



St Felix RC Primary School



Curriculum Overview – Science

	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
Nursery	<p>All about Me</p> <p>The season of Autumn, leaves changing colour and falling from trees. Animals begin to prepare for colder weather and hibernation e.g. squirrels bury nuts in the ground. Temperatures getting colder as winter approaches.</p>	<p>Journeys</p> <p>Plan a journey to the local park, or around the school grounds what would we see? What grows in our school, what grows in the park? People journey around the world to see different places and environments; Ernest Shackleton and his journey to the South Pole. Contrasting environments; journeys to cold places, what would we need to take with us? Look at some recent memorable journeys, e.g, Perseverance landing on Mars. (Children will learn more about space in Reception)</p>	<p>Dinosaurs</p> <p>We know about dinosaurs because people have found fossils in the ground. Rocks can sometimes contain fossils that palaeontologists can study.</p>	<p>Growing and changing</p> <p>Plants need water and light to grow (this will be built upon throughout the curriculum) Grow plants in nursery and observe plants growing e.g. sunflowers, cress etc. Talk about how the plants change as they grow. Make observations of the world around them, describe things they have seen e.g. plants, animals, natural objects and manmade objects. Recognise the season of Spring and notice new plants growing. Animals grow and change in many different ways.</p>	<p>Animals and their babies</p> <p>All animals have babies, some look like their parents, but some do not. Recognise and use animals names e.g. cow/calf, chicken/chick. Polar habitats are under threat as climate changes. Polar animals are adapted to their environment.</p>	<p>Heroes and Adventures</p> <p>Ice investigation-(link to South Pole – Shackleton). Ice changes from a solid to a liquid when it melts. Boats in water – explore floating and sinking. How many pennies can my boat hold? Contrasting landscapes; what does a lunar landscape look like? What might we see if we walked on the moon?</p>
Reception	<p>All about Me</p> <p>The human body: Facial features, body parts, the senses Seasons of the year; Autumn. Deciduous and evergreen trees. Observing leaves using magnifying glasses, leaves changing colour.</p>	<p>Transport- past and present</p> <p>Forces: push, pull, twist Air transport Water transport Seasons of the year: Winter. Animal hibernation, why do some animals hibernate? How do other animals survive winter? Transport in the winter; snow ploughs, gritting roads, snow tyres. Changing state of matter; frost and ice- looking closely at ice, what happens when it warms? Why can we see our breath when it is cold?</p>	<p>Space</p> <p>Our planet Earth, the moon, the sun, the planets in our solar system, space travel, astronauts, the International Space Station.</p> <p>Astronauts and Astronomers; including Mae Jamieson, Tim Peak, Caroline Hershel.</p>	<p>Growing and changing</p> <p>Seasons, plants, what plants need to grow, how we grow and change, how animals grow and change, how things around us change.</p>	<p>Kings and Queens</p> <p>Seasons of the Year: Summer. Signs of summer; flowers, warmer days, light evenings, butterflies, bees, birds.</p>	<p>Stories from the past</p> <p>Seasons of the Year: Summer. How we stay safe in the sun; sunscreen, hats, sunglasses. Safety around water. Changing state of matter; Why do our ice lollies melt?</p>

Year 1	<p><i>The Human Body</i></p> <p>Naming parts of the body, the five senses and associated body parts, understanding sensory impairment.</p>	<p><i>Animals and their Needs</i></p> <p>Living things, naming animals, grouping animals, describing animals, how plants and animals obtain food, offspring, caring for animal babies, caring for pets</p>	<p><i>Seasons and Weather</i></p> <p>The four seasons, tools to record the weather, daily weather and weather forecasts, weather symbols, weather around the world, floods and hurricanes.</p>	<p><i>Taking Care of the Earth</i></p> <p>The Earth's natural resources, conservation of natural resources, logging, recycling, how pollution is caused and can be prevented.</p>	<p><i>Plants</i> What plants need to grow, the parts and functions of plants, food production, flowers and seeds, deciduous and evergreen.</p>	<p><i>Materials and Magnets</i></p> <p>Classification of materials, magnets, magnetic attraction.</p>
Year 2	<p><i>The Human Body</i></p> <p>The skeletal and muscular systems, exercise, digestive system and healthy eating, circulatory system, preventing illness, germs and disease, animals and their offspring.</p>	<p><i>Living Things in their Environments</i></p> <p>Habitats: rainforest, desert, meadow and underground habitats. Food chains, oceans and undersea habitats, deep ocean habitats and habitat destruction and damage.</p>	<p><i>Electricity</i></p> <p>Circuits, conductive and non-conductive materials, safety rules.</p>	<p><i>Plants</i></p> <p>Seeds and bulbs, plants and water, light, temperature, healthy plants.</p>	<p><i>Materials and Matter</i></p> <p>Comparing materials, changing materials, concepts of atoms, matter, solids, liquids, gases, measurements.</p>	<p><i>Astronomy</i></p> <p>Our solar system, orbit and rotation, sun, moon, planets, stars, constellations.</p>
Year 3	<p><i>The Human Body</i></p> <p>The digestive system, teeth and senses, a healthy diet, nutrition, vitamins and minerals, skeletons and muscles for support, protection and movement.</p>	<p><i>Cycles in Nature</i></p> <p>Seasonal cycles and plants, animal migration. Life cycles of a plant and a frog.</p>	<p><i>Light</i></p> <p>How light travels, shadows, transparent and opaque objects, reflection, mirrors: plane, concave, convex, how shadows change throughout the day</p>	<p><i>Plants</i></p> <p>Functions of plants: roots, stem/trunk, leaves and flowers, Life and growth, variety of plants, water transportation, seed formation and dispersal.</p>	<p><i>Rocks</i></p> <p>Sorting rocks, how rocks are formed, hardness and permeability, fossils, soil.</p>	<p><i>Forces and Magnets</i></p> <p>Forces, friction, magnets, magnetic poles, magnetic fields, law of magnetic attraction, compasses.</p>
Year 4	<p><i>The Human Body</i></p> <p>The muscular system, the skeletal system, the nervous system, the digestive system, teeth.</p>	<p><i>Classification of Plants and Animals</i></p> <p>Cold-blooded or warmblooded, vertebrates or invertebrates, characteristics of animal classes, classification of plants.</p>	<p><i>Ecology</i></p> <p>Habitats, interdependence of organisms and their environment, producers, consumers and decomposers, food webs, producers, predators and prey, human threats to the environment.</p>	<p><i>Sound</i></p> <p>How sound is created, how sound travels, sound waves, speed of sound, pitch, intensity, the human voice, hearing, the human ear.</p>	<p><i>States of Matter and the Water Cycle</i></p> <p>Change of state, evaporation, condensation, precipitation, humidity, groundwater.</p>	<p><i>Electricity</i></p> <p>Electric current, circuits, switches, conductors and insulators.</p>

<p>Year 5 (2024-5 Y5/6)</p>	<p><i>The Human Body</i></p> <p>Human growth stages, adolescence and puberty, The human reproductive system, The endocrine system.</p>	<p><i>Materials</i></p> <p>Properties- solubility, conductivity, flexibility, fair testing, solubility, separation of mixtures, reversible changesdissolving, mixing, change of state.</p>	<p><i>Living Things</i></p> <p>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.</p>	<p><i>Forces</i></p> <p>Gravity, friction, air resistance, water resistance, pulleys, gears and levers.</p>	<p><i>Astronomy</i></p> <p>The Big Bang theory, gravity, the Universe, our Solar System, the moon and our galactic neighbourhood.</p>	<p><i>Meteorology</i></p> <p>Weather and climate, the atmosphere, the Ozone layer, air movement and wind direction, cold and warm fronts, thunder and lightning.</p>
<p>Year 6 (2023-4 Yr 5/6)</p>	<p><i>The Human Body</i></p> <p>The circulatory system, the heart, the blood vessels, the blood, blood pressure and heart rate, changes to humans as we get older</p>	<p><i>Classification of Living Things</i></p> <p>Classifying organisms, plant and animal cells, fungi, protists, monera, taxonomy, Latin names, vertebrates.</p>	<p><i>Electricity</i></p> <p>Brightness, buzzers, voltage, switches, simple circuits and symbols</p>	<p><i>Light</i></p> <p>How light travels, Our eyes, light sources, shadows, periscopes</p>	<p><i>Reproduction</i></p> <p>Asexual reproduction, sexual reproduction in non-flowering and flowering plants, pollination, fertilisation, reproduction in animals, growth stages.</p>	<p><i>Evolution</i></p> <p>Fossils, adaptation, characteristics passing through generations, Mary Anning, Alfred Wallace, Charles Darwin, Darwin's sketches of finches.</p>