

**Park Gate Primary School**  
**Year 3 and 4 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.*

<b>Year 3 Autumn Term</b> <b>Christmas is Coming...</b>	<b>Year 3 Spring Term</b> <b>Play the Game</b>	<b>Year 3 Summer Term</b> <b>Harry Potter</b>
<p>Develop design criteria to inform the design of a functional and appealing advent decoration.</p> <p>Select from a wide range of textiles to create a Christmas decoration, according to their functional properties and aesthetic qualities.</p> <p>Accurately join textiles using appropriate stitching, adding detail and thinking about aesthetic quality, size and consumer.</p> <p>Evaluate their ideas and finished decorations against their own design criteria and consider the views of others to improve their work.</p>	<p>Investigate and analyse a range of existing magnetic games.</p> <p>Understand how individuals in design and technology have helped shaped the world of games.</p> <p>Use research and develop design criteria to inform the design of an innovative, appealing magnetic game that is fit for purpose and aimed at families.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches and prototypes.</p> <p>Select from a range of tools and equipment to cut, shape, join and finish a game.</p> <p>Select from a range of materials suitable for making a game, according to their functional properties and aesthetic qualities.</p> <p>Apply their understanding of how to strengthen, stiffen and reinforce to increase the longevity of the game.</p> <p>Evaluate their game against their own design criteria and consider the views of parents at the learning outcome to potentially improve their game further.</p>	<p>Apply the principles of a healthy and varied diet when designing a savoury summer soup for the Hogwarts Party.</p> <p>Select ingredients for a summer soup based on seasonality, knowing where ingredients are grown and processed.</p> <p>Prepare ingredients for a summer soup hygienically using a range of techniques including, grating, chopping, blending, peeling and heating.</p>

<b>Year 4 Autumn Term</b> <b>It's Top Secret</b>	<b>Year 4 Spring Term</b> <b>Town Study</b>	<b>Year 4 Spring/Summer Term</b> <b>Operation Ouch</b>
<p>Research a range of spy gadgets and develop design criteria to inform the design of an innovative, functional gadget for a spy.</p> <p>Understand how spy technology has evolved over time.</p> <p>Generate, develop and communicate their ideas for a spy gadget through discussion, annotated sketches, exploded diagrams, prototypes and computer-aided design.</p> <p>Select from tools and equipment to cut, shaping, joining and finishing their gadget.</p> <p>Select from materials and components, according to their functional properties and aesthetic qualities to create a spy gadget.</p> <p>Apply their understanding of how to strengthen, stiffen and reinforce their individual spy gadget. Understand and use electrical systems in their gadget [including, series circuits incorporating switches, bulbs and buzzers].</p> <p>Apply their understanding of computing to program, monitor and control their products.</p> <p>Evaluate their ideas and products against their own design criteria and consider the views of parents attending the Spy Exhibition to potentially improve their work.</p>	<p>Design a patch for a flag depicting an image from the town study.</p> <p>Select from a wide range of textiles to create a patch, according to their aesthetic qualities.</p> <p>Accurately join textiles using more than one type of stitching, adding detail and thinking about aesthetic quality, size and overall flag design.</p> <p>Evaluate their ideas and finished patches when joined together against the original brief.</p>	<p>Investigate and analyse a range of existing healthy savoury snacks.</p> <p>Understand and apply the principles of a healthy and varied diet.</p> <p>Select ingredients for a healthy snack based on seasonality and nutritional benefits.</p> <p>Prepare and cook ingredients for a healthy snack hygienically using a range of techniques including, grating, chopping, peeling and heating.</p>