

EYFS					
<p>Comment on and ask questions about aspects of familiar world.            Talk about observations of plants, animals, natural and found objects.            Talk about how and why things work and happen.            Develop understanding of changes over time and of growth and decay.            Show care for living things and environment.            Learn about similarities and differences in relation to places, objects, materials and living things.            Talk about the features of immediate environment and how environments might vary from one another.            Make observations of animals and plants and explain why some things occur, and talk about changes.</p> <p>Forest Schools – fortnightly. Includes making fire; exploring animal habitats.            Cooking – weekly            Outdoor area – exploring changing seasons.            States of matter – ice, melting chocolate, bicarbonate of soda ‘volcano’            Floating and sinking</p>					
<b>Drumming Workshop – exploring sounds</b> <b>Life Cycles Hatching chicks</b> <b>Cotswold Wildlife park trip</b>					
YEAR 1					
There’s No Place Like Home	Seasons Come and Seasons Go	Traditional Tales	The trouble with Dragons	How does your garden grow?	Pirates
<p><b>Animals</b>            Sc1/2.2a identify and name a variety of common animals including, fish, amphibians, reptiles, birds and mammals</p> <p>Sc1/2.2b identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>Sc1/2.2c describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p>	<p><b>Seasonal Changes</b>            Sc1/4.1a observe changes across the 4 seasons</p> <p>Sc1/4.1b observe and describe weather associated with the seasons and how day length varies.</p> <p><b>Human Body</b>            Sc1/2.2d identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.)</p>	<p><b>Everyday Materials</b>            Sc1/3.1a distinguish between an object and the material from which it is made</p> <p>Sc1/3.1b identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p> <p>Sc1/3.1c describe the simple physical properties of a variety of everyday materials</p> <p>Sc1/3.1d compare and group together a variety of everyday materials on the basis of their simple physical properties</p>		<p><b>Plants</b>            Sc1/2.1a identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Sc1/2.1b identify and describe the basic structure of a variety of common flowering plants, including trees</p> <p><b>Animals</b>            Sc1/2.2b identify and name a variety of common animals that are carnivores, herbivores and omnivores</p>	
<p><b>Working Scientifically</b></p> <p>Sc1/1.1 asking simple questions and recognising that they can be answered in different ways            Sc1/1.2 observing closely, using simple equipment            Sc1/1.3 performing simple tests            Sc1/1.4 identifying and classifying            Sc1/1.5 using their observations and ideas to suggest answers to questions            Sc1/1.6 gathering and recording data to help in answering questions</p>					
YEAR 2					
India	Space	Explorers	Rainforest	Fire of London	Brunel

<p><b>Animals/ Humans</b></p> <p>Sc2/2.3a notice that animals, including humans, have offspring which grow into adults</p> <p>Sc2/2.3b find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Sc2/2.3c describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p><b>Progression from Y1: discuss suitability of materials.</b></p>	<p><b>Habitats 1</b></p> <p>Sc2/2.1c identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p><b>Progression from Y1: human body, human diet; briefly cover food chains</b></p>	<p><b>Habitats 2 Food chains</b></p> <p>Sc2/2.1c identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>Sc2/2.1d 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.</p>	<p><b>Plants</b></p> <p>Sc2/2.2a observe and describe how seeds and bulbs grow into mature plants</p> <p>Sc2/2.2b find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p>	<p><b>Everyday materials</b></p> <p>Sc2/3.1a identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses</p>	<p><b>Uses of Everyday materials (Forces)</b></p> <p>Sc2/3.1b compare how things move on different surfaces.</p> <p>Sc2/3.1c find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p> <p><b>Progression from Y2 Term 2: Discuss suitability for use</b></p>
--	--	---	--	--	--

**Working Scientifically**

- Sc2/1.1 asking simple questions and recognising that they can be answered in different ways
- Sc2/1.2 observing closely, using simple equipment
- Sc2/1.3 performing simple tests
- Sc2/1.4 identifying and classifying
- Sc2/1.5 using their observations and ideas to suggest answers to questions
- Sc2/1.6 gathering and recording data to help in answering questions.

**Where there is repetition within Year 2, Working Scientifically is also taught in a discrete way.**

3	Ancient Egypt	Capitals of Europe	Stone Age to Iron Age	
<p><b>Forces and Magnets</b></p> <p>Sc3/4.2a compare how things move on different surfaces</p> <p>Sc3/4.2b notice that some forces need contact between 2 objects, but magnetic forces can act at a distance</p> <p>Sc3/4.2c observe how magnets attract or repel each other and attract some materials and not others</p> <p>Sc3/4.2d 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</p> <p>Sc3/4.2e describe magnets as having 2 poles</p> <p>Sc3/4.2f predict whether 2 magnets will attract or repel each other, depending on which poles are facing.</p>		<p><b>Plants</b></p> <p>Sc3/2.1a identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p>Sc3/2.1b 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</p> <p>Sc3/2.1c investigate the way in which water is transported within plants</p> <p>Sc3/2.1d explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p><b>Progression from Y2: the purpose and functions of parts of plants are covered; the variety of plants and functions is covered in greater depth.</b></p> <p><b>Animals including humans</b></p> <p>Sc3/2.2a identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own</p>	<p><b>Rocks</b></p> <p>Sc3/3.1a compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</p> <p>Sc3/3.1b describe in simple terms how fossils are formed when things that have lived are trapped within rock</p> <p>Sc3/3.1c recognise that soils are made from rocks and organic matter.</p>	<p><b>Light</b></p> <p>Sc3/4.1a recognise that they need light in order to see things and that dark is the absence of light</p> <p>Sc3/4.1b notice that light is reflected from surfaces</p> <p>Sc3/4.1c recognise that light from the sun can be dangerous and that there are ways to protect their eyes</p> <p>Sc3/4.1d recognise that shadows are formed when the light from a light source is blocked by a solid object</p> <p>Sc3/4.1e find patterns in the way that the size of shadows change.</p>

		food; they get nutrition from what they eat Sc3/2.2b identify that humans and some other animals have skeletons and muscles for support, protection and movement.		
<b>Sc3/1 Working Scientifically</b>				
Sc4/1.1 asking relevant questions and using different types of scientific enquiries to answer them Sc4/1.2 setting up simple practical enquiries, comparative and fair tests Sc4/1.3 making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Sc4/1.4 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Sc4/1.5 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Sc4/1.6 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Sc4/1.7 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Sc4/1.8 identifying differences, similarities or changes related to simple scientific ideas and processes Sc4/1.9 using straightforward scientific evidence to answer questions or to support their findings.				
<b>4</b>	<b>Mountains , Rivers and Coasts</b>	<b>Local History - Steam</b>	<b>Romans</b>	
<b>States of Matter</b>	<b>All Living Things</b>	<b>Electricity</b>	<b>Animals including humans</b>	<b>Sound</b>
Sc4/3.1a compare and group materials together, according to whether they are solids, liquids or gases  Sc4/3.1b 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 (°C)  Sc4/3.1c identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	Sc4/2.1a recognise that living things can be grouped in a variety of ways  Sc4/2.1b explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment  Sc4/2.1c recognise that environments can change and that this can sometimes pose dangers to living things. <b>Progression from Y2 and 3: classification; significant changes and their impact on possible extinction/ endangered species</b>	Sc4/4.2a identify common appliances that run on electricity  Sc4/4.2b construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers  Sc4/4.2c 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  Sc4/4.2d recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit  Sc4/4.2e recognise some common conductors and insulators, and associate metals with being good conductors.	Sc4/2.2a describe the simple functions of the basic parts of the digestive system in humans  Sc4/2.2b identify the different types of teeth in humans and their simple functions  Sc4/2.2c construct and interpret a variety of food chains, identifying producers, predators and prey.  <b>Progression from Y2: food chains are developed in greater detail and food webs are covered</b>	Sc4/4.1a identify how sounds are made, associating some of them with something vibrating  Sc4/4.1b recognise that vibrations from sounds travel through a medium to the ear  Sc4/4.1c find patterns between the pitch of a sound and features of the object that produced it  Sc4/4.1d find patterns between the volume of a sound and the strength of the vibrations that produced it.  Sc4/4.1e recognise that sounds get fainter as the distance from the sound source increases
<b>Working Scientifically</b>				
Sc4/1.1 asking relevant questions and using different types of scientific enquiries to answer them Sc4/1.2 setting up simple practical enquiries, comparative and fair tests Sc4/1.3 making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers Sc4/1.4 gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Sc4/1.5 recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Sc4/1.6 reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Sc4/1.7 using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Sc4/1.8 identifying differences, similarities or changes related to simple scientific ideas and processes Sc4/1.9 using straightforward scientific evidence to answer questions or to support their findings.				
<b>5</b>	<b>Ancient Greece</b>	<b>The Americas</b>		<b>Anglo Saxons and Vikings</b>
<b>Properties of Materials</b>	<b>Forces</b>	<b>Earth &amp; Space</b>	<b>Living things &amp; their habitats</b>	<b>Properties &amp; changes of Materials</b>
				<b>Properties &amp; changes of Materials</b>

Sc5/3.1a compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets <b>Progression from Y4 (states of matter): extension of vocabulary</b>	Sc5/4.2a explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object  Sc5/4.2b identify the effects of air resistance, water resistance and friction, that act between moving surfaces  Sc5/4.2c recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect. <b>Progression from Y3: cover gravity and link this to Earth and Space; discuss how forces affect mechanisms.</b>	Sc5/4.1a describe the movement of the Earth, and other planets, relative to the Sun in the solar system  Sc5/4.1b describe the movement of the Moon relative to the Earth  Sc5/4.1c describe the Sun, Earth and Moon as approximately spherical bodies  Sc5/4.1d use the idea of the Earth's rotation to explain day and night, and the apparent movement of the sun across the sky. <b>Progression from term 2: Links made to Forces - gravity</b>	Sc5/2.1a describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird  Sc5/2.1b describe the life process of reproduction in some plants and animals.  <b>Sc5/2.2 Animals including humans (Life cycle)</b>  Sc5/2.2a describe the changes as humans develop to old age.	Sc5/3.1b know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution  Sc5/3.1c use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	Sc5/3.1d give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic  Sc5/3.1e demonstrate that dissolving, mixing and changes of state are reversible changes  Sc5/3.1f explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda. <b>Progression from Y4 (states of matter):cover changes of state</b>
---	--	--	---	--	--

#### Working Scientifically

- Sc5/1.1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- Sc5/1.2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision
- Sc5/1.3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs
- Sc5/1.4 using test results to make predictions to set up further comparative and fair tests
- Sc5/1.5 reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations
- Sc5/1.6 identifying scientific evidence that has been used to support or refute ideas or arguments.

6 Contrasting localities – Philippines - Volcanic	Contrasting Localities – Wales – Sed. Rock	Exploration – Tudor Era and New World	Explorat ion – Develop ment of cartogra phy	Mayan Civilisation – South America AD 900	
<b>Light</b>  SC6/4.1a recognise that light appears to travel in straight lines  SC6/4.1b use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye  SC6/4.1c explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes	<b>Electricity</b>  SC6/4.2a associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit  SC6/4.2b compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the	<b>Evolution</b>  SC6/2.3a recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago  SC6/2.3b recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents	<b>Living things &amp; Habitats</b>  SC6/2.1a 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  SC6/2.1b give reasons for classifying plants and animals	<b>Animals (including humans)</b>  SC6/2.2a identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood  SC6/2.2b recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function  SC6/2.2c describe the ways in which nutrients and water are transported within animals, including humans.	<b>CHEMISTRY - Revisiting</b> Separation, Filtration, Distillation & Chromatography Acids & Corrosion Rocks & Soils Levers  <b>PHYSICS – Revisiting</b> Forces, rockets, expanding gases  <b>BIOLOGY – Revisiting</b> Dissection of pluck looking at circulatory and digestive systems.

<p>SC6/4.1d use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p> <p><b>Progression from Y3: Investigate how light travels; investigate and compare light sources; learn about how the light enters the eye and how the eye/optic nerve work; discuss and investigate the spectrum of light</b></p>	<p>on/off position of switches</p> <p>SC6/4.2c use recognised symbols when representing a simple circuit in a diagram.</p> <p><b>Progression from Y4: draw circuits accurately; analyse circuit diagrams; investigate, draw and explain parallel circuits.</b></p>	<p><b>Sc6/2.3 Evolution</b></p> <p>SC6/2.3c identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p>based on specific characteristics.</p> <p><b>Progression from Y5: learn about the origins and purpose of classification systems; learn the binomial classification systems; investigate micro-organisms.</b></p>	<p><b>Progression from Y4 and Y5: learn the digestive systems in greater depth; learn about the digestive processes; learn and investigate the circulatory systems. (Term 6; dissect pluck while investigating both digestive and circulatory systems.)</b></p>	
<p><b>Working Scientifically</b></p> <p>Sc6/1.1 planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p> <p>Sc6/1.2 taking measurements, using a range of scientific equipment, with increasing accuracy and precision</p> <p>Sc6/1.3 recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, and bar and line graphs</p> <p>Sc6/1.4 using test results to make predictions to set up further comparative and fair tests</p> <p>Sc6/1.5 using simple models to describe scientific ideas</p> <p>Sc6/1.6 reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations</p> <p>Sc6/1.7 identifying scientific evidence that has been used to support or refute ideas or arguments.</p>					