



Science Curriculum Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	<p><b>The Human Body</b> Facial features, body parts, the senses</p> <p><b>Seasons of the year; Autumn.</b> Deciduous and evergreen trees. Observing leaves using magnifying glasses, leaves changing colour.</p>	<p><b>Forces</b> push, pull, twist Air transport Water transport</p> <p><b>Seasons of the year: Winter.</b> Animal hibernation, why do some animals hibernate? How do other animals survive winter?</p> <p><b>Transport in the winter</b> snow ploughs, gritting roads, snow tyres.</p> <p><b>Changing state of matter</b> frost and ice- looking closely at ice, what happens when it warms? Why can we see our breath when it is cold?</p>	<p><b>Space</b> Our planet Earth, land and sea, plants and animals, weather, gravity. The moon, the sun, the planets in our solar system, space travel, astronauts.</p> <p><b>Seasons of the year: Spring.</b> The first signs of spring; snowdrops, cherry blossom, buds and flowers, birds nesting, bees, lighter evenings.</p>	<p><b>Growing and changing</b> how people change as they grow, how animals change as they grow. Life cycles of a butterfly and/or frog. Identify and draw the following animals and their babies including but not limited to: Sheep and Lamb Cows and Calf Horse and foal Butterfly and Caterpillar Frog and tadpole Dog and puppy Cat and kitten</p> <p><b>Plants</b> how they grow from seeds and bulbs. What plants need to grow. Identify parts of plants including roots, stem and leaves. Identify trees and plants growing locally on the school grounds or in local parks. Draw pictures of local plants.</p>	<p><b>Seasons of the Year</b> Summer. Signs of summer; flowers, warmer days, light evenings, butterflies, bees, birds.</p> <p>Design a garden for the Queen; what could we grow? What would we include? Sketch some ideas and write about the design.</p>	<p><b>Seasons of the Year: Summer.</b> How we stay safe in the sun, sunscreen, hats, sunglasses. Safety around water.</p> <p><b>Changing state of matter</b> Why do our ice lollies melt?</p>
Year 1	<p><b>The Human Body</b> Naming parts of the body, the five senses and associated body</p>	<p><b>Animals and their Needs</b> Living things, naming animals, grouping animals, describing</p>	<p><b>Seasons and Weather</b> The four seasons, tools to record the weather, daily weather and weather forecasts,</p>	<p><b>Taking Care of the Earth</b> The Earth's natural resources, conservation of natural resources,</p>	<p><b>Plants</b> What plants need to grow, the parts and functions of plants, food production, flowers and</p>	<p><b>Materials and Magnets</b> Classification of materials, magnets, magnetic attraction.</p>

	parts, understanding sensory impairment.	animals, how plants and animals obtain food, offspring, caring for animal babies, caring for pets.	weather symbols, weather around the world, floods and hurricanes.	logging, recycling, how pollution is caused and can be prevented.	seeds, deciduous and evergreen.	
Year 2	<b>The Human Body</b> The skeletal and muscular systems, exercise, digestive system and healthy eating, circulatory system, preventing illness, germs and disease, animals and their offspring.	<b>Living Things in their Environments</b> Habitats: rainforest, desert, meadow and underground habitats. Food chains, oceans and undersea habitats, deep ocean habitats and habitat destruction and damage.	<b>Electricity</b> Circuits, conductive and non-conductive materials, safety rules	<b>Plants</b> Seeds and bulbs, plants and water, light, temperature, healthy plants.	<b>Materials and Matter</b> Comparing materials, changing materials, concepts of atoms, matter, solids, liquids, gases, measurements.	<b>Astronomy</b> Our solar system, orbit and rotation, sun, moon, planets, stars, constellations.
Year 3	<b>The Human Body</b> The digestive system, teeth and senses, a healthy diet, nutrition, vitamins and minerals, skeletons and muscles for support, protection and movement.	<b>Cycles in Nature</b> Seasonal cycles and plants, animal migration. Life cycles of a plant and a frog.	<b>Light</b> How light travels, shadows, transparent and opaque objects, reflection, mirrors: plane, concave, convex, how shadows change throughout the day.	<b>Plants</b> Functions of plants: roots, stem/trunk, leaves and flowers, Life and growth, variety of plants, water transportation, seed formation and dispersal.	<b>Rocks</b> Sorting rocks, how rocks are formed, hardness and permeability, fossils, soil.	<b>Forces and Magnets</b> Forces, friction, magnets, magnetic poles, magnetic fields, law of magnetic attraction, compasses.
Year 4	<b>The Human Body</b> The muscular system, the skeletal system, the nervous system, the digestive system, teeth.	<b>Classification of Plants and Animals</b> Cold-blooded or warmblooded, vertebrates or invertebrates, characteristics of animal classes, classification of plants.	<b>Ecology</b> Habitats, interdependence of organisms and their environment, producers, consumers and decomposers, food webs, producers, predators and prey, human threats to the environment.	<b>Sound</b> How sound is created, how sound travels, sound waves, speed of sound, pitch, intensity, the human voice, hearing, the human ear.	<b>States of Matter and the Water Cycle</b> Change of state, evaporation, condensation, precipitation, humidity, groundwater.	<b>Electricity</b> Electric current, circuits, switches, conductors and insulators.
Year 5	<b>The Human Body:</b> Human growth stages, adolescence and puberty, The human reproductive system, The endocrine system.	<b>Materials</b> Properties- solubility, conductivity, flexibility, fair testing, solubility, separation of mixtures, reversible changesdissolving, mixing, change of state.	<b>Living Things</b> Life cycles of a mammal, an amphibian, an insect and a bird, life process of reproduction in some plants and animals, Photosynthesis, vascular and non-vascular plants.	<b>Forces</b> Gravity, friction, air resistance, water resistance, pulleys, gears and levers.	<b>Astronomy</b> The Big Bang theory, gravity, the Universe, our Solar System, the moon and our galactic neighbourhood.	<b>Meteorology</b> Weather and climate, the atmosphere, the Ozone layer, air movement and wind direction, cold and warm fronts, thunder and lightning.

**The Human Body**

The circulatory system, the heart, the blood vessels, the blood, blood pressure and heart rate, changes to humans as we get older

**Classification of Living Things**

Classifying organisms, plant and animal cells, fungi, protists, monera, taxonomy, Latin names, vertebrates.

**Electricity**

Brightness, buzzers, voltage, switches, simple circuits and symbols

**Light**

How light travels, Our eyes, light sources, shadows, periscopes

**Reproduction**

Asexual reproduction, sexual reproduction in non-flowering and flowering plants, pollination, fertilisation, reproduction in animals, growth stages.

**Evolution**

Fossils, adaptation, characteristics passing through generations, Mary Anning, Alfred Wallace, Charles Darwin, Darwin's sketches of finches.