## Science

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EYFS Nursery ———	Planting autumn bulbs, seeds, beans, sunflowers. Gardening / allotment. Collecting seeds. New life investigations. Tending the garden  Make play dough with support  Looking at changes to materials through messy play  Teeth  Insect hunts. Building bird houses. Bird feeders. Mini beasts.  Observe seasons  Growth / Life Cycles. Planting / watering.								
Reception									
Reception	Observe changes through play dough. Scientific water play Mud play / materials and properties Changes in materials / sensory  Light / dark torches food tasting Compare photos of babies Teeth Caterpillar / butterfly / mini beasts Refer to months of the year/seasons, observe changes.  Battery operated toys  Changes in materials / sensory  Changes in materials / sensory								
V4	Animals Including Humans	Materials	Seasons (Across the year)	Plants	Animals Including Humans				
Year 1	Identify and label basic body parts. Identify and locate the 5 senses.	Identify a variety of materials and describe their properties.  Compare and group everyday materials by their properties.	Describe weather associated with the seasons and how the length of day changed during the seasons.	Identify and name common wild and garden plants including deciduous and evergreen trees. Identify and describe the basic structure of a flowering plant including trees.	Identify and name a variety of common animals including carnivores, herbivores and omnivores.				
Year 2	Animals Including Humans Know that all animals including		Plants Observe and describe how seeds	Everyday Materials Identify and compare suitability of a		Living Things And Their Habitats Explore and compare different things			
	humans have babies that grow into adults.		and bulbs grow into mature plants. Investigate and describe how plants	variety of everyday materials. Investigate how the shapes of solid		that are living, dead and that have never been alive.			
	Understand what all animals including humans need to		need water, light and warmth to stay healthy.	objects can be changed by squashing, bending, twisting and		Identify animal and plant habitats.  Describe simple food chains.			
	survive and to stay healthy.  Plants	Forces and Magnets	Light	stretching. Rocks and Soils	Animals Including Humans				
Year 3	Identify the functions of different parts of a flowering plant. Explore what plants need to grow including the transportation of water. Understand the importance of the flower in reproduction.	Compare how things move on different surfaces. Understand that magnets have two poles and can attract or repel one another and some materials.	Understand that we need light in order to see things. Understand that light is reflected from surfaces. Recognise that light from the sun can be dangerous. Understand how shadows are formed and identify how they can change.	Compare and group different kinds of rocks based on physical properties. Describe how fossils are formed. Recognise that soil is mad3e from rocks and organic matter.	Identify that animals including humans need the right types and amount of nutrition and cannot make their own food. Understand that humans and some animals have skeletons for support and protection and muscles for movement.				
Year 4	Sound and Ears Identify how sounds are made through vibration and the vibrations travel to the ear. Find patterns between pitch and volume, and the strength of vibrations that made it. Label parts of the ear.	Electricity Identify common appliances that run on electricity. Construct and name parts of electrical circuits. Identify whether a lamp will light in a simple series circuit. Recognise that a switch opens and closes a circuit. Recognise some common conductors and insulators.	Animals Including Humans Describe the functions of the digestive system. Identify different types of teeth and their functions. Construct and interpret a variety of food chains, identifying producers, predators and prey.	Living Things and Their Habitats Group living things using classification keys. Recognise that environments can change and that this can pose dangers to living things.		States of Matter Compare and group materials as to whether they are solids, liquids or gases. Understand that some materials change state when they are heated or cooled. Understand evaporation and condensation in the water cycle.			
Year 5	Earth and Space Describe the movement of Earth and other planets, relative to the sun. Describe the movement of the moon. Understand that the sun, moon and Earth are spherical bodies. Explain night and day, and the apparent movement of the sun across the sky in relation to the Earth's rotation.		Materials Group materials on the basis of their properties. Know some materials will dissolve to form a solution, and describe how to recover a substance from it. Understand how mixtures might be separated. Understand that dissolving, mixing and changes of state are reversible, but some changes are not reversible.	Explain that unsupported objects fall towards the Earth because of the force of gravity. 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.	Living Things and Their Habitats Describe and compare 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. Describe the life process of reproduction in some animals.	Animals Including Humans Describe the changes as humans develop to old age. Draw a timeline to indicate stages in the growth and development of humans. Know what changes happen during puberty. Research the gestation periods of other animals. Compare the gestation periods of other animals with humans. Find out and record the length and mass of a baby as it grows.			

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Year 6	Animals Including Humans Identify and name the main parts of the human circulatory system. 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	Light	Living Things and Their Habitats  Describe how living things are classified into broad groups according to common observable characteristics.  Describe how living things are classified based on similarities and differences, including micro-organisms, plants and animals. Give reasons for classifying plants and animals based on specific characteristics.	Evolution Including Inheritance 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.	Electricity 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 symbols when representing a simple circuit in a diagram.