Shillington Lower school and Stondon Lower school (Shillington and Stondon Federation)

Knowledge Progression Grid

Date	Science Skills Progression Review date	Subject Leader
April 2021	September 2022	Lynnette Mossop

This document aims to give guidance on the progression of Science knowledge across the year groups. It can also be used to support planning and adapt learning. As children progress across the school it is expected that they can demonstrate a wider range of knowledge in Science strands across the curriculum. The science curriculum is carefully planned so that the children build their scientific knowledge year on year, building on their existing skills and knowledge. We take a very practical approach to the teaching of science and try to include as many investigations as we can. We aim to provide children with ample opportunities to develop their 'Working Scientifically Skills' starting in the Early Years, developing right up until Year 6.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
This is what our scientists can do…. **This demonstrates what a typical scientist will look like at the end of each year, combining the key skills and knowledge they will require.**	Children will ask questions about the environment including the weather outside. They will be able to suggest what they might wear. They will develop an understanding of growth, decay and changes over time and show care and concern for living things and the environment. They will use their senses when walking around and investigating. They will develop questioning and curiosity through play and understand the concept of forces and electricity through twisting, pushing, slotting and magnetic toys and seeing the effects of pushing different buttons to make sounds and movements. They can talk about similarities and differences between living things and materials and make simple observations about animals.	Children will be asking questions about the local environment including plants and animals found there including how they can look after them. They will observe and talk about the weather and changes. They will explore different materials using scientific language to describe them.	Children will be asking questions about the local environment including discussing how plants grow, survive, germinate and reproduce. They investigate different habitats (incl. micro) and observe how different animals depend on each other and its life processes. They understand basic needs of animal survival including exercise and nutrition. They can identify properties of materials and state why they are suited to purpose. They can name some scientists who have developed new materials.	Children will be asking questions about the local environment and using their observation skills to identify parts of a flower and know how water transports around the plant. Children will understand the lifecycle of a plant by drawing diagrams and using research to find the function of each part. Children will know that humans and animals have skeletons and understand why. They know how humans get nutrients. They will carry out comparative and fair tests to compare and classify rocks and soils based on their properties.	Children will be asking questions about the local environment and observe how the environment can change along with the dangers this can cause. They will understand the functions of the teeth and the importance of oral hygiene. Children will know about how the digestive system works. Children will be grouping, identifying and classifying living things and materials and using classification keys. Children will understand the water cycle and effect of heat with evaporation and condensation as well as materials changing state. Children will use representations to understand how we hear through vibrations and know how to create simple circuits including a switch. Comparative and fair tests will be used to test conductivity of materials.	Children will understand the changes that occur in humans from birth to old age and understand reproduction in plants and animals. They explore different lifecycles and can understand the similarities and differences between mammals, amphibians, insects and birds. Children will be able to explain the uses of everyday materials and describe some reversible and irreversible changes. They will be able to present their results from fair tests using tables and charts. Children will use diagrams to show the movement of the Earth and the moon and can explain how different time zones occur. They explain day and night. They will have an understanding of forces including gravity, air resistance, water resistance and friction. They will be able to mechanisms such a levers, pulleys and gears to explain forces and making jobs easier.	Children will understand how the circulatory system works and will be able to use this to explain the positive and negative effects of diet, exercise, drugs and lifestyle on the body. They will be able to recall animals from the 5 vertebrate group and some from non-vertebrate groups including their key characteristics. They will understand how plants and animals are suited to their environment and the process of evolution. Children will be able to use classification keys to identify unknown plants. They will know what fossils are and can use research and observations to show that things lived billion years ago. Children will use diagrams to explain how light travels and understand shadows. They will be able to make simple circuits using recognised symbols in their drawings. They can conduct a range of fair tests identifying cause and effect when testing brightness of a bulb or volume of a buzzer.

							Children will be able to conduct a range of investigations with accuracy using repeat measurements and using a range of equipment. They will use scientific theory to refute or support their arguments.
EYFS Ongoing skills Early Learning Goals	**EYFS Ongoing skills Early Learning Goals**				**EYFS Ongoing skills Early Learning Goals**		
Enquiry Skills	Show curiosity about objects, events and people Questions why things happen Engage in open-ended activity Take a risk, engage in new experiences and learn by trial and error Find ways to solve problems / find new ways to do things / test their ideas Develop ideas of grouping, sequences, cause and effect Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world Use senses to explore the world around them Make links and notice patterns in their experiences Create simple representations of events, people and objects Build up vocabulary that reflects the breadth of their experience				Choose the resources they need for their chosen activities Handle equipment and tools effectively Answer how and why questions about their experiences Make observations Develop their own narratives and explanations by connecting ideas or events Explain why some things occur and talk about changes		
Knowledge and understanding of the world	Know about the similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.						
Working Scientifically	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	
Plan	Ask simple questions when prompted Suggest ways of answering a question	Ask simple questions Recognise that questions can be answered in different ways	Ask relevant questions when prompted Use different types of scientific enquiry to answer them. Set up simple and practical enquiries, comparative and fair tests with some support.	Ask relevant questions. Use different types of scientific enquiries to answer their questions Set up simple and practical enquiries, comparative and fair tests	Plan different types of scientific enquiries to answer questions. With prompting, recognise and control variables where necessary	Plan different types of scientific enquiries to answer questions Recognise and control variables where necessary	
Do	Make relevant observations using simple equipment Conduct simple tests, with support Identify and classify with guidance	Observe closely, using simple equipment Perform simple tests Identify and classify	Make systematic and careful observations, using simple equipment Use standard units when taking measurements	Make systematic and careful observations using a range of equipment, including thermometers and data loggers Take accurate measurements using standard units, where appropriate	Select, with prompting, and use appropriate equipment to take readings Take precise measurements using standard units Begin to understand the need for repeat readings	Use a range of scientific equipment to take measurements Take measurements with increasing accuracy and precision Take repeat readings when appropriate	
Record	Gather and record data	Record and communicate their findings in a range of ways and	With modelling and guidance, gather, record, classify and	Gather, record, classify and present data in a variety of	Take and process repeat readings	Record data and results of increasing complexity using	

		begin to use simple scientific language Gather and record data to help answer questions	present data in a variety of ways to help to answer questions With prompting, use various ways of recording, grouping and displaying evidence and suggest how findings may be tabulated	ways to help to answer questions Record findings using simple scientific language, drawings and labelled diagrams Record findings using keys, bar charts, and tables	Record data and results Record data using labelled diagrams, keys, tables and charts Use line graphs to record data	scientific diagrams and labels, classification keys, tables, bar charts and line graphs
Review	Recognise findings Use their observations and ideas to suggest answers to simple questions	Use their observations and ideas to suggest answers to simple questions	With prompting, suggest conclusions from enquiries Suggest how findings could be reported Suggest possible improvements or further questions to investigate	Report on findings from enquiries, including oral and written explanations, of results and conclusions Report on findings from enquiries using displays or presentations Identify differences, similarities or changes related to simple scientific ideas and processes Use straightforward scientific evidence to answer questions or to support their findings Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Report and present findings from enquiries, including conclusions and, with prompting, suggest causal relationships With support, present findings from enquiries orally and in writing Suggest further comparative or fair tests	Report and present findings from enquiries, including conclusions and causal relationships Report and presents findings from enquiries in oral and written forms such as displays and other presentation Report and present findings from enquiries, including explanations of, and degree of, trust in results Identify scientific evidence that has been used to support or refute ideas or arguments Use test results to make predictions to set up further comparative and fair tests
Vocabulary	Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, observe, compare, describe, similar/ities, different/ces, beaker, pipette, syringe	Previous vocab plus observe changes over time, notice patterns, secondary sources, hand lenses, egg timers, identify, classify, data	Previous vocab plus scientific enquiry changes over time, notice patterns, secondary sources, comparative tests, fair tests, careful, accurate, observations, equipment, gather, measure, record, data, evidence, results, keys, bar charts, table, results, conclusions, predictions, support, thermometers	Previous vocab plus enquiry types increase, decrease, identify, classify, order, notice patterns, relationships, appearance, present results, data loggers	Previous vocab plus, notice patterns, relationships, independent variable, dependent variable, controlled variable, accuracy, precision, degree of trust, classification keys, scatter graphs, line graphs, causal relationships, support/refute, data loggers	Previous vocab plus opinion/fact, confidently name scientific enquiry types

Science Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Animals including humans	Make observations of animas and explain why things occur and talk about changes	Identify and name a variety of common animals including fish, amphibians, reptiles, mammals and birds Identify and name a variety of common animals that are	Notice that animals, including humans, have offspring which grow into adults. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	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	Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions	Describe the changes as humans develop to old age **'Living things and their habitats'** **Describe the differences in the lifecycles of a mammal, an amphibian, an insect and a bird.**	Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood Recognise the impact of diet, exercise, drugs and

Links to **'Living things and their habitats'**		carnivores, herbivores and omnivores Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Identify that humans and some other animals have skeletons and muscles for support, protection and movement	Construct and interpret a variety of food chains, identifying producers, predators and prey	**Describe the life processes of reproduction in some plants and animals.**	lifestyle on the way their bodies function Describe the ways in which nutrients and water are transported within animals, including humans
Key Vocabulary	Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, heart,	Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves, reptile, amphibian, mammal, omnivore, carnivore, herbivore, all senses.	Offspring, grow, adults, nutrition, reproduce, survival, water, food, air, exercise, hygiene, survival, exercise.	Nutrition, nutrients, carbohydrates, sugars, protein, vitamins, minerals, fibre, fat, water, skeleton, bones, muscles, support, protect, skull, ribs, spine, muscles, joints.	Digestive system, digestion, mouth, teeth, saliva, oesophagus, stomach, small intestine, nutrients, large intestine, rectum, anus, incisor, canine, herbivore, omnivore.	Puberty, vocabulary linked to describe a range of sexual characteristics.	Heart, pulse, rate, pumps, blood, blood vessel, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle.
Everyday Materials **Links to** **'Forces and Magnets'**	Know that objects are made from different materials Explore similarities and differences in relation to places, objects, materials and living things	**D**istinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Describe how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	**'Forces and Magnets'** **Notice that some forces need contact between two objects, but magnetic forces can act at a distance.**	**States of Matter** Compare and group materials together, according to whether they are solids, liquids or gases 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) Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	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 Recognise that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday	

Rocks **Links to** **'Evolution'**				Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock Recognise that soils are made from rocks and organic matter.		materials, including metals, wood and plastic Demonstrate that dissolving, mixing and changes of state are reversible changes 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	**'Evolution'** **Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.**
Key Vocabulary	Metal, Wood, Soft, Hard, Plastic, Wet, dry, shiny, dull, bendy, stiff, squashy, lumpy, wrinkly. Smooth, rough.	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, plastic, glass, metal, water, rock, brick, paper, fabric, card, rubber, suitable/unsuitable, use/useful, hard/soft, stretchy/stiff. Rigid/flexible, waterproof/absorbent, strong/weak, rough/smooth, transparent/opaque, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching.	Appearance, physical Properties, hand/soft shiny/dull, rough/smooth absorbent/not absorbent fossils, sedimentary, metamorphic, igneous, rock, soils, organic matter buildings, gravestones grains, crystals.	Compare and group materials together, according to whether they are solids, liquids or gases 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) Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	Thermal/electrical insulator/conductor, change of state, mixture, dissolve, solution, soluble, insoluble, filter, sieve, reversible/not reversible, change, burning, rusting, new material.	

Light **Links to** **'Materials'** **'Seasonal Changes'** **'Plants'** **'Living things and their habitats'** **'Earth and Space'**	Respond to their senses: sights, sounds and smells in the environment.	**'Materials'** **Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties.** **'Seasonal Changes'** **Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies.** **'Animals including humans'** **Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.**	**'Materials'** **Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.** **'Plants'** **Find out and describe how plants need water, light and suitable temperature to grow and stay healthy.**	Recognise that he/she needs light in order to see things and that dark is the absence of light Notice that light is reflected from surfaces Recognise that light from the sun can be dangerous and that there are ways to protect eyes Recognise that shadows are formed when the light from a light source is blocked by an opaque object Find patterns in the way that the size of shadows change **'Plants'** **Explore the requirements of plants for life and growth (air, light, water, nutrients from soil and how they vary from plant to plant.**	**'Living things and their habitats'** **Recognise that environments can change and that this can sometimes pose dangers to living things.**	**'Materials'** **Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparence, conductivity (electrical and thermal) and response to magnets.** **'Earth and Space'** **Use Earth rotation to explain day and night due to the apparent movements of the sun across the sky.**	Recognise that light appears to travel in straight lines 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 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 Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
Sound **Links to** **'Animals including humans'**					**Sound** Identify how sounds are made, associating some of them with something vibrating Recognise that vibrations from sounds travel through a medium to the ear Find patterns between the pitch of a sound and features of the object that produced it Find patterns between the volume of a sound and the strength of the vibrations that produced it		

					Recognise that sounds get fainter as the distance from the sound source increases		
Key Vocabulary	Smell. Sound, sight, see. look			Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous.	Sound, source, vibrate, vibration, travel, pitch, volume, faint, loud, insulation.		Light, travels, straight, reflect, reflection, light, source, object, shadows, mirrors, periscope, rainbow, filters.
Forces and Magnets **Links to** **'Materials'**	Introduce and encourage children to use the vocabulary of manipulation, e.g. squeeze and prod. Show an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones.	**'Materials'** **Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties.**	**'Materials'** **Suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.**	Compare how things move on different surfaces Notice that some forces need contact between two objects, but magnetic forces can act at a distance Observe how magnets attract or repel each other and attract some materials and not others 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 Describe magnets as having two poles Predict whether two magnets will attract or repel each other, depending on which poles are facing		Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object Identify the effects of air resistance, water resistance and friction, that act between moving surfaces Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect	
Key Vocabulary	Push, pull, twist, stretch, turn, open, lift, squeeze, pinch, flick, tap.			Force, push, pull, open, surface, magnet, magnetic, attract, repel, magnetic poles, North, South.		Gravity, air resistance, water resistance, friction, surface, force, effect, move, accelerate, decelerate, stop, change direction, brake, mechanism, pulley, gear, spring, theory of gravitation.	

Electricity **Links to** **'Materials'**	Shows skills in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movement or new images.	**'Materials'** **Describe the simple physical properties of a variety of everyday materials. Compare and grouped together a variety of everyday materials on the basis of their simple physical properties.**	**'Materials'** **Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.**		Identify common appliances that run on electricity Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers 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 Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit Recognise some common conductors and insulators, and associate metals with being good conductors	**'Materials'** **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.**	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 the brightness of bulbs, the loudness of buzzers and the on/off position of switches Use recognised symbols when representing a simple circuit in a diagram
Key Vocabulary					Appliances, electricity, electrical circuit, cell, wire, bulb, buzzer, danger, electrical safety, insulators, wood, rubber, plastic, glass, conductors, metal, water, switch, open, closed, sign.		Voltage, brightness, volume, switches, danger, series, circuit, working safely with electricity, electrical, safety, sign, circuit, diagram, switch, bulb, buzzer, motor, recognised, symbols.

Seasonal changes **Links to** **'Light'** **Earth and Space** **Links to** **'Forces and Magnets'**	Identify that it is Autumn, Winter, Summer and Spring Identify seasonal colours I know that lots of new life begins in the Spring time Choose appropriate clothing for the seasons	Observe and describe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies		**'Light'** **Recognise that they need light in order to see things and that dark is the absence of light. Notice that light is reflected from surfaces.** **Recognise that shadows are formed when the light source is blocked by a solid object. Find patterns in the way the size of the shadows change.**		Describe the movement of the Earth, and other planets, relative to the Sun in the solar system Describe the movement of the Moon relative to the Earth Describe the Sun, Earth and Moon as approximately spherical bodies Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky I know that the Sun is a star at the centre of our solar system and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune (Pluto was reclassified as a 'dwarf planet' in 2006). I know that a moon is a celestial body that orbits a planet (Earth has one moon; Jupiter has four large moons and numerous smaller ones). **'Forces and magnets'** **Explain that unsupported object falls towards that Earth because of the force of gravity acting between the Earth and the falling object.**	**'Light'** **Use the idea that light travels in straight lines to explain why shadows have the same shape as the object that casts them.**

Key Vocabulary	Spring, Summer, Autumn, Winter, Weather, Warm, Hot, Cold, Snow, Rain, sun.	Season, summer, winter, autumn, spring, day, daytime, weathers, wind, rain, snow, hail, sleet, fog, sun, hot, warm, cold.				Earth, Sun, Moon, moons, planets, stars, solar system, Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto, rotate, day, night, Aristotle, Ptolemy, Galileo, Copernicus, Brahe, Alhazen, orbit, axis, spherical, heliocentric, geocentric, hemisphere, season, tilt.	
Plants **Links to** **'Living things and their habitats'**	I know that plants need sun to grow I know that plants need water to grow I know that most plants need soil and nutrients to grow I know some plants grow from seeds	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees	Observe and describe how seeds and bulbs grow into mature plants Describe how plants need water, light and a suitable temperature to grow and stay healthy	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers 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 Investigate the way in which water is transported within plants Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal	**'Living thing and their habitats'** **Recognise that living things can be grouped in a variety of ways.**	**'Living thing and their habitats'** **Describe the differences in the lifecycles of a mammal, an amphibian, an insect and a bird.**	**'Living thing and their habitats'** **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.**
Key Vocabulary	Leaves, Roots, Stem, Petal, Water, Soil.	Wild, plants, garden, plants, deciduous, evergreen, leaves, bud, flowers, blossom, petals, stem, trunk, branches, leaf, root, fruit, vegetables, bulb, seed.	Grow, healthy, water, light, suitable, temperature, germination, reproduction.	Common, wild plants, garden plants, deciduous, pollination, dispersal, formation, nutrients, flowering.			

Living things and their habitats **Links to** **'Plants'** **'Animals including humans'**	Know about similarities and differences in relation to living things and their habitats Talk about the features of my own 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.	**'Plants'** **Name common plants and describe the basic structure of flowering plants, including trees.** **'Animals including humans'** **Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.** **Identify and name a variety of common animals that are carnivores, herbivores and carnivores.** **Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including humans.**	Explore and compare the differences between things that are living, dead, and things that have never been alive 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 Identify and name a variety of plants and animals in their habitats, including micro-habitats 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	**'Plants'** **Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.**	Recognise that living things can be grouped in a variety of ways Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment Recognise that environments can change and that this can sometimes pose dangers and have an impact on living things	Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird Describe the life process of reproduction in some plants and animals	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
Evolution							**Evolution** Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution
Key Vocabulary			Living, dead, never alive Habitats, micro-habitats, Food, food chain, sun, grass, human, alive, healthy, leaf, litter, stony path, under bushes, shelter, seashore, woodland, ocean, rainforest, conditions, hot/warm/cold,		Classification, change, danger, development, impact.	Life cycles, mammal, amphibian, insect, bird, life process of reproduction, plants, animals, reproduction, plants: sexual, asexual, animals: sexual prehistoric, similarities, differences.	Classify, Compare, Linnaean, Carl Linnaeus, Classification, Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species, Characteristics, Vertebrates, Invertebrates, Microorganisms, Organism, Flowering, non-flowering.

			dry/damp/wet, bright/shade/dark.				**Evolution** Evolution, adaption, inherited, traits, adaptive traits, natural selection, inheritance, Charles Darwin, Alfred Wallace, DNA, genes, variation, parent, offspring, fossil, environment, habitat, fossilisation, plants, animals, living things.