

## Long Term Curriculum Coverage

Class Rowan	Subject Science
Year B	



<b>Autumn 1</b>	<b>Autumn 2</b>
<p style="text-align: center;"><b>Forces and Magnets</b></p> <p>Learn about forces in the context of pushing and pulling, and will identify different actions as pushes or pulls. The children will work scientifically and collaboratively to investigate friction, by exploring the movement of a toy car over different surfaces. They will work in a hands on way to identify magnetic materials. Furthermore, they will conduct an investigation into the strength of different types of magnet. The children will have chance to explore the way magnetic poles can attract and repel in an exciting activity, making their own compass and using it to find hidden items. The children will use their understanding of magnetic attraction to design and create their own magnetic game. They will develop their scientific enquiry skills, making observations, predictions and conclusions.</p>	<p style="text-align: center;"><b>Living Things and Their Habitats</b></p> <p>Children explore a variety of ways to identify, sort, group and classify living things. They learn how animals are split into 'vertebrates' and 'invertebrates' and begin to consider the differences between living things within these classifications. They use and create classification keys to group, identify and name living things from the local habitat and beyond. This unit also introduces children to the idea that environments are subject to human-made and natural changes, and that these changes can have a significant impact on living things. Throughout the unit children work scientifically by gathering, recording and presenting information in different ways</p>
<b>Spring 1</b>	<b>Spring 2</b>
<p style="text-align: center;"><b>States of Matter</b></p> <p>Children learn about the differences between solids, liquids and gases, classifying objects and identifying their properties. The children will work scientifically and collaboratively to investigate the weight of a gas. Furthermore, they will have chance to find the ideal temperature to melt chocolate. They will explore in-depth how water changes state, exploring melting, freezing, condensing as well as a particular focus on evaporation. Finally, they will learn about the stages of the water cycle, creating mini water worlds and an interactive water wheel to represent the different stages.</p>	<p style="text-align: center;"><b>Animals Including Humans</b></p> <p>Children learn about the digestive system in humans and animals and the functions of teeth. Children will learn more about herbivores, carnivores and omnivores in the context of teeth, digestion and the food chain. In addition, they will extend their understanding of food chains to more complex chains and food webs.</p>

Summer 1	Summer 2
<p data-bbox="416 248 544 277" style="text-align: center;"><b>Electricity</b></p> <p data-bbox="204 315 756 808">Children will learn about common electrical appliances and how to construct simple series circuits. They will become familiar with the key words linked to the topic and how to apply them appropriately. Children will learn about cells, wires, bulbs and buzzers and about the different types of switches. They will be able to troubleshoot and identify whether or not a bulb will light in a simple series circuit and be able to identify a complete circuit. The children will also learn about conductors and insulators and know that metals are very good electrical conductors.</p>	<p data-bbox="1011 248 1094 277" style="text-align: center;"><b>Sound</b></p> <p data-bbox="778 315 1331 1240">Children learn about how vibrations cause sounds and how sounds travel, as well as how sounds can change pitch and loudness. The children will learn about how sounds are made, carrying out demonstrations of vibrations, and completing a sound survey of their school. They will work in groups to create a human model of the way particles pass sound vibrations on and write and star in their own documentary explaining how sound travels. The children will work in a hands-on way to explore pitch and will use their understanding of how high and low sounds are made to create their own set of pan pipes. They will have the opportunity to make a string telephone and will use this to investigate how sounds change over distance and through different materials. The children will work scientifically and collaboratively to investigate the best material for soundproofing, in the context of making a music studio quieter. Finally, they will demonstrate their learning from the whole unit by designing and creating their own musical instrument that will play high, low, loud and quiet sounds</p>