

Park Gate Primary School
Year 5 and 6 Subject Overview: Design and Technology

Overview

Through a variety of creative and practical activities, pupils will be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They will work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. As part of their work with food, pupils will be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Year 5 Autumn Term This is Me!	Year 5 Autumn Term Friend or Foe	Year 5 Summer Term Narnia
<p>Design a personalised cushion adding their own personality through simplified features.</p> <p>Select from a range of textiles to create their cushion, incorporating adding detail using buttons, wool and stitching.</p> <p>Accurately join textiles and add detail using a range of stitches, including blanket stitch.</p>	<p>Investigate a range of rationing recipes and ingredients used during WWII.</p> <p>Understand seasonality and circumstance, knowing where and how a variety of ingredients were grown, reared and processed.</p> <p>Design, prepare and cook a wartime savoury meal using a range of cooking techniques including, grating, chopping, peeling and heating and baking.</p> <p>Evaluate taste, appearance and texture against original design expectation.</p>	<p>Research a range of products using winding mechanisms.</p> <p>Develop a design criteria to inform the design of an innovative and functional vehicle that is fit for purpose.</p> <p>Generate, develop, model and communicate their ideas through annotated sketches, cross-sectional diagrams and creating a prototype of their vehicle.</p> <p>Understand how cams, wheels and winding mechanisms could be used to create a moving vehicle suitable for Narnia.</p> <p>Select from and use materials and components which are fit for the purpose of a moving vehicle, including cams and wheels for Narnia.</p> <p>Use a range of practical skills to create a vehicle (including cutting, gluing, filing and sanding), measuring accurately.</p>

		Evaluate their vehicle against their own design criteria.
Year 6 Autumn Term This is Me!	Year 6 Spring Term Bird Boxes	Year 6 Summer Term Winchester
<p>Design a personalised bookmark adding their own personality through simplified features.</p> <p>Select from a range of textiles to create their bookmark using their knowledge of strengthening and stiffening.</p> <p>Accurately join textiles and add detail incorporating detail using buttons, beads, felt, wool and a variety of stitching.</p>	<p>Research a range of bird boxes and develop a design criteria to inform the design of an innovative, functional and appealing box.</p> <p>Generate, develop and communicate their ideas for a bird box through discussion, annotated sketches, prototypes and computer-aided design.</p> <p>Select from tools and equipment to accurately cut, shape, joining and finishing their box, using accurate measurement.</p> <p>Select from materials and components, according to their functional properties and aesthetic qualities to create their box.</p> <p>Apply their understanding of how to strengthen, stiffen and reinforce their individual box.</p> <p>Apply their understanding of computing to program, monitor and control their products by using a sensor for a function, using an electrical systems in their products. Demonstrate how their product could be safely positioned using a pulley.</p> <p>Consider the views of the Dragon's Den when evaluating their products against their own design criteria and target market.</p>	<p>Investigate a range of recipes and ingredients used making pizzas, including different dough bases.</p> <p>Understand seasonality and how this could influence fresh ingredients.</p> <p>Visit a pizza restaurant to learn how pizzas are produced in a professional kitchen.</p> <p>Design, prepare and cook their own pizza using a range of cooking techniques, including preparing the dough.</p> <p>Evaluate taste, appearance and texture against original design expectation.</p>

