

Lancasterian Primary School

A safe and welcoming learning community where:

- we all aim high;
- everyone is included;
- creativity is valued.



KS1/2 Curriculum Map DESIGN & TECHNOLOGY

	Y1	Y2	Y3	Y4	Y5	Y6
Wk1	<ul style="list-style-type: none"> • Technical Knowledge ➢ Build simple structures, e.g. a beam bridge, exploring how they can be made stronger, stiffer and more stable ➢ Explore and use mechanisms (for example, levers, sliders, wheels and axles) in their products. <p>[Suggested activity: Using variety of resources to build a beam bridge]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Justify design choices made</p>	<ul style="list-style-type: none"> • Cooking and nutrition ➢ Use the basic principles of a healthy and varied diet to prepare a dish which is visually appealing ➢ Cut, peel and grate safely and hygienically ➢ Understand where common ingredients used in the UK come from <p>[Suggested activity: A healthy salad, researching where the vegetables come from]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Debate the pros and cons of using locally sourced ingredients</p>	<ul style="list-style-type: none"> • Evaluate ➢ Investigate and analyse a range of existing products which have been made to fulfil a purpose of the pupil's choice ➢ Evaluate the products against own devised set design criteria <p>[Suggested activity: Explore toys for a specific age group]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Explore how another user may evaluate a product differently, including peer assessment</p>	<ul style="list-style-type: none"> • Cooking and nutrition ➢ Understand and apply the principles of a healthy and varied diet to create a sweet dish which is cooked in the oven ➢ Measure ingredients to the nearest gram accurately ➢ Assemble the final dish taking into account aesthetics <p>[Suggested activity: Used frozen/tinned chopped apples to create an apple crumble/pie. Focus is on weighing ingredients]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Once product is made, discuss whether alternate designs/methods could have been more successful</p>	<ul style="list-style-type: none"> • Technical knowledge ➢ Explore and understand mechanical systems in existing complex products (for example, gears, pulleys, cams, levers and linkages) ➢ Explore and understand the use of electrical systems in products (for example, series circuits incorporating switches, bulbs, buzzers and motors) ➢ Apply understanding of computing to program, monitor and control products <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Predict what a product does by examining its mechanical components</p>	<ul style="list-style-type: none"> • Cooking and nutrition ➢ Understand and apply the principles of a healthy and varied diet to create a bespoke dish from a base recipe which is environmentally sustainable ➢ Use a range of cooking techniques ➢ Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. <p>[Suggested activity: Use a range of techniques to create the child's choice of dish, e.g. soup, pizza, pie, stew]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Explore the use of contrasting flavour combinations (e.g. sweet and sour)</p>

<p>Wk2</p>	<ul style="list-style-type: none"> ● Evaluate <ul style="list-style-type: none"> ➢ Explore a range of existing products which have been made to fulfil the same purpose ➢ Evaluate these products against specific design criteria <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Create their own design criteria against which to evaluate a product</p>	<ul style="list-style-type: none"> ● Design <ul style="list-style-type: none"> ➢ Design a purposeful, functional, appealing product based on design criteria ➢ Develop and communicate ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Use wider knowledge and understanding of existing products to suggest adaptations</p>	<ul style="list-style-type: none"> ● Cooking and nutrition <ul style="list-style-type: none"> ➢ Understand and apply the principles of a healthy and varied diet to prepare a savoury, cooked dish ➢ Follow a recipe ➢ Select and safely use appropriate utensils <p>[Suggested activity: select a savoury dish from foodafactforlife website]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Justify utensil choices by explaining how they support the preparation of the dish</p>	<ul style="list-style-type: none"> ● Design <ul style="list-style-type: none"> ➢ Use research and given design criteria to inform the design of an innovative, functional, appealing product that is fit for purpose, aimed at particular individuals or groups ➢ Generate, develop, model and communicate ideas through discussion, annotated sketches and exploded diagrams <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Generate more than one design and justify most appropriate against design criteria</p>	<ul style="list-style-type: none"> ● Cooking and nutrition <ul style="list-style-type: none"> ➢ Explore the environmental impacts of different foods, including how they are produced and the most effective ways to store them to prolong shelf-life and reduce waste ➢ Understand and apply the principles of a healthy and varied diet and knowledge about environment impacts of foods to create a dish ➢ Control the temperature of the hob or oven to cook properly ➢ Apply knowledge of the correct storage of ingredients to maximise shelf-life of dish <p>[Suggested activity: Explore a variety of dishes which can be made with a potatoes without any waste, including peels]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Use 2 different cooking methods within one dish (e.g. boil and fry or bake and grill)</p>	<ul style="list-style-type: none"> ● Design <ul style="list-style-type: none"> ➢ Develop design brief and criteria to inform the design of innovative, functional, appealing product of pupil's choice that uses mechanical and/or electrical systems, is fit for purpose, and is aimed at particular individuals or groups ➢ Generate, develop, model and communicate ideas through exploded diagrams, prototypes, and computer-aided design <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Model ideas using scaled drawings/diagrams</p>
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<p>Wk3</p>	<p>● Cooking and nutrition</p> <ul style="list-style-type: none"> ➢ Use the basic principles of a healthy and varied diet to prepare part of a dish from a culture outside the UK ➢ Understand where the ingredients in the dish come from <p>Suggestions: -Create dips from cultures. Children to try them with bread -create a smoothie, fruit juice</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Evaluate different ingredients according to different characteristics (e.g. taste, texture, appearance)</p>	<p>● Make</p> <ul style="list-style-type: none"> ➢ Make the product by using: <ul style="list-style-type: none"> ✓ given materials and components (for example, construction materials or textiles) ✓ given tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Justify choice of material, components, tools and equipment by explaining their function and characteristics</p>	<p>● Technical knowledge</p> <ul style="list-style-type: none"> ➢ Learn about how to strengthen, stiffen and reinforce complex structures, e.g. truss bridge, and apply understanding <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Focus on the materials themselves, explain how their properties (e.g. strength, flexibility, durability, etc.) can enhance the performance of a structure/product</p>	<p>● Make</p> <ul style="list-style-type: none"> ➢ Make the product by selecting from and using: <ul style="list-style-type: none"> ✓ a limited range of materials and components, including <u>textiles</u> according to their functional properties and aesthetic qualities ✓ a limited range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Explain why one method of cutting/joining might be more appropriate than another depending on the function of the product</p>	<p>● Evaluate</p> <ul style="list-style-type: none"> ➢ Investigate and analyse a range of existing products which have been made to fulfil a purpose of the pupil's choice ➢ Understand how key events and individuals in design and technology have helped shape the world including BAME role models <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Identify how perceptions of strengths and weaknesses in designs may vary according to who is evaluating the design</p>	<p>● Make</p> <ul style="list-style-type: none"> ➢ Make the product by selecting from and using: <ul style="list-style-type: none"> ✓ a wide range of materials and components, including <u>construction materials</u> according to their functional properties and aesthetic qualities ✓ a wide range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately <p>[Suggested activity: ---]</p> <p><u>Suggested Extended Abstract/Greater Depth Task:</u> Adapt choices of tools and materials during the process in response to unforeseen issues</p>
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IT Resources

LGFL – [Busythings](#) – Cooking and Nutrition

LGFL – [Busythings](#) – Design Technology

LGFL - [Cookit](#)

www.foodafactforlife.org.uk