	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	How do I look after my body?		Exploring Ice	What is a life cycle?	Exploring Animals	Science week working scientifically
Sequencing	To be able to explain the importance of oral hygiene To know how to look after our bodies and personal hygiene To know the importance of eating a variety of fruit and vegetables To be able to brush my teeth efficiently To be able to make healthy food choices		To know that ice, ice-cream, chocolate and bread can change states To know that some changes cannot be undone To know that some change can happen more than once To be able to use their sense to explore the change of states	To know what a life cycle is To be able to describe the life cycle of a butterfly To be able to explain that animals change as they grow To be able to observe minibeasts closely To be able to select equipment and materials to create a bug habitat To be able to use senses to explore the outdoors	To be able to know the names of animals and their babies To be able to explain that animals change as they grow To know that animals live in different habitats To be able to use my senses to explore the outdoors	To be able to make observations and simple comparisons To be able to perform a simple test on waterproof materials To be able to explore their sense of taste to classify different foods To be able to make simple predictions To be able to recognise simple types of forces and describe their effects
Vocabulary	Teeth, brush, hygiene, toothbrush, healthy, fruit, vegetable, wash		Change, melt, freeze, cold, hot	grow, change, habitat, egg, butterfly, caterpillar, chrysalis, life-cycle	Cow, calf, dog, puppy, cat, kitten, sheep, lamb, horse, foal, duck, duckling, pig, piglet, hen, chick	Watch, same, different, sour, taste, sweet, bitter, salty, push, pull
YEAR 1	Who am I?	Celebrations	Polar Places	Plants and Animals where we live	On Safari	Science week working scientifically
Sequencing	To be able to comment on how they have changed since they were a baby	To be able to investigate light and dark To be able to identify sources of light	To be able to identify and name a variety of animals including fish, birds, mammals, reptiles and amphibians.	To be able to identify and name a variety of common wild and garden plants, including deciduous and	To be able to plan ahead and choose simple equipment To be able to identify invertebrates and	

	To be able to talk about the eye and the sense of sight To be able to create a pictogram based on favourite tastes To be able to use scientific vocabulary to describe textures To be able to identify, name, draw and label the basic parts of the human body To be able to say which part of the body is associated with each sense To be able to compare themselves with others using measurements and comparative language	To be able to ask scientific questions and find answers To be able to use materials to create a dark space in the classroom To be able to plan and carry out a test using shadows To be able to identify which part of the body is connected to sight	To be able to classify animals into appropriate groups and explain their choices To be able to identify and name common animals that are carnivores, herbivores and omnivores To be able to describe the simple properties of everyday materials (climate) To be able to compare the simple properties of everyday materials (gloves)	evergreen trees in their local area To be able to identify leaves and the name of the tree it belongs to To be able to observe changes across the four seasons To be able to describe and classify birds	name parts of their bodies To be able to observe invertebrates in their local habitat To be able to ask simple questions about invertebrates To research the answers to our questions about invertebrates	
Vocabulary	Backbone, ear lobe, elbow, eye socket, hips, joints, ribs, thigh, tongue, vertebrae, nail, senses, chin, spine, nose, ribs, human, sight, taste	Bark, battery, bright, bulb, candle, cool, dark, dull, fast, flame, flower, fruit, high, hot, leaf, light, liquid, loud, low, mirror, observe, plant, quiet, root, senses, shoot, slow, solid, texture, torch, wax, wick, transparent, translucent and opaque	Antarctic, Arctic, carnivore, clothes, cold, explorer, freeze, frozen, herbivore, habitat, ice, iceberg, North Pole, omnivore, penguin, polar bear, sea lion, seal, snow, South Pole, warm, waterproof, weather, whale	Animals, birds, buds, feed, habitat, identify, leaves, live, nest, plants, sort, tree, twigs, amphibians, fish, flowers, habitat, mammal, reptile, stem, tree	Abdomen, antennae, detritivore, exoskeleton, eyes, food chain, habitat, head, insect, invertebrate, jointed, key, legs, metamorphosis, pond, sections, thorax, vertebrate	Test, results, question, answer, sort, describe
YEAR 2	Healthy Me	Materials Monster	Squash, Bend, Twist and Stretch	Our Local environment	Young Gardeners	Science week working scientifically

Sequencing	I know that mental health is connected to physical health. I can describe the importance of exercise for humans. I know the long-term benefits of exercise. I can carry out a pattern seeking investigation. I can identify and classify food into different categories. I can describe the importance of eating the right amounts of different food types.	I can use different words to describe the properties of different materials. I recognise that things are made of different materials. I can identify the properties of different materials. I can identify and compare the suitability of a variety of everyday materials. I can test the properties of a material for a purpose. I can set up a fair test to test the absorbency of materials.	To understand how materials can be changed by squashing, bending, twisting and stretching. To practise squashing, bending, twisting and stretching materials. To sort things depending on their abilities to stretch, twist, bend and squash something. To use scientific vocabulary to describe how they changed the shape of the balloon. To carry out their test and use numerical data to answer their question about stretching. To explain that they squash the bottle, then the air will make the rocket mouse move.	To explore and compare the differences between things that are living, dead and things that have never been alive. To identify and classify things as alive, dead or never alive. To identify micro-habitats and know that plants and animals live there. To describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. To gather and record data to help in answering questions about micro habitats. To use the idea of a simple food chain to describe how animals obtain their food from plants and other animals. To classify parts of a food chain and sort	To identify and name a variety of plants in our local environment. To find seeds in our local area and ask questions of them. To observe and record the growth from a bulb over time. To describe how seeds and bulbs grow into mature plants. To perform simple tests and use observations and ideas to suggest answers to questions. To make predictions, comparing the seeds that they have planted and their different conditions. To know what conditions produce a healthy plant.	To be able to observe and compare different melting speeds in different conditions To be able to raise enquiry questions To be able to suggest different ways to test how waterproof materials are To be able to gather and record data to help in answering questions To be able to observe liquid droplets carefully

				living things accordingly		
Vocabulary	Calm, calves, cough, exercise, feed, fitness, food, fruit, germs, happiness, health, healthy, hygiene, hygienic, muscle, needs, sneeze, stomach, thighs, vegetables	Absorbent, bend, brittle, bumpy, card, change, concrete, dull, elastic, fabric, flexible, glass, hard, man-made materials, metal, natural materials, opaque, paper, plastic, recycle, rough, rubber, shiny, smooth	Bend, dough, elastic, pull, push, squash, squeeze, stretch, twist	alive, carnivore, dead, food chain, habitat, herbivore, micro-habitat, never alive, omnivore, predator, prey	Annual, bulb, compost, flower, fruit, germinate, germination, fruit, health, healthy, leaf, plant, root, seed, seedling, soil, stem, vegetable, properties, materials,	Observe, group, compare, identify, differences, similarities, measurements, equipment, question, answer, research
YEAR 3	Rocks, Soils and Fossils	Food and our bodies	Light and Shadows	Forces and Magnets	How does your garden grow?	Science week working scientifically
Sequencing	To compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. To describe in simple terms how fossils are formed when things that have lived are trapped within rock. To recognise that soils are made from rocks and organic matter.	To 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. To Identify that humans and some other animals have skeletons and muscles for support, protection and movement.	To recognise that we need light in order to see things and that dark is the absence of light. To notice that light is reflected from surfaces. Recognise that light from the Sun can be dangerous and that there are ways to protect the eyes. To recognise that shadows are formed when the light from a light source is blocked by a solid object. To find patterns in the way that the	I can identify different types of forces I can compare how things move on different surfaces I can find which magnet is the strongest I can identify different pushes and pulls I can find out if magnets work through different materials I can consolidate learning through an end of unit assessment.	To identify and describe the functions of different parts of flowering plants: roots, stem / trunk, leaves and flowers. To 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. To investigate the way in which water is transported within plants. To explore the part that flowers play in	To be able to draw simple conclusions To be able to plan an investigation based on forces To be able to make careful observations To be able to ask relevant questions and use scientific enquiry to answer them To be able to evaluate outcomes against a success criteria

			sizes of shadows change		the life cycle of flowering plants, including pollination, seed formation and seed dispersal.	
Vocabulary	Mineral, rock, permeable, impermeable, crystals, magma, sediment, sedimentary, humus, fossil, extinct, palaeontologists, granite, igneous, metamorphic, soil, marble, sand, clay, limestone	Balanced diet, biceps, carbohydrates, contract, relax, exoskeleton, fats, femur, humerus, joint, muscle, nutrients, protein, skeleton, triceps, vertebrate	Description, dull, explanation, light source, mirror, observation, opaque, reflect, shadow, shiny, translucent, transparent	Attract, compass, contact, force, iron, magnet, magnetic, magnetic North, non-contact, non-magnetic, pol, prediction, repel	Carpel, flower, germinate, leaves, life cycle, nutrients, ovary, ovule, petal, photosynthesis, pollen, pollination, root, root hairs, seed dispersal, sepals, stamen, stem, style, stigma, veins	Prediction, conclusion, changes, evidence, classify,
YEAR 4	What's that sound?	Looking at states	Living Things	Power it Up	Teeth and Digestion	Science week working scientifically
Sequencing	I can explain how sounds are made I can investigate vibrations I can explain how sound travels through different materials I can recognise that the sound gets fainted the further you get from the sound source I can explain pitch and volume	I can classify solids, liquids and gases I can explain how materials change state when they are heated I can explain how materials change when they are cooled I can explain the water cycle I can conduct an experiment about evaporation	To be able to classify animals (mammals, birds, fish, reptiles and amphibians) To be able to classify animals using Venn diagrams To be able to identify invertebrates in the local environment To be able to use classification keys	To be able to classify electrical appliances To be able to explain how to stay safe with electricity To be able to identify components within a circuit To be able to create a circuit using a variety of switches To be able to identify electrical insulators and conductors	To be able to identify different teeth and their functions To be able to explain how to take care of their teeth To be able to describe the effects of tooth decay To be able to make a model of the digestive system To be able to explain the functions of the digestive system To be able to classify and identify an owl's food chain	To be able to evaluate methods and suggest how it could have been improved To be able to use their observations to ask deeper and wider questions To be able to gather, record and classify data To be able to plan and set up a fair test To be able to compare the properties of materials over time

					(owl pellet dissection) To be able to create their own food chains	
Vocabulary	Pitch, sound source, vibration, volume	Boiling point, boiling, condensing, evaporation, freezing, freezing point, gas, liquid, matter, material, melting, melting point, solid, temperature, thermometer, water cycle	Amphibian, bird, centipede, classify, fish, flowering plant, habitat, insect, invertebrate, key, mammal, organism, reptile, vertebrate	Battery, bulb, cell, circuit, components, conductor, insulator, mains, rechargeable, switch, terminals, wires	Anus, canine, carnivores, decay, digestion, enamel, energy, herbivore, incisor, incisors, large intestines, molar, molars, mouth, nutrients, oesophagus, omnivores, small intestines, stomach	Prediction, conclusion, classify, gather, diagram, data, changes, record, explanations, bar charts, tables,
YEAR 5	Let's Get Moving	Material World	Circle of Life	Out of this World	Growing up and Growing Old	Science week working scientifically
Sequencing	To explain that objects fall towards the Earth because of the force of Gravity To plan different types of scientific enquiries To carry out secondary research into Galileo and Newton To identify the effects of air resistance To identify the effects of water resistance To identify the effects of friction	I can create a Wordle about materials to identify prior learning. I can identify different properties of materials I can give reasons for the particular uses of everyday materials I can carry out a fair test relating to the particular uses of everyday materials. I can investigate thermal conductors and insulators	To describe sexual reproduction in plants To describe asexual reproduction in plants To describe the life cycle of a mammal To describe the life cycle of an amphibian To describe the life cycle of an insect To describe the life cycle of a bird	I can name all the planets in the solar system I can carry out research on the solar system I can carry out research on Galileo and Copernicus I can explain day and night I can explain the phases of the moon. I can consolidate learning through an end of unit assessment.	Describe the changes as humans develop to old age. Describe the changes as humans develop to old age. Key ideas to develop are; length of pregnancy, how a baby develops and grows during pregnancy and the idea that other mammals have similar pregnancies Describe the changes as humans develop to old age.	To 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. To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. To report and present findings

		I can carry investigate solutions and mixtures I can consolidate learning through an end of unit assessment.			Describe the changes as humans develop to old age. Describe the changes as humans develop to old age. Describe the changes as humans develop to old age. (including puberty)	from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. To take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. To use test results to make predictions to set up further comparative and fair tests. To identify scientific evidence that has been used to support or refute ideas or arguments.
Vocabulary	Air resistance, force meter, friction, gravity, newton, non-contact force, reliable, water resistance, weight	Dissolve, elastic, electrical conductor, evaporate, filter, flexible, hard, insoluble, mixture, plastic, rigid, soluble, solute, solution, solvent, strong, thermal conductor, thermal insulator, tough	Asexual reproduction, bulb, external fertilisation, fertilisation, gestation, internal fertilisation, larva, metamorphosis, pollination, sexual reproduction, sperm	Daytime, geocentric, heliocentric, night time, orbit, planet, solar system, star, sun, time zone	Adolescence, adolescent, adult, arthritis, gestation period, life expectancy, menstruation, pregnant, puberty, teenager	Plan, variables, measurements, precision, repeat, comparative test, predictions, conclusions, pattern

YEAR 6	Electricity	Light	Classifying Living Things	Evolution and Inheritance	Healthy Bodies	Science week working scientifically
Sequencing	To be able to identify electrical symbols To be able to make a circuit drawn from symbols To be able to draw a series circuit using symbols	To be able to explore transparent, opaque and translucent To be able to identify and explain that light travels in straight lines To be able to explain how we see light sources To be able to explain how the shape and size of a shadow are determined To be able to explain how white light is made up of a spectrum of different colours	To be able to use a classification key to correctly identify and organise animal groups To be able to research the work of Carl Linnaeus To be able to classify invertebrates To be able to classify plants according to common observable characteristics To be able to understand the importance and function of microorganisms	To be able to investigate how characteristics are passed from parents to offspring To be able to explain how an animal or plant has adapted to suit their environment To be able to understand what evolution is To be able to research the work of Charles Darwin To be able to make observations of fossils to identify living things that lived on Earth years ago	To be able to describe the functions of blood and blood vessels To be able to identify the main parts of the human circulatory system and explain their functions To be able to research how nutrients are transported around our bodies To be able to explain how the human heart works To be able to dissect a heart and identify in properties To be able to explain the effects of diet and exercise on the body	To be able to consider how tension and compression forces affect the strength of a bridge To be able to record and present measurements using tables and graphs To be able to make predictions and examine their evidence to test their predictions To be able to ask questions and develop a line of enquiry To be able to explain the relationship between height and diameter of a falling liquid
Vocabulary	Battery, blow, cell, complete, component, electrons, filament, fuse	Cornea, iris, lens, light ray, pupil, rainbow, reflection, refraction, symmetry	Amphibian, bacteria, bird, fauna, fermentation, fish, flora, fungi, genus, insect, invertebrate, mammal, microbe, mushroom, organism, reptile, species, toadstool, vertebrate	Adaptation, dinosaur, evolution, fossil, inherited, natural selection, prehistoric, variety	Addiction, aorta, artery, atrium, blood, capillaries, carbon dioxide, circulatory system, de-oxygenated, exercise, heart, lungs, nicotine, oxygen, oxygenated, pulse, respiration, vein, ventricles	Variables, hypothesis, conclusions, relationships, classification, comparative, precision, accuracy, enquiry, interpret