

## Design technology Year 5

	1	2	3	4	5	6
<p><b>Design and Technology knowledge</b></p> <p>*Through a variety of creative and practical activities pupils should be taught the knowledge, understanding and skills to engage in an iterative process of designing and making.</p> <p>*Know how to use utensils and equipment including heat sources to prepare and cook food</p> <p>*Prepare and cook and cook a variety of predominantly savoury dishes uses a range of cooking techniques.</p> <p>*Understand seasonality in relation to food products and the source of different products.</p>		<p>WW2 Biscuits (done as homework but brought into school)</p>	<p>Bridge workshop</p>	<p>Spinach and cheese muffins</p>		<p>Fairground wheels</p> <p>Greek Tzatziki</p> <p>Lego Wedo</p>
<p>Health and safety</p>		<p>*Discussion about washing hands/ coughing/ sneezing/ fingers in mouth etc. at home</p> <p>*Discussion about safety of using kitchen equipment, at home, and that they might need</p>	<p>* Discussion about safety of using sticks: point them down, do not put them near peoples' eyes.</p>	<p>*Discussion about washing hands/ coughing/ sneezing/ fingers in mouth etc.</p> <p>*Discussion about safety when using kitchen equipment - knives, peelers, oven</p>		<p>*Discussion and modeling on how to use saws and clamps safely</p> <p>*Discussion about the correct use of glues for various materials.</p> <p>*Discussion about washing hands/</p>

		parental assistance in some instances				coughing/ sneezing/ fingers in mouth etc *Discussion and modeling on how to use knives correctly
<b>Design and Technology skills</b>						
Design		Design (as part of homework) their own WW2 recipe – keeping in mind – appealing product, fit for purpose, aimed at the family. *Research typical recipes from WW2 era. *Write up instructions in homework book	*Generate, develop, model and communicate their ideas through discussion (group work)	Write instructions for spinach and cheese muffins		*Generate innovative ideas through research and discussion with peers to develop a design brief and criteria for a design specification – Ferris wheel. *Design a functional, purposeful product for the intended user that is fit for purpose based on a simple design specification. *Develop and communicate ideas through discussion, annotated drawings and drawings from different views. *Create a design sheet with instructions/materials/history (research) – recognise that their designs have to meet a range of needs  Write instructions

						for Greek tzatziki
<p>Make</p> <p>- Use of tools and equipment</p>		<p>*Select from and use a wide range of kitchen equipment to perform a practical task (cooking) accurately and successfully.</p>	<p>*Use construction materials, selecting sizes according to their functional properties.</p> <p>*Use tools and equipment to perform practical tasks - elastic bands for joining.</p>	<p>*Use a combination of claw and bridge knife techniques</p> <p>*Grate soft foods</p> <p>*Use a jug to measure liquids</p> <p>*Handle and fold short crust pastry</p> <p>*Glaze</p> <p>*Tear herbs</p> <p>*Arrange ingredients</p> <p>*Beat ingredients together</p> <p>*Season to taste</p> <p>*Use an oven (under supervision)</p>		<p>*Write a step-by-step plan including a list of resources needed.</p> <p>*Select from and use a range of appropriate materials, tools, components to accurately measure and and combine materials and resources.</p> <p>*Make a moving ferris wheel out of wood – considering strengthening techniques, movement using an axle, pulley and gear and how to effectively join the materials</p> <p>*Use a claw knife technique for soft and hard foods</p> <p>*Use measuring spoons and cups</p> <p>*Crush garlic</p> <p>*Use a lemon squeezer</p> <p>*Season to taste</p> <p>*Garnish and decorate</p>
<p>Evaluate</p>		<p>*As a class, evaluate their own and other recipes.</p>	<p>*Investigate and analyse a range of existing products</p>			<p>*Investigate and analyse other ferris wheels.</p>

		<p>*Identify and evaluate the ingredients they were able to use (WW2 rationing).</p> <p>* Understand how key events and individuals in design and technology have shaped the world.</p>	<p>(bridges)</p> <p>*Evaluate their ideas and build against their own design criteria and consider the views of others to improve their work.</p> <p>*Understand how key events and individuals in design and technology have shaped the world.</p>			<p>*Compare the final product to the original design specification and record the evaluations</p> <p>*Test the ferris wheel and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose Consider the views of others to improve their work</p> <p>*Taste testing tzatziki - group discussion</p>
Build structures			<p>* Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Power of the triangle</p>			
Explore and use mechanisms						<p>*Understand that mechanical systems have an input process and an output</p> <p>*Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement</p>

Explore electrical systems in their products						*Understand and use electrical systems (through Lego Wedo) in their ferris wheel, incorporating sounds, lights and motors
Use computing with product						*Apply their understanding of Lego Wedo computer program to monitor and control their ferris wheel
Subject specific vocabulary		Research, appealing, target audience, ingredients, recipe, evaluate	Structure, build, strength, support, reinforce, construction, joints, stiffen, evaluate, triangle, test	Ingredients, herbs, seasoning, glaze, beat, healthy, dairy protein, vitamins, savoury, seasonality, utensils, combine, pour, sprinkle, crumble, grate		design, materials, sketch, join, spin, turn, axle, pulley, gear, push, wheel, wood, g-clamp, hacksaw, sandpaper, driver belt, rotation, spindle, axle, follower, input, output  claw knife, measuring spoons/cups, crush, squeezer, garnish, decorate, ingredients