

Loseley Fields Primary School - Long Term Science Curriculum Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p>The Human Body - Naming parts of the body, the five senses and associated body parts, understanding sensory impairment.</p> <p>Animals and their Needs - Living things, naming animals, grouping animals, describing animals, how plants and animals obtain food, offspring, caring for animal babies, caring for pets.</p> <p>Seasons and Weather - The four seasons, tools to record the weather, daily weather and weather forecasts, weather symbols, weather around the world, floods and hurricanes.</p> <p>Plants - What plants need to grow, the parts and functions of plants, food production, flowers and seeds, deciduous and evergreen, farming, crops, pesticides, harvest, from field to supermarket</p>					
			<p>Materials and Magnets Classification of materials, magnets, magnetic attraction</p>	<p>Taking Care of the Earth The Earth's natural resources, conservation of natural resources, logging, recycling, how pollution is caused and can be prevented.</p> <p>Science Biographies Wilburn and Orville Wright Jane Goodall (conservationist) Joseph Banks (botanist)</p>		
Year 2	<p>Living Things in their Environments - Plants Habitats: rainforest, desert, meadow and underground habitats. Plants. Environmental change</p>	<p>The Human Body The skeletal and muscular systems, exercise, digestive system and healthy eating, circulatory system, nervous system, preventing illness, germs and disease. Science Biographies Rosalind Franklin Edward Jenner</p>	<p>Electricity Circuits, conductive and non-conductive materials, safety rules.</p>	<p>Living Things in their Environments - Animals Food chains, oceans and undersea habitats, deep ocean habitats and habitat destruction and damage Classification of animals</p>	<p>Earth and Space Geographical features of the earth. What's inside the earth Our solar system, orbit and rotation, sun, moon, planets, stars, constellations. Science Biographies Mae Carol Jemison</p>	<p>Use of Everyday Materials Identify and compare suitability of a variety of materials for particular uses. How shapes of solid objects can be changed.</p>
Year 3	<p>Forces and Magnets Forces, friction, magnets, magnetic poles, magnetic fields, law of magnetic attraction, compasses. Science Biographies Archimedes, Aristotle</p>	<p>The Human Body Cells, organ systems, the digestive system, teeth and senses, a healthy diet, vitamins and minerals</p>	<p>Rocks Sorting rocks, how rocks are formed, hardness and permeability, fossils, soil.</p>	<p>Simple Machines examine how simple machines help make work easier, and how they are applied and combined in familiar tools and machines.</p>	<p>Cycles in Nature Seasonal cycles and plants, animal migration. Life cycles of a plant and a frog. Insects Characteristics of insects, habitats, classifying insects, helpful and harmful insects, life cycles, social insects. Science Biography Henry Turner</p>	<p>Matter Concepts of atoms, matter, solids, liquids, gases, measurements. Water Cycle (linked to Geography) Change of state, evaporation, condensation, precipitation, humidity, groundwater.</p>
Year 4	<p>Classification of Plants and Animals Cold-blooded or warm-blooded, vertebrates or invertebrates, characteristics of animal classes, classification of plants.</p>	<p>Ecology Habitats, interdependence of organisms and their environment, producers, consumers and decomposers, food webs, fossils, man-made threats to the environment</p>	<p>Light The speed of light, shadows, transparent and opaque objects, reflection, mirrors: plane, concave, convex, the human eye.</p>	<p>Astronomy The Big Bang theory, gravity, the Universe, our Solar System, the moon and our galactic neighbourhood. Science Biographies Caroline Herschel Isaac Newton</p>	<p>Sound How sound is created, how sound travels, sound waves, speed of sound, pitch, intensity, the human voice, hearing, the human ear. Science Biographies James West</p>	<p>The Human Body The muscular system, the skeletal system, the nervous system.</p>

Year 5	<p>The Human Body: Circulation The circulatory system, the heart, the blood vessels, the blood, blood pressure and heart rate. The respiratory system Process of taking in oxygen and getting rid of carbon dioxide</p> <p>Science Biographies Elizabeth Garrett Anderson Florence Nightingale Charles Drew</p>	<p>Chemistry: Basic terms and concepts Properties- solubility, conductivity, flexibility etc., fair testing, solubility, separation of mixtures, reversible changes- dissolving, mixing, change of state.</p>	<p>Evolution Fossils, adaptation, characteristics passing through generations, Mary Anning, Alfred Wallace, Charles Darwin, Darwin's sketches of finches.</p>	<p>Electricity Electric current, series and parallel circuits, switches, closed circuit, open circuit, short circuit, conductors and insulators.</p> <p>Science Biographies Jagadish Chandra Bose</p>	<p>Forces Gravity, friction, air resistance, water resistance, pulleys, gears and levers.</p> <p>Science Biographies Michael Faraday Charles Darwin</p>	<p>Geology The Earth's layers, earthquakes, volcanoes, formation of mountains, formation of rocks</p> <p>Meteorology (linked to Geography) Weather and climate, the atmosphere, the Ozone layer, air movement and wind direction, cold and warm fronts, thunder and lightning.</p> <p>Science Biographies Zhang Heng</p>
Year 6	<p>Chemistry Atoms, the Periodic Table, metals and non-metals, molecules, compounds, physical and chemical changes.</p> <p>Science Biographies Dorothy Hodgkin Humphry Davy</p>	<p>Classification of Living Things Classifying organisms, plant and animal cells, fungi, protists, monera, taxonomy, Latin names, vertebrates.</p> <p>Science Biographies Carl Linnaeus</p>	<p>Plants Photosynthesis, vascular and non-vascular plants.</p> <p>Science Biographies George Washington Carver</p>	<p>Life Cycles and Reproduction (Plants) Asexual reproduction, sexual reproduction in non-flowering and flowering plants, pollination, fertilisation, reproduction in animals, growth stages</p>	<p>Life Cycles and Reproduction (The Human Body) Hormones and reproduction Human growth stages, adolescence and puberty, The human reproductive system, The endocrine system and glands.</p>	<p>Famous Scientists and their discoveries</p>