



RECEPTION						
Autumn		Spring		Summer		
Main Project: We are Superheroes (based on 'Me and My Community')	Main Project: Sparkle and Shine	Main Project: Starry Night	Main Project: Once Upon a Time	Main Project: Dangerous Dinosaurs	Main Project: Big Wide World	
<p><b>Companion Project:</b> <i>Exploring Autumn</i> This project teaches children about the natural changes that happen during the season of autumn, including how the weather changes, why trees lose their leaves and how wild animals prepare for winter.</p>		<p><b>Starry Night:</b> This project explores the differences in the world at night compared to during the day. It teaches children about the importance of a good night's sleep, and helps them to discover what is happening in the world while they are sleeping, including finding out about nocturnal animals.</p> <p><b>Companion Project:</b> <i>Winter Wonderland</i> This project teaches children about the changes that happen during winter, including the types of weather associated with winter. It also explores places that have snow all year round and the types of animals that live there.</p>		<p><b>Dangerous Dinosaurs:</b> This exciting project teaches children about the different animals that roamed Earth millions of years ago and how they are related to animals that live on Earth today.</p> <p><b>Companion Project:</b> <i>Puddles and Rainbows</i> This mini project teaches children about the weather that happens during spring and allows them to explore natural phenomena, including rainbows. It supports them to explore colour in the natural world.</p>		<p><b>Big Wide World:</b> This project teaches children about the global community to which they belong and explores how living things, communities and climates differ around the world.</p>

# SCIENCE OVERVIEW

YEAR 1 (Cycle A)		
*Working Scientifically is taught within each wider Science topic throughout the year		
Autumn	Spring	Summer
Main project: Childhood	Main project: Bright Lights, Big City	Main project: School Days
<p><b>Everyday materials:</b> This project teaches children that objects are made from materials. They identify a range of everyday materials and their sources. Children investigate the properties of materials and begin to recognise that a material's properties define its use.</p> <p><b>Human Senses:</b> This project teaches children that humans are a type of animal known as a mammal. They name and count body parts and identify similarities and differences. They learn about the senses, the body parts associated with each sense and their role in keeping us safe.</p>	<p><b>Seasonal Changes:</b> This project teaches children about the seasons, seasonal changes and typical seasonal weather and events. They learn about measuring the weather and the role of a meteorologist. Children begin to learn about the science of day and night and recognise that the seasons have varying day lengths in the UK.</p>	<p><b>Plant Parts:</b> This project teaches children about wild and garden plants by exploring the local environment. They identify and describe the basic parts of plants and observe how they change over time.</p> <p><b>Animal Parts:</b> This project teaches children about animals, including fish, amphibians, reptiles, birds, mammals, and invertebrates. They identify and describe their common structures, diets, and how animals should be cared for.</p>
YEAR 2 (Cycle B)		
*Working Scientifically is taught within each wider Science topic throughout the year		
Autumn	Spring	Summer
Main project: Movers and Shakers	Main project: Coastline	Main project: Magnificent Monarchs
<p><b>Human Survival:</b> This project teaches children about the basic needs of humans for survival, including the importance of exercise, nutrition, and good hygiene. They learn how human offspring grow and change over time into adulthood.</p> <p><b>Habitats:</b> This project teaches children about habitats and what a habitat needs to provide. They explore local habitats to identify, and name living</p>	<p><b>Uses of Materials:</b> This project teaches children about the uses of everyday materials and how materials' properties make them suitable or unsuitable for specific purposes. They begin to explore how materials can be changed.</p> <p><b>Plant Survival:</b> This project teaches children about the growth of plants from seeds and bulbs. They observe the growth of plants first-hand, recording changes</p>	<p><b>Animal Survival:</b> This project teaches children about growth in animals by exploring the life cycles of some familiar animals. They build on learning about the survival of humans by identifying the basic needs of animals for survival, including food, water, air and shelter.</p>

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<p>things and begin to understand how they depend on one another for food and shelter.</p>	<p>over time and identifying what plants need to grow and stay healthy.</p>	
<p><b>YEAR 3 (Cycle A)</b> *Working Scientifically is taught within each wider Science topic throughout the year</p>		
<p>Autumn</p>	<p>Spring</p>	<p>Summer</p>
<p>Main project: Through the Ages</p>	<p>Main project: Rocks, Relics, and Rumbles</p>	<p>Main project: Emperors and Empires</p>
<p><b>Animal nutrition and the skeletal system:</b> This project teaches children about the importance of nutrition for humans and other animals. They learn about the role of a skeleton and muscles and identify animals with different types of skeleton.</p>	<p><b>Forces and Magnets:</b> This project teaches children about contact and non-contact forces, including friction and magnetism. They investigate frictional and magnetic forces and identify parts of a magnet and magnetic materials.</p>	<p><b>Plant Nutrition and Reproduction:</b> This project teaches children about the requirements of plants for growth and survival. They describe the parts of flowering plants and relate structure to function, including the roots and stem for transporting water, leaves for making food and the flower for reproduction.</p> <p><b>Light and Shadows:</b> This project teaches children about light and dark. They investigate the phenomena of reflections and shadows, looking for patterns in collected data. The risks associated with the Sun are also explored.</p>

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<b>YEAR 4 (Cycle B)</b> *Working Scientifically is taught within each wider Science topic throughout the year		
Autumn	Spring	Summer
Main project: Invasion	Main project: Misty Mountain, Winding River	Main project: Ancient Civilisations
<p><b>Food and the Digestive System:</b> This project teaches children about the human digestive system. They explore the main parts, starting with the mouth and teeth, identifying teeth types and their functions. They link this learning to animals' diets and construct food chains to show the flow of energy.</p> <p><b>Sound:</b> This project teaches children about sound, how sound is made and how sound travels as vibrations through a medium to the ear. They learn about pitch and volume and find out how both can be changed.</p>	<p><b>States of Matter:</b> This project teaches children about solids, liquids and gases and their characteristic properties. They observe how materials change state as they are heated and cooled, and learn key terminology associated with these processes.</p> <p><b>Grouping and Classifying:</b> This project teaches children about grouping living things, known as classification. They study the animal and plant kingdoms and use and create classification keys to identify living things.</p>	<p><b>Electrical Circuits and Conductors:</b> This project teaches children about electrical appliances and safety. They construct simple series circuits and name their parts and functions, including switches, wires, and cells. They investigate electrical conductors and insulators and identify common features of conductors. It also teaches children about programmable devices. They combine their learning to design and make a nightlight.</p>
<b>YEAR 5 (Cycle A)</b> *Working Scientifically is taught within each wider Science topic throughout the year		
Autumn	Spring	Summer
Main project: Dynamic Dynasties	Main project: Sow, Grow and Farm	Main project: Groundbreaking Greeks
<p><b>Forces and Mechanisms:</b> This project teaches children about the forces of gravity, air resistance, water resistance and friction, with children exploring their effects. They learn about mechanisms, their uses and how they allow a smaller effort to have a greater effect.</p> <p><b>Earth and Space:</b> This project teaches children about our Solar System and its spherical celestial bodies. They describe the movements of the Earth and the other planets relative to the Sun, the Moon relative</p>	<p><b>Human Reproduction and Ageing:</b> This project teaches children about animal life cycles, including the human life cycle. They explore human growth and development to old age, including the changes experienced during puberty and human reproduction.</p>	<p><b>Properties and Changes of Materials:</b> This project teaches children about the wider properties of materials and their uses. They learn about mixtures and how they can be separated using sieving, filtration, and evaporation. They study reversible and irreversible changes and use common indicators to identify irreversible changes.</p>

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to Earth, and the Earth's rotation to explain day and night.		
<b>YEAR 6 (Cycle B)</b> *Working Scientifically is taught within each wider Science topic throughout the year		
Autumn	Spring	Summer
Main project: Maafa	Main project: Frozen Kingdoms	Main project: Britain at War
<p><b>Circulatory System:</b> This project teaches children about the transport role of the human circulatory system, its main parts, and primary functions. They learn about healthy lifestyle choices and the effects of harmful substances on the body.</p>	<p><b>Electrical Circuits and Components:</b> This project teaches children about electrical circuits, their components and how they function. They recognise how the voltage of cells affects the output of a circuit and record circuits using standard symbols. It also teaches children about programmable devices, sensors, and monitoring. They combine their learning to design and make programmable home devices.</p>	<p><b>Light Theory:</b> This project teaches children about the way that light behaves, travelling in straight lines from a source or reflector, into the eye. They explore how we see light and colours, and phenomena associated with light, including shadows, reflections, and refraction.</p> <p><b>Evolution and Inheritance:</b> This project teaches children how living things on Earth have changed over time and how fossils provide evidence for this. They learn how characteristics are passed from parents to their offspring and how variation in offspring can affect their survival, with changes (adaptations) possibly leading to the evolution of a species.</p>