



## Gig Mill Primary - Science Curriculum



Intent	At Gig Mill Primary School, our vision is to give children a science curriculum which enables them to confidently explore and discover the world around them, so that they have a deeper understanding of the world we live in. We aim to create fun and stimulating science lessons that nurture children's natural curiosity and their on-going development. Through a hands-on, enquiry-based curriculum that develops scientific vocabulary and promotes the following skills: questioning, planning fair tests, predicting, measuring, observing, recording, handling data and looking for patterns, concluding, and evaluating. Children also develop an understanding of how important and relevant science is to their lives, now and in the future.		
	Autumn	Spring	Summer
Nursery	<ul style="list-style-type: none"><li>Learning about Autumn and Winter</li></ul>	<ul style="list-style-type: none"><li>Life cycles and learning about animals</li></ul>	
Reception	<ul style="list-style-type: none"><li>Identify signs of Autumn</li><li>Discover changes between day and night and think about nocturnal animals</li><li>Focus on harvest using espresso videos, discussing where food comes</li></ul>	<ul style="list-style-type: none"><li>Sea creatures and different types of animals</li><li>Penguin focus</li></ul>	<ul style="list-style-type: none"><li>Growing conditions for plants</li><li>Caring for plants</li><li>Planting seeds</li><li>Mini - beasts</li><li>Sorting different materials</li></ul>
Year 1	<ul style="list-style-type: none"><li>Animals, including humans.</li><li>Materials</li><li>Seasonal changes.</li></ul> <p><b>Working scientifically</b> – planning fair tests, predict, make observations use observations to answer questions, perform simple tests, graphs and tables</p>	<ul style="list-style-type: none"><li>Animals including humans</li><li>Materials</li><li>Seasonal changes</li></ul> <p><b>Working scientifically</b> – make observations use observations to answer questions., identifying and classifying, predict.</p>	<ul style="list-style-type: none"><li>Plants</li><li>Seasonal changes</li></ul> <p><b>Working scientifically</b> – make observations use observations to answer questions., identifying and classifying, recording, equipment and measurement, predict.</p>
Year 2	<ul style="list-style-type: none"><li>Use of everyday materials</li><li>Living things and their habitats</li></ul> <p><b>Working scientifically</b> –ask simple questions and recognising they can be answered in different ways, observing closely, performing simple tests, identifying and classifying, using their observations and ideas to suggest answers to questions, gathering and recording data to help in answering questions</p>	<ul style="list-style-type: none"><li>Living things and their habitats</li><li>Animals, including humans</li><li>Plants</li></ul> <p><b>Working scientifically</b> –ask simple questions and recognising they can be answered in different ways, observing closely, performing simple tests, identifying and classifying, using their observations and ideas to suggest answers to questions, gathering and recording data to help in answering questions</p>	<ul style="list-style-type: none"><li>Living things and their habitats</li><li>Animals including humans</li><li>Use of everyday materials</li></ul> <p><b>Working scientifically</b> –ask simple questions and recognising they can be answered in different ways, observing closely, performing simple tests, identifying and classifying, using their observations and ideas to suggest answers to questions, gathering and recording data to help in answering questions</p>



## Gig Mill Primary - Science Curriculum



Intent	At Gig Mill Primary School, our vision is to give children a science curriculum which enables them to confidently explore and discover the world around them, so that they have a deeper understanding of the world we live in. We aim to create fun and stimulating science lessons that nurture children's natural curiosity and their on-going development. Through a hands-on, enquiry-based curriculum that develops scientific vocabulary and promotes the following skills: questioning, planning fair tests, predicting, measuring, observing, recording, handling data and looking for patterns, concluding, and evaluating. Children also develop an understanding of how important and relevant science is to their lives, now and in the future.		
	Autumn	Spring	Summer
Year 3	<ul style="list-style-type: none"><li>Forces and Magnets</li><li>Animals including Humans</li></ul> <p><b>Working scientifically:</b> Making predictions and exploring friction when investigating the speed of toy cars on different surfaces, recording scientifically when investigating which different materials are attracted to magnets, measure and observe patterns when investigating if leg length affects jumping distance.</p>	<ul style="list-style-type: none"><li>Rocks and Soils</li><li>Plants</li></ul> <p><b>Working scientifically:</b> Investigate the permeability and durability of different rocks in order to rank results, use classification keys to sort and compare rocks, choose variables when investigating the permeability of soils, measure and observe plants over time to investigate what they need to grow and draw graphs to show results.</p>	<ul style="list-style-type: none"><li>Plants (continued)</li><li>Light</li></ul> <p><b>Working scientifically:</b> Make conclusions when investigating how water travels in plants, use data loggers (with light sensor) to investigate the effectiveness of different sun protection accessories (hats or sunglasses), suggest ways to make a fair test, measure the height of shadows, and spot patterns when investigating how distance affects shadow height.</p>
Year 4	<ul style="list-style-type: none"><li>Sound</li></ul> <p><b>Working scientifically</b> – presenting information, recording observations, drawing scientific diagrams, communicating conclusions in a scientific way.</p>	<ul style="list-style-type: none"><li>Electricity</li><li>Animals including humans</li></ul> <p><b>Working scientifically</b> – making predictions, presenting information, recording observations, drawing scientific diagrams, communicating conclusions in a scientific way.</p>	<ul style="list-style-type: none"><li>States of Matter</li><li>Living things and their habitats</li></ul> <p><b>Working scientifically</b> – presenting information, suggesting relevant observations, making predictions, spotting patterns.</p>
Year 5	<ul style="list-style-type: none"><li>Properties of materials</li></ul> <p><b>Working scientifically</b> – suggest ideas that can be investigated, plan a fair test, decide what variables to measure, make predictions, select suitable measuring equipment</p>	<ul style="list-style-type: none"><li>Forces</li><li>Life cycles</li></ul> <p><b>Working scientifically</b> – Observations, predictions, measure distances, time, volume, mass, temperature and force accurately, use patterns and trends to help draw conclusions, e.g. tell the story of a graph</p>	<ul style="list-style-type: none"><li>Animals including humans</li><li>Earth and space</li></ul> <p><b>Working scientifically</b> - Use ICT, and other sources, to find information relevant to an investigation, draw labelled diagrams with increasing clarity and begin to add some annotations</p>
Year 6	<ul style="list-style-type: none"><li>Animals including humans</li><li>Living things and their habitats</li></ul> <p><b>Working scientifically</b> – developing questions to investigate, selecting variables, use of data loggers to record data to 2dp, calculate averages of results, construct tables or graphs to record results, draw labelled diagrams.</p>	<ul style="list-style-type: none"><li>Light</li></ul> <p><b>Working scientifically</b> – draw detailed labelled diagrams, selecting and using apparatus effectively and accurately, identify some variables that cannot be controlled &amp; explain why, use a comparative sentence for predictions, make a series of observations, comparisons or measurements, explain conclusions.</p>	<ul style="list-style-type: none"><li>Evolution and Inheritance</li><li>Electricity</li></ul> <p><b>Working scientifically</b> – use research to support scientific findings, draw conclusions based on evidence, explain any patterns using scientific language &amp; ideas, draw clear, detailed labelled diagrams.</p>