EYFS	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Friendships/ animals**	**Celebrations**	**All about me**	**Growing and Change**	**Oh I do like to be beside the seaside**	**We've got the whole world in our hands**
Science focus (In line with NC)	**Animals including humans**	**Seasonal Changes (Energy)**	**Animals including humans**	**Plants**	**Seasonal Changes (Energy)**	**Materials**
Knowledge and Understanding of the World	Can talk about things they have observed including animals Look closely at similarities, differences, patterns and change.	Observe and explain why certain things may occur (e.g. leaves falling off trees, weather changes). Look closely at similarities, differences, patterns and change. Comments and questions about the place they live or the natural world. Developing an understanding of change.	be able to identify different parts of their body. Have some understanding of healthy food and the need for variety in their diets. Know the effects exercise has on their bodies. Look closely at similarities, differences, patterns and change.	Know some names of plants, trees and flowers May be able to name and describe different plants, trees and flowers Have some understanding of growth and change. Comments and questions about the place they live or the natural world. Look closely at similarities, differences, patterns and change.	Observe and explain why certain things may occur (e.g. leaves falling off trees, weather changes). Look closely at similarities, differences, patterns and change. Comments and questions about the place they live or the natural world. Developing an understanding of change.	Be able to show care and concern for living things. Comments and questions about the place they live or the natural world. Look closely at similarities, differences, patterns and change. (habitats, looking after the planet – minibeasts)

YEAR 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Toys	Asia to Australia	LOCAL HISTORY STUDY- Smallwood	Oceans & Seas	Fire!	GEOGRAPHY STUDY- The UK (with a focus on London)
Curriculum links	History- Changes to toys and games within living memory English-Major Glad, Major Dizzy	Geography-comparing weather/climate in different continents English – There's a Tiger in the Garden DT- Foods from different continents – UK seasonal food				Art - Botany drawing and Beatrix Potter Geography – comparing Lake District with a city – Beatrix Potter's homes School Garden study
Science	Marvellous Materials	Autumn & Winter	Humans and other animals		Spring & Summer	What's growing in the school garden?
Area	MATERIALS	ENERGY (SEASONAL CHANGE)	ANIMALS, INCLUDING HUMANS		ENERGY (SEASONAL CHANGE)	PLANTS
NC objectives	Distinguish between and object and the material from which it is made. Identify and name a variety of everyday materials, including wood, metal, plastic, glass, water and rock Describe the simple physical properties of a variety of everyday materials.	Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.	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 four 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. Identify and name the roots, trunk, branches and leaves of trees.

	Compare and group together a variety of everyday materials based on their simple properties				
Vocabulary Progression	Hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy/not bendy, waterproof/not waterproof, absorbent, opaque	Seasons, spring, summer, autumn, winter, windy, sunny, overcast, snow, rain, temperature	Amphibians, birds, fish, mammals, reptiles, carnivores, herbivore, omnivore, sight, hearing, touch, taste, smell, head, neck, ear, mouth, shoulder, hand, fingers, leg, foot, thumb, eye, nose, knee, toes, teeth, elbow	Seasons, spring, summer, autumn, winter, windy, sunny, overcast, snow, rain, temperature	Leaves, trunk, branch, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen
Key Texts	The Great Paper Caper (Oliver Jeffers) Who Sank the Boat (Pamela Allen) Cinderella (Traditional Tale)	Tree: Seasons Come, Seasons Go After the Storm (Mick Inkpen)	One Year With Kipper (Mick Inkpen) Snail Trail (Ruth Brown) Superworm (Donaldson & Scheffler) What the Ladybird Heard (Donaldson)		Trees: Seasons Come, Seasons Go (Hegarty & Teckentrup) A Little Guide to Wild Flowers (Charlotte Voake) The Things That I LOVE about TREES (Butterworth) Harry's Hazlenut (Parsons) The Tiny Seed (Eric Carle)
Key Scientists	William Addis (Toothbrush) Charles Mackintosh (Waterproof coat) John McAdam (roads)	Dr Steve Lyons (Extreme Weather)	Chris Packham (Animal Conservationist)	Holly Green (Meteorologist)	Beatrix Potter (Botanist) David Bellamy Alys Fowler (Horticulturist) (Edible Garden book)
Places of Interest	Museum of Childhood – Sudbury Hall Sheffield –Steel		Peak Wildlife Park Local farm	Catalyst – Operation Earth KS1 workshop	Gruff Outdoor Learning

	Stoke - Ceramics Macclesfield – Paradise Mill				

YEAR 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Landscapes**	**Queen E to Queen V**	**LOCAL HISTORY STUDY- Styal Mill**	**Hot and Cold areas of the world**	**Explorers and engineers**	**Asia -India / China**
Curriculum Links	**Geography – landscapes – urban v city living things/ habitats** **What are different materials used for in the landscape?**	**History – Children's lives, diet and health in the past**	**Geography-animals in different climates** **Food chains in hot and cold areas of the world.**		**History – David Bellamy. David Attenborough**	
Science	**Using Materials**	**Healthy Animals**	**Food chains**		**Ready, Steady, Grow!**	
Area	**Materials**	**Animals including humans**	**Living things & their habitats**		**Plants**	
NC Objectives	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 shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Know that animals, including humans, have offspring which grow into adults Know the basic stages in a life cycle for animals, including humans. Find out and describe the basic needs of animals, including humans, for survival (water, food and air).	Explore and compare the difference 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		Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and warmth to grow and stay healthy	

		Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	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 the different sources of food.	
Vocabulary Progression	Waterproof, fabric, rubber, cars, rock, paper, cardboard, wood, metal, plastic, glass, brick, twisting, squashing, bending, matches, cans, spoons	Living, dead, never alive, habitats, micro-habitats, food, food chain, leaf litter, shelter, seashore, woodland, ocean, rainforest, conditions, desert, damp, shade	Living, dead, never alive, habitats, micro-habitats, food, food chain, leaf litter, shelter, seashore, woodland, ocean, rainforest, conditions, desert, damp, shade	Leaves, trunk, branch, root, seed, bulb, flower, stem, wild, garden, deciduous, evergreen, observe, grow, compare, record, temperature, predict, measure, diagram, germinate, warmth, sunlight.
Key Texts				
Key Scientists				
Places of Interest	MOSI	Museum of Childhood		Eden Project Gruff Outdoor Learning (Marton) – Flower Farmer Biddulph Grange – gardens around the world Rode Hall

YEAR 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Water, Weather & Climate**	**Stone Age to Iron Age**	**LOCAL HISTORY STUDY- Roman Chester**	**Natural Disasters**	**The Egyptians**	**GEOGRAPHY STUDY- The UK (cities & counties)**
Curriculum Links		**History – Stonehenge**	**History – Archaeological record Mary Anning Geography – Rock Cycle**			**Geography – City gardens and country green spaces – Sheffield Winter Gardens, Rode Hall, Biddulph Grange Congleton in Bloom**
Science	**Keeping Healthy**	**Light & Shadow**	**Rocks & Fossils**		**Amazing Magnets**	**Roots & Shoots**
Area	**Animals including humans**	**Energy**	**Materials**		**Forces & Magnets**	**Plants**
NC Objectives	Identify that animals, including humans, need the right types and amount of nutrition, and they cannot make their own food; they get their nutrition from what they eat. Know how nutrients, water and oxygen are transported within animals and humans.	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.	Compare and group together different kinds of rocks based on their appearance and simple physical properties Describe in simple terms how fossils are formed when things that have lived are trapped within rock		Compare how things move on different surfaces. • Know how a simple pulley works and use making lifting an object simpler Notice that some forces need contact between two objects, but magnetic forces can act at a distance. Observe how magnets attract and repel each	Identify and describe the functions of different parts of the flowering plant: roots, stem/trunk/leaves and flowers Explore the part flowers play in a flowering plants life cycle, including pollination, seed formation and seed dispersal Explain the requirements of plants for life and growth (air, light, water, nutrients from soil, room to grow) and how they vary between plants

	Know about the importance of a nutritious, balanced diet. Identify that humans and some other animals have skeletons and muscles for support, protection and movement	Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the sizes of shadows change.	Recognise that soils are made from rocks and organic matter	other and attract some materials and not others. Compare and group together a variety of everyday materials based on whether they are attracted to a magnet and identify some magnetic materials. Describe magnets as having two poles. Predict whether two magnets with attract or repel each other, depending on which poles are facing.	Know the way in which water is transported between plants
Vocabulary Progression	Nutrients, nutrition, carbohydrates, protein, fats, vitamins, minerals, water, fibre, skeleton, bones, joints, endoskeleton, exoskeleton, hydrostatic skeleton, vertebrates, invertebrates, muscles, contract, relax	Light source, dark, reflect, ray, mirror, bounce, visible, beam, sun, glare, travel, straight, opaque, shadow, block, transparent, translucent.	Rocks, igneous, metamorphic, sedimentary, anthropic, permeable, impermeable, chemical fossil, body fossil, trace fossil, Mary Anning, cast fossil, mould fossil, replacement fossil, extinct, organic matter, topsoil, sub soil, base rock	Force, push, pull, friction, surface, magnet, magnetic, magnetic field, pole, north, south, attract, repel, compass	Air, light, water, nutrients, soil, support, anchor, reproduction, pollination, dispersal, transportation, flower, energy, growth, seedling, carbon dioxide, oxygen, sugar, material, photosynthesis, chlorophyll

YEAR 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Ancient Greece	The Arctic	History Study- The Staffordshire Hoard	Vikings	Rainforests	Geography Study- Europe
Curriculum Links	History – Hippocrates, Olympics	Geography – Polar ice caps/ Global warming / Climate change Art- Ephemeral Art/ Andy Goldsworthy ice and snow			Geography – Rainforest plants and animals/ deforestation and habitat loss	Geography – Europe and Eurovision DT- Joining materials and insulation
Science	Chewing, Churning and Chains	Freezing and Melting	Electricity		Identifying and Classifying	Eurovision
Area	Animals including humans	Materials	Electricity		Living things and their habitats	Energy (Sound)
NC Objectives	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.	Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when heated or cooled, and measure and research the temperature at which this happens in degrees Celsius. Identify the part played by evaporation and condensation in the water cycle and associate the	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 a lamp will light in a simple series circuit, based on whether the lamp is part of a complete loop with a battery. Recognise that a switch opens and closes the circuit and associate this with whether a		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 danger to living things	Know how sound is made associating some of them with vibrating. Know what happens to a sound as it travels from its source to our ears. Know the correlation between the volume of a sound and the strength of the vibrations that produced it. Know how sound travels from a source to our ears.

		rate of evaporation with temperature.	lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors. Know the difference between a conductor and an insulator, giving examples of each. Safety when using electricity.	Construct and interpret a variety of food chains, identifying producers, predators and prey	Know the correlation between pitch and the object producing a sound.
Vocabulary Progression	Herbivore, Carnivore, Digestive system, tongue, mouth, teeth, oesophagus, stomach, gall bladder, small intestine, pancreas, large intestine, liver, tooth, canine, incisor, molar, premolar, producer, consumer.	Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice, temperature, process, condensation, evaporation, water vapour, energy, precipitation, collection	Electricity, electric current, appliances, mains, crocodile clips, wires, bulb, battery cell, battery holder, motor, buzzer, switch, conductor, electrical insulator, component	Environment, flowering, nonflowering, plants, animals, vertebrates, fish, amphibians, reptiles, mammals, invertebrate, human impact, nature reserves, deforestation	Amplitude, volume, quiet, loud, ear, pitch, high, low, particles, instruments, wave.

YEAR 5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Save our Planet!	Benin Civilization	Tudors (Little Moreton Hall)	Migration	British Slave Trade	Geography Study- The Americas
Curriculum Links	Eco Schools/ Geography – Micro-plastics and pollution technologies to extract micro-plastics Geography - Melting ice caps Geography - Cleaning dirty water	School Grounds - Seasonal changes/ tree seed dispersal Hibernation in life cycles RE – Poppy/life cycle History - Life cycles of animals native to Benin – Nile crocodile/ elephant / vulture	History- comparing life expectancy then and now PSHE - SRE		DT- Forces used in different transport PSHE/RE – Lifeboats/Asylum seekers and dangerous crossings	History- NASA and space Exploration (Apollo 11 & 13) Geography- Scientists on the ISS/ Viewing Earth from Space – Geographical features of Americas/ Weather and Climate from Space
Science	Materials and our impact on the planet	Life Cycles	Growing and Changing		May the Force be with you!	Space Explorers
Area	Materials and their properties (sustainability focus)	Living things and their habitats	Animals including humans		Forces	Earth and Space

NC Objectives	Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. Know 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.	Know the life cycle of different living things, e.g. Mammal, amphibian, insect bird. Know the process of reproduction in plants. Know the process of reproduction in animals.	Different animals mature at different rates and live to different ages. Puberty is something we all go through, a process which prepares our bodies for being adults, and reproduction Hormones control these changes, which can be physical and/or emotional.	Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object and the impact of gravity on our lives. Identify the effects of air resistance, water resistance and friction, which act between moving surfaces. Recognise that some mechanisms, including levers, pulleys, and gears, allow a smaller force to have a greater effect	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 Describe the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
Vocabulary	Solid, liquid, gas, particles, state, materials, properties, matter, melt, freeze, water, ice, temperature, process, condensation, evaporation, water vapour, energy, precipitation, collection	Reproduction, Sexual, Asexual, Pollination, Dispersal, reproduction, cell, fertilisation, pollination, male, female, pregnancy, young, mammal, metamorphosis, amphibian, insect, egg, embryo, bird, plant	Foetus, Embryo, Womb, Gestation, Baby, Toddler, Teenager, Elderly, Growth, Development, Puberty, Hormone, Physical, Emotional	Air resistance, Water resistance, Friction, Gravity, Newton, Gears, Pulleys, force, push, pull, opposing, streamline, brake, mechanism, lever, cog, machine, pulley.	Earth, Sun, Moon, Axis, Rotation, Day, Night, Phases of the Moon, star, constellation, waxing, waning, crescent, gibbous. Mercury, Venus, Mars, Jupiter, Saturn, Uranus, Neptune, planets, solar system, day, night, rotate, orbit, axis, spherical, geocentric, heliocentric.
Key Texts					
Key Scientists					
	Catalyst – Operation Earth				Catalyst – Space workshop/Planetarium Jodrell Bank - Planetarium

YEAR 6	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Antarctica**	**WW2**	**History Study - Crime and Punishment**	**Wolves - Populations**	**Darwin's Journey**	**Fieldwork – Local study**
Curriculum Links	**History/DT- Explorers - Periscopes/binoculars/magnifying glasses**	**DT-Lighthouse with a circuit/Morse code machine History- Blackouts/dimmer switch RE-Christmas lights**	**PSHE- SRE/ exercise and lifestyle/balanced diet PE-Impact of exercise/changes in heart rate and breathing**		**History-Darwin/Wallace, Family history/ Family trees Geography – animal and plant adaptation to different climates and environments**	**Geography/ECO Schools- audit of plant and wildlife on school grounds/ classification / using quadrants**
Science Area	**Light Energy**	**Electricity Electricity**	**A healthy body Animals including humans**		**Game of Survival Evolution & Inheritance**	**Classification Living things and their habitats**
NC Objectives	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	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.	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 lifestyle on the way their bodies function. Describe the ways in which nutrients and water are		Know about evolution and can explain what it is. Know how fossils can be used to find out about the past. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents	Classify living things into broad groups according to observable characteristics and based on similarities and differences. Give reasons for classifying plants and animals based on specific characteristics.

	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. Know how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.	Use recognised symbols when representing a simple circuit in a diagram.	transported within animals, including humans.	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	
Vocabulary Progression	Light source, dark, reflect, ray, mirror, bounce, visible, beam, sun, glare, travel, straight, opaque, shadow, block, transparent, translucent. Reflect Absorb Emitted Scattered Refraction	Electricity, neutrons, protons, electrons, nucleus, atom, electric current, appliances, mains, crocodile clips, wires, bulb, battery cell, battery holder, motor, buzzer, switch, conductor, electrical insulator, conductor.	Oxygenated, Deoxygenated, Valve, Exercise, Respiration Circulatory system, heart, lungs, blood vessels, blood, artery, vein, pulmonary, alveoli, capillary, digestive, transport, gas exchange, villi, nutrients, water, oxygen, alcohol, drugs, tobacco.	Fossils, Adaptation, Evolution, Characteristics, Reproduction, Genetics, Variation, Inherited, Environmental, Mutation, Competition, Survival of the Fittest, Evidence	Variation Organisms Populations. Classification Characteristics Environment, flowering, nonflowering, plants, animals, vertebrates, fish, amphibians, reptiles, mammals, invertebrate, human impact, nature reserves, deforestation. Classify, compare, bacteria, microorganism, organism, invertebrates, vertebrates, Linnaean