on the position of the source, object and surface.		complete its orbit. The Sun, Earth and Moon are approximately spherical.	
ACTIVITIES:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Light & Astronomy	**Seasonal Change** Can you collect information about the weather regularly throughout the year? Can you present this information in tables and charts to compare the weather across the		**Shadows & reflective surfaces** Can you explore how different objects are more or less visible in different levels of lighting? Can you explore how objects with different		**Earth and Space** Can you use secondary sources to help create a model e.g. role play or using balls to show the movement of the	**Light** Can you explore different ways to demonstrate that light travels in straight lines e.g. shining a torch down a bent and straight hose pipe, shining a

	seasons? Can you collect information, regularly throughout the year, of features that change with the seasons e.g. plants, animals, humans? Can you present this information in different ways to compare the seasons? Can we gather data about day length regularly throughout the year and present this to compare the seasons?		surfaces? e.g. shiny vs matt, are more or less visible. Can you explore how shadows vary as the distance between a light source and an object or surface is changed? Can we explore shadows which are connected to and disconnected from the object? e.g. shadows of clouds and children in the playground. Can you choose suitable materials to make shadow puppets? Can you create artwork using shadows?		Earth around the Sun and the Moon around the Earth? Can you use secondary sources to help make a model to show why day and night occur? Can you make first-hand observations of how shadows caused by the Sun change through the day? Can you make a sundial? Can you research time zones? Can you consider the views of scientists in the past and evidence used to deduce shapes and movements of the Earth, Moon and planets before space travel?	torch through different shaped holes in card? Can you explore the uses of the behaviour of light, reflection and shadows, such as in periscope design, rear view mirrors and shadow puppets?

Key Vocabulary	Weather (sunny, rainy, windy, snowy etc.) Seasons: winter, summer, spring, autumn Sun, sunrise, sunset, day length		Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous	✓	Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, solar system, rotates, star, orbit, planets	***As for Year 3 -*** Light, plus straight lines, light rays
Key Learning: Sound				A sound produces vibrations which travel through a medium from the source to our ears. Different mediums such as solids, liquids and gases can carry sound, but sound cannot travel through a vacuum (an area empty of matter). The vibrations cause parts of our body inside our ears to vibrate, allowing us to hear (sense) the sound. The loudness (volume) of the sound depends on the strength (size) of vibrations which		✓

				decreases as they travel through the medium. Therefore, sounds decrease in volume as you move away from the source. A sound insulator is a material which blocks sound effectively. Pitch is the highness or lowness of a sound and is affected by features of objects producing the sounds. For example, smaller objects usually produce higher pitched sounds		
ACTIVITIES:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	✓ **Year 6**
Sound				**Sound** Can you classify sound sources? Can you explore making sounds with a range of		

				objects, such as musical instruments and other household objects? Can you explore how string telephones or ear gongs work? Can you explore altering the pitch or volume of objects, such as the length of a guitar string, amount of water in bottles, size of tuning forks? Can you measure sounds over different distances? Can you measure sounds through different insulation materials?		
Key Vocabulary				Sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation		
<u>Key Learning:</u>				**Electricity**		**Electricity**

Electricity				Many household devices and appliances run on electricity. Some plug in to the mains and others run on batteries. An electrical circuit consists of a cell or battery connected to a component using wires. If there is a break in the circuit, a loose connection or a short circuit, the component will not work. A switch can be added to the circuit to turn the component on and off. Metals are good conductors so they can be used as wires in a circuit. Non-metallic solids are insulators except for graphite (pencil lead).		Adding more cells to a complete circuit will make a bulb brighter, a motor spin faster or a buzzer make a louder sound. If you use a battery with a higher voltage, the same thing happens. Adding more bulbs to a circuit will make each bulb less bright. Using more motors or buzzers, each motor will spin more slowly and each buzzer will be quieter. Turning a switch off (open) breaks a circuit so the circuit is not complete and electricity cannot flow. Any bulbs, motors or buzzers will then turn off as well. You can use

				Water, if not completely pure, also conducts electricity.		recognised circuit symbols to draw simple circuit diagrams.
ACTIVITIES:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Electricity				**Electricity** Can you construct a range of circuits? Can you explore which materials can be used instead of wires to make a circuit? Can you classify the materials that were suitable/not suitable for wires? Can you explore how to connect a range of different switches and investigate how they function in different ways? Can you choose switches to add to circuits to solve particular problems, such as a pressure switch		**Electricity** Can you explain how a circuit operates to achieve particular operations, such as to control the light from a torch with different brightness or make a motor go faster or slower? Can you make circuits to solve particular problems, such as a quiet and a loud burglar alarm? Can you carry out fair tests exploring changes in circuits? Can you make circuits that can

				for a burglar alarm? Can you apply their knowledge of conductors and insulators to design and make different types of switches? Can you make circuits that can be controlled as part of a DT project? ***N.B. Children should be given one component at a time to add to circuits.***		be controlled as part of a DT project?
Key Vocabulary				Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connectionsloose connection, short circuit, crocodile clip, bulb, switch,		Circuit, complete circuit, circuit diagram, circuit symbol, cell, battery, bulb, buzzer, motor, switch, voltage ***N.B. Children do not need to understand what voltage is, but will use volts and voltage to describe different***

				buzzer, motor, conductor, insulator, metal, non-metal, symbol		***batteries. The words "cells" and "batteries" are now used interchangeably.***
Key Learning: Evolution & Inheritance				✓		**Evolution & Inheritance (Including adaptations)** All living things have offspring of the same kind, as features in the offspring are inherited from the parents. Due to sexual reproduction, the offspring are not identical to their parents and vary from each other. Plants and animals have characteristics that make them suited (adapted) to their environment. If the environment changes rapidly,

						some variations of a species may not suit the new environment and will die. If the environment changes slowly, animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young. Over time, these inherited characteristics become more dominant within the population. Over a very long period of time, these characteristics may be so different to how they were originally that a

						new species is created. This is evolution. Fossils give us evidence of what lived on the Earth millions of year ago and provide evidence to support the theory of evolution. More recently, scientists such as Darwin and Wallace observed how living things adapt to different environments to become distinct varieties with their own characteristics.
ACTIVITIES:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Evolution & Inheritance						**Evolution & Inheritance**

						(Including adaptations) Can you design a new plant or animal to live in a particular habitat? Can you use models to demonstrate evolution e.g. 'Darwin's finches' bird beak activity? Can you use secondary sources to find out about how the population of peppered moths changed during the industrial revolution? Can you make observations of fossils to identify living things that lived on Earth millions of years ago? Can you identify features in

						animals and plants that are passed on to offspring and explore this process by considering the artificial breeding of animals/plants? e.g. dogs. Can you compare the ideas of Charles Darwin and Alfred Wallace on evolution? Can you research the work of Mary Anning and how this provided evidence of evolution?
Key Vocabulary						Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils

Scientists studied in Units

Year 3 - Mary Anning

Year 5 - Galileo Galilei & Isaac Newton

Year 6 - Darwin, Wallace, Mary Anning