

INTENT

Design and Technology Curriculum Year B: 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
Autumn Term Mechanisms - moving pictures (sliders, leavers, wheels)	<p>Explore and evaluate a range of books with moving pictures.</p> <p>Explore how different mechanisms work (leavers, sliders, wheels) and what materials are needed for them to work.</p> <p>Know what Design criteria is and how it can be used to create a product.</p> <p>Explore mechanisms using a range of materials.</p> <p>Generate and communicate their design ideas through talking and drawing.</p> <p>Making a moving picture for a traditional story, using a range of tools, equipment and materials.</p> <p>Evaluate their product against the design criteria and suggest improvements.</p> <p>The assessment of this unit will be to design, make and evaluate a moving picture for a Christmas card, demonstrating the knowledge and skills we have gained.</p>	<p>Through this unit pupils will understand that different mechanisms produce different types of movement within a picture. They will explore with different mechanisms and make moving pictures to support a story of a traditional tale. Pupils will further develop their knowledge of how to design, make and evaluate products. Pupils will become secure in the vocabulary of: Mechanism, Design, Evaluate, Slider, Lever, Wheel, Axel, Pivot, Template, Annotated sketch, Assemble, Design criteria</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.</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>
Spring Term Textiles (manipulating materials)	<p>To look at examples of weaving in real life and online. Then evaluate products we have seen.</p> <p>To know which equipment is needed to weave materials together.</p> <p>Produce a mock-up with paper to learn how to weave.</p> <p>Select appropriate tools and materials to cut shape and join and finish the collaborative wall hanging.</p> <p>To look at examples of masks in real life and online. Then evaluate products we have seen.</p>	<p>Taught alongside our geography work focusing on Mexico and Mexican textiles. Pupils will further develop their weaving and manipulating material skills and knowledge of how to design, make and evaluate individual and collaborative projects. Pupils will become secure in the vocabulary of: design, make, evaluate, weave, papier mache, rip, cut, paste, model, template, mock up, materials and design criteria.</p>	<p>Building on prior learning in the EYFS of large scale weaving and paper masks, this unit will further develop pupil knowledge of how to manipulate materials and use a range of tools. This unit will support later work in LKS2 on sewing and making Tudor purses. It supports later work in UKS2 on textiles for Make Do and Mend (WWII)</p>	<p>Through this work pupils will draw on disciplines such as mathematics, science and art.</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>

	<p>To know which equipment is needed to make papier mache and how the materials change as it is constructed.</p> <p>Produce a mock-up with a paper plate to learn how to make a mask.</p> <p>Select appropriate tools and materials to cut shape and join and finish their individual mask.</p> <p>To know what Design criteria is and how it can be used to create a product.</p> <p>To generate and communicate their design ideas through talking, drawing and templates.</p> <p>To know how to evaluate their product against the design criteria and suggest improvements.</p> <p>The assessment of this unit will be to design, make and evaluate a mask in the natural environment demonstrating the knowledge and skills we have gained.</p>			
<p>Summer Term</p> <p>Cooking: where food comes from</p>	<p>Find out where food comes from, including exploring, affordability, sustainability and fair trade.</p> <p>Look at a range of food and have a visit/ visits (farmer, dairy, baker, Supermarket, allotments)</p> <p>Explore the properties of food using a range of tools (grating, cutting, peeling, weighing, measuring) safely and hygienically.</p> <p>Design their pasty, consider its purpose (healthy snack), function (nutritious) and appeal (looks good)</p> <p>Communicate their design through talking, drawing and mock ups using salt dough.</p> <p>To know how to wash, peel, slice and grate vegetables, selecting and use appropriate kitchen equipment safely and purposefully.</p>	<p>Taught alongside our science unit on plants. Pupils will further develop their knowledge of healthy and unhealthy foods and secure their knowledge of where food comes from. They will further develop their skills when using a range of tools in a safe and hygienic environment. Pupils will design, make and evaluate a healthy snack. Pupils will become secure in the vocabulary of: design, make, evaluate, cut, weigh, peel, measure, hygienic, nutrition, safety, affordability</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 & apple juice. It supports later work in LKS2 on food technology. It supports later work in UKS2 on cooking fruit crumble and Egyptian bread.</p> <p>This unit links to our eco school topics of global citizenship and waste.</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>

To begin to use and be aware of a range of methods of food preparation, such as peeling, chopping, steaming and boiling.

Use a range of tools and equipment to make their own pasty, thinking about the ingredients they will use and how they will construct it.

Use all of their senses to evaluate their pasty.

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