



Year 5: D&T

Designing and Evaluating	Making	Cookery and Nutrition
D1 I can design with the user in mind, motivated by the service a product will offer.	M1 Construction I can develop a range of practical skills and demonstrate them to create products (e.g. cutting, drilling, and screwing, nailing, gluing, filing and sanding).	C1 I can discuss and understand how foods are processed, including using one ingredient to make another e.g. wheat into flour.
D2 I can make products through stages of prototypes, making continual refinements.	M2 Mechanics I can convert rotary motion to linear using cams.	C2 I can apply my knowledge of the food groups to plan a balanced meal.
D3 I can ensure products have a high-quality finish, using art skills where appropriate.	M3 Mechanics I can use innovative combinations of mechanics in product designs.	C3 I can understand the importance of correct storage and handling of ingredients (knowledge of micro-organisms).
D4 I can combine elements of design from a range of inspirational designers throughout history.		C4 I can demonstrate a range of baking and cooking techniques.
D5 I can create innovative designs that improve upon existing products.		C5 I can measure accurately all of the ingredients from a recipe.
		C6 I can create and refine recipes, including ingredients, methods, cooking times and temperatures.

Year 5 coverage

Autumn Construction	Spring Mechanics	Summer Cookery and Nutrition
D1, D3, D4, D5 M1	D1, D2, D3, D4, D5 M2, M3	D1, D2, D3, D4, D5 C1, C2, C3, C4, C5, C6
Vocabulary	Vocabulary	Vocabulary



<p><u>Construction</u> reinforce, suitable, appropriate, efficient, combine techniques</p>	<p><u>Mechanics</u> convert, rotary, motion, linear, cams, combination</p>	<p><u>Cookery and Nutrition</u> processed, process names (e.g. milling to turn wheat into flour), ingredient, balanced meal/diet, storage, handling, micro-organisms, cooking and baking</p>
		<p>techniques (boil, poach, fry, steam, microwave, grill, toast, roast, bake) accuracy, recipe, refine</p>
<p><u>Designing and Evaluating:</u> purpose, motivated, service that the product offers, prototypes, continually refine, efficiency, precision, high quality finish, innovative Also include the names of designers studied</p>		
<p>I will know</p>	<p>I will know</p>	<p>I will know</p>



<u>Construction</u>	<u>Mechanics</u>	<u>Cookery and Nutrition</u>
<ul style="list-style-type: none">• That there are a range of construction techniques that I can use to create a product (e.g. cutting, drilling, and screwing, nailing, gluing, filing and sanding).• That these techniques: drilling, cutting, filing, sanding, screwing, gluing, and nailing, can be used to make (join), strengthen or refine the finish of objects/products.• How to use these techniques: drilling, cutting, filing, sanding, screwing, gluing, and nailing to make (join), strengthen and refine the finish of a product.• How to select the most appropriate techniques for the product/finish they want to achieve.	<ul style="list-style-type: none">• That there are a range of mechanisms that I can use to create movement in a product.• How to select appropriate mechanisms when designing a product.• How to show the intended use of mechanisms in a design.• How to combine mechanisms in a design to show an innovative product.• That rotary motion is a circular movement.• That linear motion is a straight movement e.g. up and down or left and right.• That cams allow me to change the type of motion from rotary to linear.• How to use cams to change rotary motion to linear motion.	<ul style="list-style-type: none">• How food is processed in different ways, to create different ingredients/products.• How to use a range of ingredients from different food groups to plan a balanced meal.• That it is important to correctly store and handle ingredients to prevent them from going off/spread of germs/micro-organisms (bacteria).• That a micro-organism is a bacterium that can be found on raw foods.• That the cooking process kills the bacterium making the food safe to eat.• How to correctly store and handle ingredients to prevent the spread of micro-organisms.• That there are different ways to cook foods (boil, poach, fry, steam, microwave, grill, toast, roast, bake).• That there are different pieces of cookery equipment that can be used e.g. hob, oven, microwave, grill.• How to use different cooking equipment to show a range of cooking and baking techniques.



Designing and Evaluating:

- How to design with the end user in mind to ensure that the product is successful.
- How to create designs that are motivated by the service that the product will provide.
- That a prototype is a first or preliminary version of a product.
- That ideas and designs can be continuously refined alongside the making of prototypes.
- How to make and refine products using prototypes.
- That products can have different quality of finishes.
- How to achieve a high-quality finish on a product.
- How to apply artistic skills where appropriate (decoration) to improve the finish of a product.
- The name and works of some inspirational designers, including pioneers in horticultural techniques.
- How to combine elements of work and ideas from inspirational designers within my own designs.
- That existing products can be improved.
- How to create innovative designs to improve upon existing products.
- How to critically evaluate my own product (peer/self).