

Science Overview - St Paul's



https://www.pzaz.online/						
Working Scientifically skills	Autumn		Spring		Summer	
	Planning -Ask questions -Use observational skills -Use scientific equipment		Data -gathering -presenting -analysing results		Evaluation -answer questions -use results to draw conclusions -primary and secondary sources	
Reception	Potions Ask simple questions		Growing Make observations		Natural world Identify and classify	
Seasonal Changes EYFS- linked to months of the year. A week applied each term to link to Understanding the World.						
Year 1	*Everyday Materials <small>STEM: https://www.stem.org.uk/rxuat</small> William Addis Toothbrush Inventor. Charles Mackintosh (Waterproof coat) John MacAdam- roads.		*Animals inc Humans Chris Packham-Animal Conservationist		*Plants Beatrix Potter Author & Botanist	
	*Seasonal Changes Year 1 -An ongoing weather diary across all the seasons. Dr Steve Lyons (Extreme Weather) Holly Green (Meteorologist)					
Year 2	*Animals inc Humans Florence Nightingale Pioneer of modern nursing . Elizabeth Garrett Anderson - First British female physician and surgeon. Steve Irwin -Wildlife expert.		*Uses of Everyday Materials <small>STEM: https://www.stem.org.uk/rxer7f</small> Charles Macintosh-Waterproof material John MacAdam- Tarmac		*Living things and their habitats Rachel Carson- Marine Pollution Liz Bonnin Conservationist	
	*Plants Year 2- Start in the Spring with this as an on-going study, (much like Seasons in year 1 and EYFS). Captain Cook- Botanists. Agnes Arber Botanist Alan Titchmarsh- Botanist & Gardener.					
Year 3	*Animals inc Humans Marie Curie- Radiation. Wilhelm Rontgen - X rays	Rocks (Links to Geography) Mary Anning- Fossil hunter. Dr Anjana Khatwa Geologist Katia Krafft - Volcanologist	*Forces and Magnets Andre Marie Ampere- Electro-magnetism .The Wright Brothers Airplanes. Henry Ford- Cars	Light Justus Von Liebig Mirrors. James Clerk Maxwell (Visible and Invisible Waves of Light)	*Plants Joseph Banks- Botanist Ahmed Mumin Warfa - Botanist	STEM GLOBAL LEARNER <small>https://www.globalstemlearning.org/ https://www.stem.org.uk/rx3uv3</small> *** Consideration of STEM and Global Learner opportunities.
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Year 4	Living things and their habitats Jacques Cousteau -Marine Biology. Cindy Looy-Environmental Change and Extinction. Joean Beauchamp Procter Zoologist	*Electricity Michael Faraday- Discovered relationship between magnets and electricity Thomas Edison- Lightbulb Joseph Swan- Incandescent Light Bulb	*States of Matter Joseph Priestly - Discovered oxygen Lord Kelvin - Absolute zero (temperature) Anders Celsius -Temperature Scale Daniel FahrenheitTemperature Scale / Invention of the Thermometer. George Washington Carver- chemist		Animals inc Humans Joseph Lister-Antiseptic Ivan Pavlov- Digestive System Mechanisms Washington & Lucius Sheffield- Toothpaste in a tube	*Sound Alexander Graham Bell -Invented the telephone Aristotle - Sound Waves Galileo Galilei - Frequency and Pitch of Sound Waves
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<p>Year 5</p>	<p>*Forces <i>Isaac Newton- Gravity</i> <i>Albert Einstein- The Theory Of relativity</i> <i>Galileo Galilei - Gravity and Acceleration</i> <i>Archimedes of Syracuse- Levers</i></p>	<p>Earth and space (Links to Geography) <i>Margaret Hamilton- Computer scientist (Moon Landings). Stephen Hawking- Black Holes. Mae Jemison - Astronaut Claudius Ptolemy and Nicolaus Copernicus - Heliocentric vs Geocentric Universe. Neil Armstrong- First man on the Moon. Helen Sharman- GB astronaut. Caroline Herschel- First to find a comet. V. Tereshkova-Cosmonaut</i></p>	<p>*Properties and changes of materials <i>Sir Humphrey Davy- Separating gases</i> <i>Jamie Garcia (BP website)- Invention of a new plastic. Becky Schroeder - fluorescence material. Spencer Silver, Arthur Fry and Alan Amron - Post-It Notes.</i></p>	<p>*Living things and habitats <i>Jane Goodall- naturalist. Sylvia Earle - Marine biologist. Dr. Paula Kahumbu-wildlife conservationist. Mangala Mani - Antarctic scientist</i> <i>Sir David Attenborough- Animal Behaviourist</i></p>	<p>Animals inc Humans (Links to RSE) <i>Alexander Fleming- Penicillin. Louis Pasteur- Vaccination</i> <i>Eva Crane -Reproduction in Bees. Virginia Apgar-<u>obstetrical anaesthesiologist</u></i></p>	
<p>Year 6</p>	<p>*Electricity <i>Nikola Telsa -AC electric system</i> <i>Alessandro Volta- Electrical Battery</i> <i>Nicola Tesla- Alternating Currents</i> <i>Edith Clarke -Electrical engineer</i></p>		<p>Light <i>Thomas Edison -Invented electric light bulb</i> <i>Patricia Bath (BP website)- saving sight</i> <i>Thomas Young (Wave Theory of Light)</i> <i>Ibn al-Haytham -Light and our Eyes. Percy Shaw - The Cats Eye</i></p>	<p>*Living things and habitats <i>Carl Linneus Classification.</i> <i>Libby Hyman Classification Invertebrates</i></p>	<p>*Evolution and Inheritance <i>Hippocrates -The Father of Medicine</i> <i>Charles Darwin- Evolution</i> <i>Alfred Russell Wallace - naturalist</i> <i>Rosalind Franklin - DNA</i> <i>Nettie Stevens - Geneticist. Professor Alice Roberts - Evolutionary biologist</i></p>	<p>Animals inc Humans (Links to RSE) <i>Leonardo Da Vinci- anatomy. Santorio</i> <i>Santorio-Anatomist. Dr. Katherine Dibb - Expert in Cardiovascular Sciences. Justus von Liebig- Theories of Nutrition and Metabolism. Sir Richard Doll- Linking Smoking and Health Problems.</i></p>