Science Long Term Overview

	Autumn Term		Spring Term		Summer Term	
Pre-School **Learning in Science in Pre-School will come up as the year progresses on children's interests or from books (See Kno & Und floor book)**	**All About me!** Starting Pre- School Who is in my family? What makes me special? I can use all my senses to explore my environment and natural materials	**Celebrations!** Birthdays Christmas Bonfire Night The Nativity Story Halloween Celebrations What do others celebrate? (RE) Dinosaurs (linking to personal interests) I can use all my senses to explore my environment and natural materials I can name some of my body parts (Funnybones/ PE)	**MARVELLOUS MINIBEASTS!** **David Attenborough (Pre-Learning for Reception)** Minibeasts Who am I? describing minibeasts Comparing animals- jungle, arctic Cold and hot countries Planting flowers to attract minibeasts <u>Rising 3's</u> New topics based on children's interests I understand the key features of the life cycle of the plant/ animal (Pre-learning Reception) I can name some animal body parts (beak/ tail)	**People who help us!** **Construction** How does Fireman Sam help people? 999, what's your emergency? Cars and different modes of transport Trains Aero planes Baby clinic and nurses What does the Easter Bunny do? Dentist visit? Teeth bushing and oral health <u>Rising 3's</u> New topics based on children's interests I can explore and talk about different forces I can feel I can explore materials with similar / different properties	**Let's grow!** Growing sunflowers Nature walks and looking at the weather Making a rain catcher Rainbows Planting and growing own fruit and vegetables Fruit salads <u>Rising 3's</u> New topics based on children's interests I can plant a seed and care for growing plants, understanding they need water and light	**FANTASY LAND!** Graduation ceremony Personal interests – Sooty, Elsa, Peppa, Toy story Castles, knights and Dragons Sleeping Beauty Frozen- Elsa Pirates <u>Rising 3's</u> New topics based on children's interests
Key Vocabulary	Senses Explore Environment	Body Head Shoulders Feet Arms Legs Eyes/nose/mouth/ears	Hot Cold Grow Animal body parts Life cycle	Fast Slow Move Build Hard Soft	Grow Care Sun Light Weather vocabulary	Vocabulary linked to children's interests
	1	**2**	**1**	**2**	**1**	**2**
Reception **Learning in Science in Reception will come**	**All About me!** Staying healthy / Food / Human body How have I changed? My family / PSED focus	**Terrific Tales!** Traditional Tales/Disney Little Red Hen - Harvest Disney's Frozen- arctic life Familiar tales Library visits	**Amazing Animals!** **Life cycles** Safari Animals around the world Climates / Hibernation Down on the Farm	**Come Outside!** Plants & Flowers Weather / seasons Does the moon shine? The great outdoors Forest School	**Vehicles!** Around the Town How do I get there? Where in the world have you been?	**ROAR!** Hook lesson with the giant dinosaur egg Creating fossils Make Volcanos Are dinosaurs extinct?

up as the year progresses on children's interests or from books (See Kno & Und floor book)	I can explore seasonal changes (melting etc – pre- learning Y1) I can talk about how I am similar and different to others as well as other animals	I can explore seasonal changes (Antarctica-Link to Disney Frozen) Autumn- I can explore hibernation	Mini Beasts Animal Arts and crafts Night and day animals Animal patterns David Attenborough Happy Habitats I can explore the life cycle of animals (chicks/ butterflies) and plants	Planting seeds Make a sculpture Reduce, Reuse & Recycle Fun Science / Materials I can explore seasonal changes (melting etc – pre-learning Y1) I can explore the life cycle of animals (chicks/ butterflies) and plants	Where do we live in the UK / world? Fly me to the moon! Vehicles past and Present Design your own transport! Who was Neil Armstrong?	Dinosaur School Design a fact file on dinosaurs Mary Anning Magic Grandad I can explore seasonal changes (melting etc – pre-learning Y1)
Personalisation and Subject Links	Everything planned from children's interests from parent's questionnaires on children's likes					
Key Vocabulary	Healthy Food Animal Human Baby Adult Child Teenager	Hibernation Freeze Thaw Night Day	Climate Hibernate Life cycle Birth Grow	Soil Water Light Grow Care Changes Observe Recycle Design Seasons	Vehicles Space Moon Planets and names Design Transport	Dinosaurs Pre-historic Climate Hot Extinct
Year 1	**Animals Sorting and Grouping**	**Enquiry Based Science Seasonal Changes**	**Everyday Materials**	**Seasonal Changes/ Weather**	**Plants**	**Animals Inc Humans Seasonal Changes/ weather**
Key Stage 1 National Curriculum	• 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 omnivores	• observe changes across the 4 seasons • observe and describe weather associated with the seasons and how day length varies	• distinguish 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	• observe changes across the 4 seasons • observe and describe weather associated with the seasons and how day length varies	• 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. Children might work scientifically by: • Observe closely using magnifying glasses whilst comparing and contrasting familiar plants.	• identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. • **Pupils might work scientifically by**: • asking simple questions and recognising that they can be answered in different ways. • using their observations and ideas to suggest answers to questions

			simple physical properties		• Describe how we are able to group them whilst drawing diagrams to show the parts. • Keep records of how plants change over time.	• gathering and recording data to help in answering questions • observe changes across the 4 seasons • observe and describe weather associated with the seasons and how day length varies
Personalisation and Subject Links	Art: Drawing the animals during Art Week from x7 different continents. Geography: Looking at animals from different continents.	English: create a factfile on each season Computing: Time lapse	English & DT- Creating a cape for Paddington Bear	English: create a factfile on each season Computing: Time lapse	Computing-time lapse photography Art- changing the colour of the petals Maths- recording data	English: create a factfile on each season Computing: Time lapse Art: The Human Body cut and stick bones DT: Tasting food- creating a healthy snack English: Funnybones book
Key Vocabulary	Animals Habitat Nocturnal Amphibian Reptile Fish Bird Mammal Carnivore Herbivore Omnivore	Spring Summer Autumn Winter Weather Season Changes Time lapse	Paddington Cape Waterproof Material Wood Plastic Glass Metal Fabric Man made Natural	Spring Summer Autumn Winter Weather Season Changes Time lapse	Seed, bulb, plant, water, light, temperature, leaves, flowers, blossom, petals, fruit, roots, bulb, seed, trunk, branches, stem.	Spring Summer Autumn Winter Weather Season Changes Time lapse
Year 2	**Animals Inc Humans**	**Living things and their habitats**	**Uses of everyday materials**	**Plants**	**Living things and their habitats**	**Living things and their habitats**
Key Stage 1 National Curriculum	• 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) • describe the importance for humans of exercise, eating the right	• explore and compare the differences between things that are living, dead, and things that have never been alive • **Pupils might work scientifically by:** sorting and classifying things according to whether they are living, dead or were never alive, and recording their	• identify and compare the 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	• observe and describe how seeds and bulbs grow into mature plants • find out and describe how plants need water, light and a suitable temperature to grow and stay healthy • **Pupils should use the local environment throughout the year**	• 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	• 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. • **Pupils might work scientifically by**: constructing a simple food chain that includes humans (e.g. grass, cow, human).

	amounts of different types of food, and hygiene * **To be done during Health and Fitness week summer term.** • **Pupils might work scientifically by:** observing, through video or first-hand observation and measurement, how different animals, including humans, grow; asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions.	findings using charts. They should describe how they decided where to place things, exploring questions for example: 'Is a flame alive? Is a deciduous tree dead in winter?' and talk about ways of answering their questions.	• **Pupils might work scientifically by:** comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs); observing closely, identifying and classifying the uses of different materials, and recording their observations.	**to observe how plants grow. (Using Nature Diaries)** • **Pupils might work scientifically by**: observing and recording, with some accuracy, the growth of a variety of plants as they change over time from a seed or bulb, or observing similar plants at different stages of growth; setting up a comparative test to show that plants need light and water to stay healthy.	habitats, including microhabitats • **Pupils might work scientifically by**: They could describe the conditions in different habitats and micro-habitats (under log, on stony path, under bushes) and find out how the conditions affect the number and type(s) of plants and animals that live there.	
Personalisation and Subject Links	English: The Crow's Tale Art: human sculpture	English: Non-chronological report- Hibernation	DT: lunar buggy, Computing: space History: UK space race English: Instructions- How to Make a Bird Feeder	English: instructions Art: water gardens painting	Maths: pictogram English: Little Red Reading Hood	DT: food
Key Vocabulary	Offspring, reproduction, growth, child, young/old stages (examples - chick/hen, baby/child/adult, caterpillar/butterfly)	Living, dead, never been alive	Materials – wood, metal, plastic, glass, brick, rock, paper, cardboard Properties – as for Y1 plus opaque, transparent and translucent, reflective, non-reflective, flexible, rigid	Seed, bulb, plant, water, light, temperature, growth, healthy, mature, observe, germinate	Names of local habitats e.g. pond, woodland etc. Names of micro-habitats e.g. under logs, in bushes etc	Food, food chain

			Shape- push/pushing, pull/puling, twist/twisting, squash/squashing, bend/bending, stretch/stretching			
Year 3	**Animals Inc Humans**		**Forces & Magnets**	**Rocks & Soil**	**Plants (**across summer term)	**Light & Shadows** (across summer term)
Key Stage 2 National Curriculum	skeletons identify that humans and some other animals have skeletons and muscles for support, protection and movement	healthy eating 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	• compare how things move on different surfaces • notice that some forces need contact between 2 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 2 poles • predict whether 2 magnets will attract or repel each other, depending on which poles are facing	• 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	• 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	• 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 light from the sun can be dangerous and that there are ways to protect their 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
Personalisation and Subject Links	P.E. movement	DT food tech: sandwiches		geog volcanoes & earthquakes art fossil prints	link with environment	D.T. outdoor shelter from the sun art silhouettes
Key Vocabulary	Bone Skeleton Joint Muscle Vertebrate Invertebrate Support Protect Move Skull Ribs Spine carnivore herbivore omnivore ext Exoskeleton	nutrition nutrients carbohydrates sugar starch protein vitamins minerals fibre fat Dairy Carnivore Herbivore Omnivore Vegetarian Energy Growth	Magnet (horseshoe/bar /button) magnetic poles attract repel force push pull contact force non-contact	(types of rock, sizes of rocks) Rock Igneous Metamorphic Sedimentary Lava Volcano Fossil Pressure Permeable Absorb Soil Humus Clay	Focus on function of part of plant Types and names of plants photosynthesis pollen pollination reproduce stamen carpel dispersal ext osmosis/ capillary action chlorophyll transpiration	Light light source darkness shadow transparent translucent opaque shiny matt surface reflect(ive) mirror comparative language

	Endoskeleton (Hydrostatic skeleton)					
Year 4	**Electricity**	**Sound**	Ongoing science using 'Explorify'.	**Animals including Humans**	**Living things and their habitats**	**States of Matter**
Key Stage 2 National Curriculum	• 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. **Pupils might work scientifically by:**	• 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. • **Pupils might work scientifically by**: • Find patterns in the sounds that are made by different objects such as saucepan lids of different sizes or elastic bands of different thicknesses. • They might make earmuffs from a variety of different		• 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 • Construct and interpret a variety of food chains, identifying producers, predators and prey. **Pupils might work scientifically by:** • Compare the teeth of carnivores and herbivores, and suggesting reasons for differences • Find out what damages teeth and how to look after them. • They might draw and discuss their ideas about the digestive system and compare them with models or images.	• 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 to living things **Pupils might work scientifically by:** • use and make simple guides or keys to explore and identify local plants and animals; making a guide to local living things • Raise and answer questions based on their observations of animals and what they have found out about other animals that they have researched.	• 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. **Pupils might work scientifically by:** • Group and classify a variety of different materials; exploring the effect of temperature on substances such as chocolate, butter, cream • Research the temperature at which materials change state, for example,

	• observing patterns, for example, that bulbs get brighter if more cells are added, that metals tend to be conductors of electricity, and that some materials can and some cannot be used to connect across a gap in a circuit.	materials to investigate which provides the best insulation against sound. They could make and play their own instruments by using what they have found out about pitch and volume.				when iron melts or when oxygen condenses into a liquid. • Observe and record evaporation over a period of time, for example, a puddle in the playground or washing on a line, and investigate the effect of temperature on washing drying or snowmen melting.
Personalisation and Subject Links	Art: drawing circuits English – describe what they are doing and explain what they have found out.	Music – Hearing sounds and pitch D&T- Making instruments		Art – Drawing of digestive system and teeth. ICT – Research	Art: drawing and painting habitats. English – discussions / debates about habitats and impacts. ICT – Recording information and taking photographs.	Maths – data logging. Classifying and grouping materials. English – Descriptions and explanations throughout unit.
Key Vocabulary	Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol	sound, source, vibrate, vibration, travel, pitch (high, low), volume, faint, loud, insulation		Saliva, tongue, teeth, omnivore, carnivore, herbivore, digestion, chemicals, digest, break up, liquid, large and small intestine, gallbladder, incisors, molars, canines	Classification, classification keys, environment, habitats, humans, dangers, conservation, negative, positive, migrate, hibernate.	Solid, liquid, gas, state change, melting, freezing, melting point, boiling point, evaporation, temperature, water cycle
Year 5	**Living Things**	**Materials**	**Ongoing science using 'Explorify'.**	**Changing Materials**	**Earth and Space**	**Forces**

Key Stage 2 National Curriculum	• To dissect and label the parts of a flowering plant, including male and female structures. • To record findings as an annotated botanical illustration of a flowering plant. • To learn about the lifecycle and reproduction of amphibians and insects. • To learn about the lifecycle and reproduction of mammals and birds. • To learn about some famous naturalists. • To present information about a famous naturalist. **Children might work scientifically by**: • By **observing and comparing** the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times). • By asking **pertinent questions**. • By suggesting reasons for	• I can compare materials according to their properties. • To plan and carry out an investigation on a range of materials to test for hardness. • To present results, identifying the hardest materials that are also fit for purpose as a food prep surface. • To plan an investigation on given materials to explore thermal insulating properties. • To carry out an investigation on given materials to explore thermal insulating properties. • To find out about how chemists create new materials. • To record and present findings, identifying the best materials for keeping liquids hot or ice cold. • To find out about how chemists create new materials. **Children might work scientifically by:** • Pupils should build a more systematic understanding of materials by exploring and comparing the properties of a broad range of materials, including relating		• To plan and carry out an investigation into soluble materials. • I can use different processes to separate mixtures of materials. • I can investigate materials which will dissolve. • To plan and carry out irreversible cooking investigations that may create some new materials. • I can identify and explain irreversible chemical changes. **Children might work scientifically by:** • They should explore reversible changes, including, evaporating, filtering, sieving, melting and dissolving, recognising that melting and dissolving are different processes. • Pupils should explore changes that are difficult to reverse, for example, burning, rusting and other reactions, for example, vinegar with bicarbonate of soda.	• I can explain why we know the Sun, Earth and Moon are spherical. • To create and discuss a scaled solar system model. • I can explain day and night and the apparent movement of the sun across the sky. • I can explain the movement of the Moon. • To produce an information text. • To research about the Sun, Moon and Earth. **Children might work scientifically by:** • By comparing the time of day at different places on the Earth through internet links and direct communication. • By creating simple models of the solar system. • By discussing scientific ideas.	• To know what gravity and resistance are and identify balanced and unbalanced forces. • To plan an investigation into the effectiveness of parachutes. • To design a parachute. • I can carry out and investigation offering possible explanations. • To investigate the effects of friction. • To investigate the effect of boat shape on water resistance. • To explore the effect gravity has on objects and how the first theory of gravity was developed. **Children might work scientifically by:** • By planning an investigation. • By carrying out an investigation. • By looking at famous scientists

	similarities and differences. • By trying to grow new plants from different parts of the parent plant, for example, seeds, stem and root cuttings, tubers, bulbs. • By **observing changes** in an animal over a **period of time** (for example, by hatching and rearing chicks). • By **comparing** how different animals reproduce and grow.	these to what they learnt about magnetism in year 3 and about electricity in year 4. • They should find out about how chemists create new materials, for example, Spencer Silver, who invented the glue for sticky notes or Ruth Benerito, who invented wrinkle-free cotton. • Pupils might work scientifically by: carrying out tests to answer questions, for example, 'Which materials would be the most effective for making a warm jacket, for wrapping ice cream to stop it melting, or for making blackout curtains?'				
Personalisation and Subject Links	Computing – digital research Art – sketching English – writing information texts English – speaking and listening	Computing – digital research English – writing English – speaking and listening		Mathematics - graphs English – writing English – speaking and listening	Mathematics - ratio English – writing Computing – digital research	English – writing Computing – digital research
Key Vocabulary	gamete, stamen, stigma, carpel, pistil, pollination, germination, flowering, sexual reproduction, life cycle, seed, pollen, anther, filament, style,	Material, property, magnetic, hard, transparent, flexible, permeable, opinion/fact, variables, accuracy, precision, scatter graphs, material names,		variables, accuracy, precision, enquiry, solid, liquid, gas, dissolve, soluble, solute, solution, line graph, Separate, mixture, suspension, insoluble, dissolve,	Earth, Sun, Moon, sphere, circle, evidence, flat, round, solar system, celestial body, sphere/spherical, Mercury, Venus, Mars, Jupiter, Saturn, Uranus,	Gravity, forces, Isaac Newton, newton meter, weight, mass, variables, accuracy, causal relationships, support/refute, fall,

	ovary, botanical illustration, dissection, asexual & sexual reproduction, metamorphosis, amphibian, insect, life cycle, mammal, bird, sexual reproduction, life cycle, gestation, foetus, sperm, egg, uterus, chick, egg, baby, adult, Natural scientist, naturalist, observation, conservation, endangered	property names, enquiry, Variables, accuracy, precision, line graphs, causal relationship, degree of trust, thermal insulator/conductor, Adhesive, sticky, solution, problem, microsphere adhesive, persistent, cotton, chemistry		evaporate, filter, sieve, magnet, attract, particles, Enquiry, new material, not usually reversible, irreversible, reversible, boiled, scrambled, poached, physical, chemical, reaction, reactant, product	Neptune, Pluto, 'dwarf' planet, orbit, opinion/fact, accuracy, precision, scatter graphs, line graphs, support/refute	gravity, water resistance, Fraction, force, brake, prediction, investigation, measure, observe, variables, results, support, fall, Earth, gravity, air resistance, friction, moving surfaces, air resistance, friction, balancing force
Year 6	**Evolution and Inheritance**	**British Science Week Activities**	**Living Things**	**Light**	**Great Science Share Investigation**	**Animals including Humans**
Key Stage 2 National Curriculum	• 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 • Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. **Children might work scientifically by:**		• 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. 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;	• 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. • **Children might work scientifically by:** • Observe and compare how		• identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood (6-Animals, including Humans) • recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function (6-Animals, including Humans) • describe the ways in which nutrients and water are transported within animals, including humans (6-Animals, including Humans) **Children might work scientifically by:** • Observe and record, with some accuracy, the pulse rate of individuals

	• Observe and excavate our own fossils • Compare fossils to the animals we know today		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. • Plants can be divided broadly into two main groups: flowering plants; and non-flowering plants. **Children might work scientifically by:** • Compare different groups of animals and plants. • Observe and classify different flowering plants, non-flowering plants and animals. • Draw conclusions and explain our reasoning.	shadows are formed and how they can be bigger/smaller. • Observe and experiment with how light travels. • Create scientific diagrams with detailed labels, using scientific vocabulary. • Explain reasoning to others (when designing periscopes and also with an explanation about the moon not being a source of light)		• Observe and make a model of blood • Set up a comparative test to show how exercise affects our heart rate
Personalisation and Subject Links	Art: Fossil art work DT: Home learning opportunity to possibly make our own fossils English: Darwin, Wallace and Anning biographies Newspaper report showcasing the new animal species they design		Art: observational drawings Maths: Venn diagrams, flow charts etc.	**English:** Writing explanations and non-chronological reports **Maths:** recording results in tables and measuring angles **DT:** Making periscopes	DT: Blood model English: non-chronological reports Maths: data handling (tables and graphs to record pulse rates) Art: Homework task – portrait/haiku for blood components	
Key Vocabulary	Vary, characteristics, adapted, environment fossils, evolution, change over time, species, population, features,		Various animal types inc mammals, amphibians, fish, invertebrates, worms etc	Refraction, transparent, opaque, translucent, shadow, prism, visible spectrum	Lungs, veins, circulatory system, arteries, heart, blood, blood vessels, capillaries, oxygen, carbon dioxide, nutrients,	

	trait, inherit, reproduce, offspring, variation, mutation, survive, adaptation, consumer, producer, predator, prey, food chain					