

Design and Technology Curriculum Map



St. Winefride's Catholic Primary School



	Autumn	Spring	Summer
Reception	<p>Food and Nutrition All About Me Make a healthy fruit tiger.</p> <p>Festivals Around the World Make and eat Jewish doughnuts.</p> <p>When the children talk about and identify healthy and unhealthy foods and make and eat their healthy fruit tiger and Jewish doughnut the children will begin to understand some food preparation tools, techniques and processes, practise stirring, mixing, pouring, blending, discuss how to make an activity safe and hygienic, discuss use of senses, understand need for variety in food and begin to understand that eating well contributes to good health.</p>	<p>Construction Once Upon a Time Design and construct homes suitable for the 3 little pigs. Create a beanstalk stable enough for a plant to grow.</p> <p>When the children design and construct a home for the 3 little pigs and a stable beanstalk for a plant to grow the children will replicate structures with materials / components, build / construct with a wide range of objects, learn how everyday objects work, start to build structures, joining components together and to learn how to use a range of tools, e.g. scissors, hole punch, stapler etc.</p> <p>Food and Nutrition Make, decorate and eat a gingerbread man. When the children talk about the ingredients to make a gingerbread man and discuss the process of preparing and baking a gingerbread man the children will begin to understand some food preparation tools, techniques and processes, practise stirring, mixing, pouring, blending, discuss how to make an activity safe and hygienic, discuss use of senses, understand need for variety in food and begin to understand that eating well contributes to good health.</p> <p>Textiles</p>	<p>Construction Environmental Awareness Junk model crab using litter. When the children design and construct an image of a crab and attach junk to the image the children will replicate structures with materials / components, build / construct with a wide range of objects, learn how everyday objects work, start to build structures, joining components together and to learn how to use a range of tools, e.g. scissors, hole punch, stapler etc.</p> <p>Textiles and Mechanisms Minibeasts Weave wings of a butterfly. Make the butterfly wings move. When the children design, create and weave ribbon/paper etc to create the wings of a butterfly the children will explore different fabric with their hands, use scissors to cut and trim fabric, yarn and string, spread glue and stick fabric, yarn and wool on to a chosen surface, develop threading experiences and decorate textiles using a number of techniques (such as adding sequins or beads or additional fabric). When the children design and create their butterfly wings to move the children will look at simple hinges, wheels and axles begin to incorporate moving parts into models. For example, use split pins to make body parts move.</p>

		<p>Past and Present</p> <p>Make a wooden spoon puppet.</p> <p>When the children design and create their wooden spoon puppet the children will explore different fabric with their hands, use scissors to cut and trim fabric, yarn and string, spread glue and stick fabric, yarn and wool on to a chosen surface, develop threading experiences and decorate textiles using a number of techniques (such as adding sequins or beads or additional fabric).</p>	
<p>Year 1</p>	<p>Textiles</p> <p>Toys</p> <p>Linked to Toys through Time, the children will design an appealing product and select from a range of tools to perform practical tasks. This will include learning basic sewing stitches. The final product will be a toy made from fabric or a sock and decorated using materials such as pipe cleaners, sequins and buttons.</p> <p>Mechanisms</p> <p>Moving Christmas Cards (sliders and levers)</p> <p>The children will create a Christmas Card and learn about sliders and levers. They will create their own prototypes of these different mechanisms using card, and split pins for the pivot.</p>	<p>Construction and Textiles</p> <p>Making Royal Headwear</p> <p>Linking to Queens topic, the children select from and use a wide range of materials. They will design purposeful, functional, appealing products for themselves, and other users based on design criteria. Using papier-mâché, the children will create their headwear suitable for a king/queen. They will explore how they can be made stronger, stiffer and more stable. They headwear will be decorated with a range of items (buttons, sequins, bead etc.) thinking about how to secure them effectively.</p>	<p>Food and Nutrition</p> <p>Seaside Snacks</p> <p>Linking to Geography, the children will research, design and make snacks appropriate to eat by the seaside. They use the basic principles of a healthy and varied diet and use what they know about the Eatwell Guide to design and prepare dishes. This topic allows the children to understand where food comes from.</p>
<p>Year 2</p>	<p>Food and Nutrition</p> <p>Make Ice-Cream</p> <p>Linked to the History of Parkgate and the famous ice-cream shop, the children will make their own fruit ice-cream. They will use science to make ice-cream in a bag. Through the project, the children will describe the properties of ingredients and importance of varied diet</p>	<p>Construction</p> <p>Great Fire of London</p> <p>The children will build structures exploring how they can be made stronger, stiffer and more stable. They will talk about and start to understand the simple working characteristics of materials and components. With help, the children will measure, mark out, cut, shape and score materials with some accuracy. Finally, they will assemble, join and combine materials or components.</p>	<p>Mechanisms</p> <p>Vehicles</p> <p>Linked to explorers and transport, the children will be creating their own vehicle out of recycled items from home. They will explore and use mechanisms (axles and wheels) and use a variety of materials and tools safely and effectively to create a vehicle using wheels and axles to make it travel a distance. The children will generate,</p>

	<p>and say where food comes from (animal, underground etc.). The children will learn about the eat well plate and explain there are groups of food.</p> <p>Mechanisms Moving Christmas Cards (sliders and levers) The children will create a Christmas Card and learn about sliders and levers. They will create their own prototypes of these different mechanisms using card, and split pins for the pivot.</p>	<p>Textiles Religious Easter Cards The children will have the opportunity to create a Religious Easter decoration. They will experience fabric collage, paper weaving, willow work, beadwork, mosaic, textile weaving.</p>	<p>develop, model and communicate their ideas through talking and drawing.</p>
<p>Year 3</p>	<p>Food and Nutrition Bronze Age Bread Children will research the recipes and ingredients used by Bronze Age people and design their own. They will prepare and cook savoury breads, and will use a heat source, with support. The children will grow in confidence using some of the following techniques: grating, mixing, spreading and baking.</p>	<p>Textiles Egyptian Jewellery Children will research jewellery made and worn in Ancient Egypt and design their own linked to a set criteria. They will use appropriate decoration techniques, including applique, and will join fabrics in different ways using running stitch, over stitch or back stitch. The children will choose textiles considering appearance and functionality and make 3D jewellery as a result.</p>	<p>Mechanisms and Electrical Systems Rainforest Biome in a box The children will make a Rainforest habitat box. They will use levers and linkages to make an aspect of their box move and add electrical systems to add effect.</p>
<p>Year 4</p>	<p>Textiles Greek Sandals The children will appreciate the resources used by the Ancient Greek, research their sandal designs and make and evaluate an Ancient Greek-style sandal. The children will think about how to make product strong, explain how to join things in a different way and explore fastenings.</p>	<p>Construction, Mechanisms and Electrical Systems Volcanoes The children will be making a volcano using papier mâché and paints. They will apply their understanding of how to strengthen, stiffen and reinforce more complex structures. To add extra impact, the children will use a number of components in a circuit to make their volcano light up. After constructing the volcano, the children will use pneumatic systems to drop the baking soda inside the volcano.</p>	<p>Food and Nutrition Viking Pea Soup Linked to their history, the children will research what the Vikings used to eat and will discuss how they made pea soup. They will write step-by-step instruction on how to make split pea soup and work in pairs to make it. The children will be confident using some of the following techniques: peeling, chopping, slicing, grating, mixing and spreading,</p>

<p>Year 5</p>	<p>Food and Nutrition</p> <p>Islamic Stew</p> <p>Linked to our history topic on 'Early Islamic Civilisations', the children will safely and hygienically prepare and cook a stew. They will begin by looking at the seasonality of foods and where they are grown or caught. When preparing the ingredients they will use the techniques - peeling, chopping, slicing, grating and boiling.</p>	<p>Textiles</p> <p>Freedom Quilt</p> <p>To make links with our history topic on 'The Slave Trade', the children will create their own unique patchwork square which we will join together to create a class patchwork quilt. This will involve looking at the different ways of joining materials with a focus on stitching, glueing and sewing.</p>	<p>Mechanisms and Electrical Systems</p> <p>Make a Victorian toy</p> <p>To make links with our history topic on 'Industrial Revolution & Victorians', the children will design and make a Victorian toy using cams, pulleys or gears to create movement. The children will confidently use number of components in a circuit and incorporate switch into product.</p>
<p>Year 6</p>	<p>Construction and Electrical Systems</p> <p>Build an Air Raid Shelter</p> <p>John Anderson - put in charge of designing somewhere safe for people to take refuge during air raid sirens. The children will work in groups to build their own Anderson Shelters (air raid shelters) using a range of different materials based on their durability and strength. The children will incorporate a switch into product and confidently use number of components in a circuit to create light and sound.</p>	<p>Textiles</p> <p>Easter decoration</p> <p>Children are to design their own Easter decoration. It may be used as a decoration for an Easter bonnet, as part of an Easter wreath to hang on your front door or simply to show symbols of Easter. Children will use a range of materials carefully thought out to ensure durability, appearance and cost effectiveness. The children will use a range of joining techniques and understand that a single 3D textiles project can be made from a combination of fabric shapes.</p>	<p>Food and Nutrition</p> <p>Chinese Cuisine</p> <p>After completing the three-way study between France, the UK and China. The children will work together to plan, design, and make their own Chinese cuisine following a design brief and carefully selected ingredients native to the country. The children will describe some of the different substances in food and drink, and how they can affect health. They will prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source and use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, griddling, grilling and frying.</p>