

## INTENT

### Design and Technology Curriculum Year A: Planning, Progress and Long-Term Knowledge Growth

YEAR 1/2	Substantive Design and Technology content	Recurring substantive themes, ideas and language (Key Concepts)	Subject rationale: Supporting pupils' wider design and technology curriculum journey	Basic disciplinary training in design and technology
<b>Autumn Term</b>  <b>Mechanisms (Moving toys) – wheels &amp; axels</b>	<p>To look at examples of moving toys and explore their mechanisms (wheels, axels, wind up, spring). Understand that different mechanisms produce different types of movement. Evaluate products we have seen.</p> <p>To know what Design criteria is and how it can be used to create a product.</p> <p>To explore mechanisms using a range of materials.</p> <p>To generate and communicate their design ideas through talking and drawing. Produce a mock-up of their design and test it.</p> <p>To know how to evaluate their product against the design criteria and suggest improvements.</p> <p>Make improvements for final product.</p>	<p>Taught alongside the history unit of changes in living memory, this unit will develop pupils knowledge and understand that different mechanisms produce different types of movement to make a toy move. Pupils will further develop their knowledge of how to design, make and evaluate products.</p> <p>They will know and use technical vocabulary relevant to the project. Such as <b>design, purposeful, functional, appealing, criteria, mechanism, wheels, axel, spring, explore, generate, evaluate, improve, mock up, test.</b></p>	<p>Building on prior learning in the EYFS of how things work this unit will deepen children's knowledge of the mechanisms that make things move. This unit will support later work in LKS2 on mechanisms through moving animals and Roman catapults. It supports later work in UKS2 on construction of wooded toys, balloon buggies and Mars Rovers (Lego Wedo)</p> <p>This unit links to our eco school topics of <b>transport.</b></p>	<p>Through this work pupils will draw on disciplines such as mathematics, science, engineering, computing and art.</p> <p>Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens.</p> <p>Children will learn to design and make high-quality prototypes and products, as well as critique, evaluate and test their ideas and products.</p>
<b>Spring Term</b>  <b>Cookery – traditional foods of the UK</b>	<p>To know the food groups that different healthy foods belong and demonstrate by selecting appropriate combinations for a singular meal</p> <p>Find out where food comes from.</p> <p>To know the purpose of different tools and which to select for use in preparing food (eg colander, sieve, spatula, roller, cutter, peeler, masher).</p> <p>Explore the properties of food using a range of tools (cutting, weighing, measuring) safely and hygienically.</p> <p>Use a range of tools and equipment to make their own traditional foods (oat or potato cakes, Welsh cakes, scones &amp; soda bread),</p>	<p>Taught alongside the geography unit 'The British Isles', pupils will further develop their knowledge of healthy and unhealthy foods as well as regional foods associated with location. They will further develop their skills when using a range of tools in a safe and hygienic environment. Pupils will make and evaluate food from the 4 countries of the UK. Pupils will become secure in the vocabulary of: <b>make, evaluate, cut, weigh, measure, hygienic, nutrition, safety, affordability</b></p>	<p>This unit will build on prior learning in the EYFS where children grow their own vegetables and make soup, fruit salad, Christmas cake &amp; apple juice. It supports later work in LKS2 on food technology. It supports later work in UKS2 on cooking Egyptian bread.</p> <p>This unit links to our eco school topics of <b>global citizenship and waste.</b></p>	<p>Through this work pupils will draw on disciplines such as mathematics and science.</p> <p>Pupils will understand and apply the principles of nutrition and learn how to cook.</p>

	<p>thinking about the ingredients they will use and how they will construct it.</p> <p>Use all of their senses to evaluate their cooking.</p>			
<p><b>Summer Term</b></p> <p><b>Structure</b></p>	<p>. Know that a range of tools can be used for different purposes: cutting, sticking, curling, bending, joining etc.</p> <p>To know how to join components together effectively</p> <p>To understand how structures can be made stronger and stiffer. Build structures by selecting appropriate materials and investigating ways to strengthen them.</p> <p>Design, develop and create turrets, castles and drawbridges using knowledge from their investigation and design criteria.</p> <p>Evaluate their ideas throughout the process and review their products against original criteria.</p>	<p>This unit is taught alongside the history unit of Castles, Kings and Queens; the geography unit on human and physical features and the science unit on materials. Through this unit pupils will develop their knowledge and understanding of mechanisms and use of suitable materials. Pupils will further develop their knowledge of how to design, make and evaluate products.</p> <p>They will know and use technical vocabulary relevant to the project. Such as <b>design, purposeful, functional, appealing, criteria, , explore, generate, evaluate, improve, mock up, test, stable, strong, structure</b></p>	<p>This unit will build on prior learning in the EYFS on joining materials through junk modelling. It supports later work in LKS2 on structures when building bridges.</p> <p>It supports later work in UKS2 on construction through wooden toys and willow structures.</p> <p>This unit links to our eco school topics of <b>litter</b>.</p>	<p>Through this work pupils will draw on disciplines such as mathematics, science, engineering, computing and art.</p> <p>Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens.</p> <p>Children will learn to design and make high-quality prototypes and products, as well as critique, evaluate and test their ideas and products.</p>