

St Mary's and All Saints CE Primary School

Progression Map: Science

Greater detail of this subject's progression can be found in our 'Science Long Term Plan - Whole School Progression' Document'. Please speak to the school for further information.

Themes

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Wisdom	<p><u>Earth and Space</u> Neil Armstrong Buzz Aldrin Michael Collins Tim Peake Chris Hadfield</p> <p>Isaac Newton</p>	<p><u>Animals, including Humans</u> Leonardo Da Vinci (Anatomical drawing, 'Vitruvian Man')</p> <p>Miller Hutchinson (Engineer who invented the first electric hearing aid)</p> <p><u>Everyday Materials</u> Chester Greenwood (Inventor of earmuffs)</p>	<p><u>Animals, including humans</u> Florence Nightingale (Nurse and founder of modern nursing)</p> <p><u>Uses of Everyday Materials</u> Charles Mackintosh. (Chemist and inventor of waterproof clothing)</p>	<p><u>Animals including Humans</u> Marie Curie (Physicist who invented the first mobile x-ray machine to treat soldiers wounded on the battlefield in WWI)</p> <p><u>Rocks</u> James Hutton (Scientist who studied rocks and the effects of natural processes on them, such as rain, running water, tides, and volcanoes, on the development of the Earth)</p> <p><u>Light</u> Percy Shaw (Inventor of the cat's eye)</p> <p><u>Forces and Magnets</u> William Gilbert (Doctor who developed the theory of magnetism) Leonardo Da Vinci (First person to plan and carry out tests on friction)</p>	<p><u>States of Matter</u> Daniel Fahrenheit (Physicist who invented the Fahrenheit temperature scale and the thermometer) Anders Celsius (Astronomer who invented the degrees Celsius temperature scale)</p> <p><u>Sound</u> Aristotle (Philosopher who developed the concept that sound travels through air due to the movement of air particles) Isaac Newton (Mathematician & Physicist who measured the speed of sound)</p> <p><u>Electricity</u> Thomas Edison (Inventor of the lightbulb and power grid) Joseph Swan (Physicist & Chemist who developed a primitive electric light 20 years before Thomas Edison) Benjamin Franklin (Discovering Electricity in 1700s)</p>	<p><u>States of Matter</u> Daniel Fahrenheit (Physicist who invented the Fahrenheit temperature scale and the thermometer) Anders Celsius (Astronomer who invented the degrees Celsius temperature scale)</p> <p><u>Sound</u> Aristotle (Philosopher who developed the concept that sound travels through air due to the movement of air particles) Isaac Newton (Mathematician & Physicist who measured the speed of sound)</p> <p><u>Electricity</u> Thomas Edison (Inventor of the lightbulb and power grid) Joseph Swan (Physicist & Chemist who developed a primitive electric light 20 years before Thomas Edison) Benjamin Franklin (Discovering Electricity in 1700s)</p>	<p><u>Living Things and their habitats</u> David Attenborough (Naturalist & TV Presenter) Jane Goodall (Wildlife Researcher & Conservationist who studied chimpanzees)</p> <p><u>Earth and Space</u> Claudius Ptolemaeus (Ptolemy) (Astronomer who developed theory that Earth was at centre of Solar System around which the Sun and other planets orbited) Nicolaus Copernicus (Astronomer who developed the theory that Sun was at the centre of the Solar System around which the planets orbited) Johannes Kepler (Mathematician, Astronomer and Astrologer who developed theory that planets moved on oval paths around the Sun) Neil Armstrong (Astronaut who was the first human to walk on the Moon)</p> <p><u>Forces</u> Archimedes (Mathematician who developed theories about how levers/pulleys can lift & move heavy objects) Galileo Galilei (Astronomer, Mathematician & Physicist who was the first person to use the scientific method to test theories about gravity and the Solar System) Isaac Newton (Mathematician & Physicist who developed theories about gravity)</p>	<p><u>Living Things and their habitats</u> Carl Linnaeus (Botanist & Zoologist who developed a taxonomy for classifying organisms)</p> <p><u>Evolution and Inheritance</u> Charles Darwin (Natural Historian who developed the theory of evolution by natural selection) Alfred Wallace (Natural Historian who developed the theory of evolution by natural selection)</p> <p><u>Light</u> Euclid (Mathematician who predicted light travels in straight lines & we only see things that light falls on) Willebrord Snell (refraction of light)</p> <p><u>Electricity</u> Nikola Tesla (Electrical & Mechanical Engineer who developed the AC electrical system and made important advances in technologies such as x-rays, neon lights and robotics) Alessandro Volta (Physicist who developed the electric battery)</p>
Creation (Developing an appreciation of the world in which we live)	<p>Earth in Space</p> <p>Seasonal Changes</p>	<p>Environments, organisms and materials that are most familiar to them or part of their everyday world. Respect for the natural world, living and non-living.</p> <p>Seasonal Changes</p>		<p>Broaden their scientific view of the world around them. Through exploring, natural curiosity, observation and discussion, children will test and develop ideas about everyday, natural phenomena and the relationships between living things and familiar environments.</p>	<p>Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things.</p>	<p>Space</p>	<p>Evolution and its inheritance</p>	
Love	<p>Experimentation and investigation Prediction, fair Testing, Explaining Results and creating Conclusions</p>							

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Overview of topics

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn	Biology Animals including Humans	Biology Animals including Humans: Animals and their diet (Full Term Unit)	Biology Animals including humans: Survival	Biology Animals including humans (Full Term Unit)	Biology Living things and Their Habitats	Chemistry Materials and Their Properties (Full Term Unit)	Biology Living things and Their Habitats
	Physics Light		Biology Animals including humans: Focus on Humans		Chemistry Changes of state		Physics Electricity
Spring	Biology Living things and their habitats	Biology Animals including humans: Human body and senses	Chemistry Materials and their properties – uses of materials (properties)	Chemistry Rocks	Biology Animals including Humans: Teeth and Digestion (Term Unit)	Physics Space	Physics Light
	Physics Earth and Space	Chemistry Materials and their properties	Chemistry Materials and their properties – changing shapes of materials	Biology Plants		Physics Forces	Biology Animals including Humans: Circulatory System / Healthy Bodies
Summer	Physics Seasonal changes	Biology Plants	Biology Living things and their habitats	Physics Light	Physics Electricity	Biology Living things and their habitats (inc extinction)	Biology Evolution and its inheritance (Term Unit)
	Biology Plants	Physics Seasonal changes	Biology Plants	Physics Forces and Magnets	Physics Sound	Biology Animals including humans: Growing and getting old	