

Design Technology Overview

	Autumn	Spring	Summer	Cooking and Nutrition
N	Christmas Baking Cooking and Nutrition	Three Billy Goats Architecture and Structure	Hungry Caterpillar Mechanisms and Mechanical Systems	
R	Moving Christmas Cards Mechanisms and Mechanical Systems	Animals Homes Architecture and Structures	Teddy Bear Picnic Cooking and Nutrition	
Year 1	Homes Architecture and Structures	Flying Kites Design	Moving Mini Beast Mechanisms and Mechanical Systems	Seaside Snacks
Year 2	Delightful Decorations Textiles	Wacky Windmills Architecture and Structures	Making Fire Engines Mechanisms and Mechanical Systems	Perfect Pizza
Year 3	Story Books Mechanisms and Mechanical Systems	Light – UP Signs Programming and Electronics	Mini Greenhouses Architecture and Structures	Sandwiches
Year 4	Seasonal Stockings Textiles	Torches Electrical Systems	Great British Inventors Architecture and Structures	Seasonal Food
Year 5	Building Bridges Architecture and Structures	Fashion and Textiles Textiles	Moving Toys Mechanisms and Mechanical Systems	Burgers
Year 6	Fairground Electrical Systems	Shelters Architecture and Structures	Programing Pioneers Programming and Electronics	Great British Dishes

	Autumn	Spring	Summer
Nursery Overview	<p><u>Cooking and Nutrition - Preparing Food</u> <u>Christmas Baking</u></p> <p>Children engage in the process of making savoury and sweet dishes Discussing hygiene and safety expectations before learning and applying skills.</p>	<p><u>Structures - Freestanding Structures</u> <u>Three Billy Goats</u></p> <p>Children will learn about how simple bridges are constructed. They will then make a bridge to carry the Three Billy Goats across the river.</p>	<p><u>Mechanisms and Mechanical Systems</u> <u>Hungry Caterpillar</u></p> <p>Children will find out what a sliding mechanism is, and how it can be used to make a simple moving picture. Children will use this to create a moving Hungry Caterpillar</p>
End of Unit Key Assessment Questions			
Reception Overview	<p><u>Mechanisms and Mechanical Systems</u> <u>Christmas Cards</u></p> <p>Children will find out what a sliding mechanism is, and how it can be used to make a simple moving picture. Children will use this to create a moving Christmas card.</p>	<p><u>Structures - Freestanding Structures</u> <u>Animal Homes</u></p> <p>Working in groups to create a freestanding structure (home) for an animal from a hot or cold environment. Children to look at the suitability of the structure</p> <p>Explore materials best used for creating a successful floating boat.</p>	<p><u>Cooking and Nutrition</u> <u>Teddy Bear Picnic</u></p> <p>Children to discuss and explore different picnic foods and what are the most appropriate foods to take on a picnic. They will also consider what are healthy and balanced food choices using an 'eatwell plate' and taste different types of picnic foods using appropriate vocabulary to describe them.</p>
End of Unit Key Assessment Questions			

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Year 1	<p><u>Homes</u></p> <p>Children will explore and investigate the various types of houses people live in around the world, as well as the shapes you can find in houses. They will be challenged to think about what materials and tools to use as well as how to join them.</p>	<p><u>Flying Kites</u></p> <p>Children will explore different types of kites and why people make them. Children will learn about kites made in different countries and what they are used for. Children will use colours, shapes and patterns to make and decorate a kite.</p>	<p><u>Moving Mini Beast</u></p> <p>Children will find out what a sliding mechanism is, and how it can be used to make a simple moving picture. They will then explore the sliding mechanism themselves making a variety of simple moving pictures with different minibeasts.</p>	<p><u>Seaside Snacks</u></p> <p>Children will apply all they have learnt about seaside snacks when creating a balanced picnic. They will use a balanced plate to check how healthy their picnics are and if they can be improved at all.</p>
Year 2	<p><u>Delightful Decorations</u></p> <p>Children will discuss what a decoration is, as well as where, when and why we might use them. They will look at different sets of decorations and identify which special occasions they are linked with.</p>	<p><u>Wacky Windmills</u></p> <p>Children will explore what a windmill is and identify the different parts they have. Children will look at different windmills around the worlds and discuss their differences. They will design their own windmill</p>	<p><u>Making Fire Engines</u></p> <p>Children will explore modern fire engines and their features, looking at what features are common to all vehicles and which are specific to fire engines. Children will look at a 17th century fire engine to compare how they are similar and different to modern fire engines.</p>	<p><u>Perfect Pizza</u></p> <p>Children to discuss their favourite pizza and compile information into a pictogram. They will also consider healthy eating and complete a balanced plate by sorting their favourite pizza ingredients.</p>
Year 3	<p><u>Story Books</u></p> <p>Children will examine a variety of books with moving mechanisms and discuss their design and construction using technical vocabulary.</p>	<p><u>Light – UP Signs</u></p> <p>Children will consider the purposes of illuminated signs, and identify a number of ways in which signs may be illuminated. They will make a simple circuit, considering how some of the components might be hidden</p>	<p><u>Mini Greenhouses</u></p> <p>Children will find out the purpose of a greenhouse, and how it can help plants to grow. Children will explore the structures and how these can be made stable</p>	<p><u>Sandwiches</u></p> <p>Children will learn about the nutritional content of a variety of sandwiches and fillings, and consider how grouping food can help us plan for a healthy diet.</p>

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Year 4	<p><u>Seasonal Stockings</u></p> <p>Children will find out where the tradition of the Christmas stocking is thought to have come from. Before looking at any examples. Children will learn about the importance of functionality and visual appeal</p>	<p><u>Torches</u></p> <p>Children will look at a variety of torches, identifying features and considering their uses. They will identify how torches work by creating a circuit</p>	<p><u>Great British Inventors</u></p> <p>Children will find out about famous British inventors and their revolutionary inventions. Children are then challenged to design and evaluate problem-solving products</p>	<p><u>Seasonal Food</u></p> <p>Children will learn why certain British foods are seasonal, and consider some pros and cons of foods from other parts of the world being available all year round.</p>
Year 5	<p><u>Building Bridges</u></p> <p>Children will learn about how simple bridges are constructed using beams, pillars or piers, then make and test beam bridge designs.</p>	<p><u>Fashion and Textiles</u></p> <p>Children will discover how some natural and synthetic textiles are produced, and consider their uses in clothing.</p>	<p><u>Moving Toys</u></p> <p>Children will think of and investigate different moving toys. They will learn about cam mechanisms and explore different toys that use them.</p>	<p><u>Burgers</u></p> <p>Children to explore and discuss different burgers, restaurants and their preferences. They will analyse different nutrition facts and find out how to check the nutrition fact labels.</p>
Year 6	<p><u>Fairground</u></p> <p>Children to explore and discuss different fairground rides they have been on. They will think about how they move, what are the components that join them together and the mechanisms that make them work</p>	<p><u>Shelters</u></p> <p>Children will explore, discuss and investigate a range of shelters, thinking about what they are made from and their purpose. Children will carry out some experiments to find out how best to join materials together to form a structure and think about how to reinforce the structures to make them stronger.</p>	<p><u>Programing Pioneers</u></p> <p>Children will learn that many more complex electrical products are controlled using embedded computer systems, often with microcontrollers with specially written programs on them. They will begin to explain, in human language, the algorithms that monitor and control these systems.</p>	<p><u>Great British Dishes</u></p> <p>Children will develop their understanding of what a national dish is. They will explore some national savoury dishes of England, looking at the origin of each one and discussing how healthy it is</p>