

Long-Term Plan: Science

Year: 3	Subject: Science		Autumn Term (13 weeks 2 days)		Spring Term (9 weeks 4 days)		Summer Term (9 weeks 4 days)					
			Autumn 1 (7 weeks 4 days)	Autumn 2 (5 weeks 3 days)	Spring 1 (4 weeks 4 days)	Spring 2 (5 weeks)	Summer 1 (4 weeks 2 days)	Summer 2 (5 weeks 2 days)				
National Curriculum Subject Content:	Animals Including Humans		Light		Rocks		Plants					
Learning Outcomes Students will be taught to:	<p>(i) Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</p> <p>(ii) Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p>		<p>(i) Recognise that they need light in order to see things and that dark is the absence of light.</p> <p>(ii) Notice that light is reflected from surfaces.</p> <p>(iii) Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</p> <p>(iv) Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</p> <p>(v) Find patterns in the way that the size of shadows change.</p>		<p>(i) Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</p> <p>(ii) Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p> <p>(iii) Recognise that soils are made from rocks and organic matter.</p>		<p>(i) Compare how things move on different surfaces.</p> <p>(ii) Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance.</p> <p>(iii) Observe how magnets attract or repel each other and attract some materials and not others.</p> <p>(iv) Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</p> <p>(v) Describe magnets as having 2 poles.</p> <p>(vi) Predict whether 2 magnets will attract or</p>		<p>(i) Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.</p> <p>(ii) Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.</p> <p>(iii) Investigate the way in which water is transported within plants.</p> <p>(iv) Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p>		<p>(i) Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.</p> <p>(ii) Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.</p> <p>(iii) Investigate the way in which water is transported within plants.</p> <p>(iv) Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p>	

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				repel each other, depending on which poles are facing		
Working Scientifically Skills:	<ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs using test results to make predictions to set up further comparative and fair tests reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations identifying scientific evidence that has been used to support or refute ideas or arguments 					
Scientific Topic Area	'Keeping Healthy'	'Light and Shadows'	'Rocks and Fossils'	'Amazing Magnets'	'Roots and Shoots'	'Artful Flowers. Fruits and Seeds'
Literature Links	<p><u>Core Text:</u> Quill Soup by Alan Durant</p> <p><u>Guided Reading Text:</u> Midnight Feasts; Tasty Poems <i>A.F Harrold</i></p> <p><u>Complementary Texts:</u></p> <ol style="list-style-type: none"> The Monster Health Book: A Guide to Eating Healthy, Being Active & Feeling Great for Monsters & Kids! <i>Edward Miller</i> Ultimate Kids' Guide to Being Super Healthy <i>Dr. Nina Shapiro and Nicole Grimes</i> Are you what you eat? <i>DK</i> Your Strong Skeleton and Amazing Muscular System <i>Paul Mason</i> 	<p><u>Core Text:</u> NA</p> <p><u>Guided Reading Text:</u> NA</p> <p><u>Complementary Texts:</u></p> <ol style="list-style-type: none"> What are light waves? <i>Robin Johnson</i> Light is all around us <i>Wendy Pfeffer</i> Oscar and the Moth: A Book About Light and Dark <i>Geoff Waring</i> All About Light <i>Angela Royston</i> My Shadow <i>Robert Louis Stevenson</i> Light Makes a Rainbow <i>Sharon Coan</i> Blackout <i>John Rocco</i> 	<p><u>Core Text:</u> NA</p> <p><u>Guided Reading Text:</u> The Rock Factor - A story about rocks and stones <i>Jacqui Lailey</i></p> <p><u>Complementary Texts:</u></p> <ol style="list-style-type: none"> Dinosaur Lady - the daring discoveries of Mary Anning <i>Linda Skeers</i> Everyday STEM: Geology <i>Emily Dodd & Robbie Cathro</i> Under Your Feet <i>RHS & DK</i> A Rock Is Lively <i>Dianna Hutts Aston & Sylvia Long</i> 	<p><u>Core Text:</u> NA</p> <p><u>Guided Reading Text:</u> NA</p> <p><u>Complementary Texts:</u></p> <ol style="list-style-type: none"> Forces: Physical Science for Kids by Andi Diehn and Hui Li Forces and Magnets (Step Into Science) <i>Peter Riley</i> Forces Make Things Move <i>Kimberly Bradley</i> What Makes a Magnet? <i>Dr. Franklyn M. Branley</i> Powerful Forces (Extreme Science) <i>Jon Richards</i> 	<p><u>Core Text:</u> NA</p> <p><u>Guided Reading Text:</u> NA</p> <p><u>Complementary Texts:</u></p> <ol style="list-style-type: none"> Plants Make Their Own Food <i>Julie Lundgren</i> How Do Plants Grow? <i>Julie Lundgren</i> Plants Are Alive! <i>Molly Aloian</i> Bloom <i>Nicola Skinner & Flavia Sorrentino</i> A Seed is Sleepy <i>Dianna Aston & Sylvia Long</i> Under the Canopy 	<p><u>Core Text:</u> NA</p> <p><u>Guided Reading Text:</u> NA</p> <p><u>Complementary Texts:</u></p> <ol style="list-style-type: none"> Plants Need Sunlight <i>Christine Peterson</i> What Are Bulbs And Roots? <i>Molly Aloian</i> What Are Stems? <i>Molly Aloian</i> Botanicum (Welcome To The Museum) <i>Kathy Willis & Katie Scott</i> Women in Science <i>DK</i>

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	<p>5. Bone by Bone: Comparing Animal Skeletons <i>Sara C. Levine</i></p> <p>6. The Skeletal System <i>Kay Manolis</i></p> <p>7. Take a Closer Look at Your Heart <i>Janet Slike</i></p>	<p>8. Sending messages with sound and light <i>Jennifer Boothroyd</i></p> <p>9. Lewis Latimer - the man behind a better lightbulb <i>Nancy Dickmann</i></p> <p>10. Windows <i>Julia Denos</i></p>	<p>5. The Street Beneath My Feet <i>Charlotte Guillian & Yuval Zommer</i></p> <p>6. Under Earth, Under Water <i>Aleksandra Mizielinski & Daniel Mizielinski</i></p>	<p>6. Forces and Magnets: Let's Investigate <i>Ruth Owen</i></p> <p>7. Old Bear <i>Jane Hissey</i></p> <p>8. The Tin Snail <i>Cameron McAllister</i></p>	<p><i>Iris Volant & Cynthia Alonso</i></p> <p>7. Toby Alone <i>Timothee de Fombelle</i></p>	
Assessment	Rising Stars End of Topic Assessment					
Enrichment	TBD	TBD	The Saint Cezaire Grotto	TBD	TBD	TBD