Year 3: D&T

Designing and Evaluating	Making	Cookery and Nutrition
D1 I can design with purpose by identifying opportunities to design.	**M1 Construction** I can choose suitable techniques to construct products or to repair items.	**C1** I can say where food comes from, from around Europe.
D2 I can make products by working efficiently (such as by carefully selecting from a wide range of materials and tools).	**M2 Construction** I can strengthen materials using suitable techniques.	**C2** I know that different foods are best produced in different seasons around Europe.
D3 I can refine work as work progresses, evaluating the end product design.	**M3 Mechanics** I can use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).	**C3** I can name all of the food groups and sort ingredients into them (Carbohydrates, fruit and vegetables, protein, dairy, oils and spreads, foods high in fats and sugars).
D4 I can identify some of the great designers in all of the areas of study to generate ideas for designs.		**C4** I can follow a recipe, including selecting appropriate ingredients.
D5 I can improve upon existing designs, giving reasons for choices.		**C5** I can prepare ingredients hygienically selecting and using appropriate utensils.
D6 I can use software to design and represent product designs.		**C6** I can measure ingredients to the nearest gram.
		C7 I can assemble and cook ingredients (controlling the temperature of the oven or hob if cooking).

Year 3 topic coverage

Autumn Cookery and Nutrition	Spring Mechanics	Summer Shell Structures
D1, D2, D3, D4, D5 C1, C2, C3, C4	D1, D2, D3, D4, D5 M3	D1, D2, D3, D4, D5, D6 M1, M2
Vocabulary	**Vocabulary**	**Vocabulary**
Cookery and Nutrition Europe, produce, seasonality, food groups, carbohydrates, fruit and vegetables, protein, dairy, oils and spreads, high in fats and sugars, ingredients, varied, prepare, utensils, sterilise, gram, assemble, control, temperature	**Mechanics** scientific knowledge, mechanisms, forces, transference, levers, linkages, input, output, winding mechanisms, pulleys, gears.	**Construction** Suitable/appropriate, repair, reinforce, 3-D, net, score, corrugate, ribbing, laminating (layering of materials).
Designing and Evaluating: Research, efficiency, process, end product design, improve, develop, appealing, model, represent, annotate, critical Also include the names of designers studied.		
I will know	**I will know**	**I will know**
Cookery and Nutrition • That food can be sourced from further afield than the UK. • That food grows best in certain seasons e.g. strawberries in the Summer. • The names of the food groups (carbohydrates, fruit and vegetables, protein, dairy, oils and spreads, foods high in fats and sugars). • How to sort foods into the food groups. • How to follow a recipe.	**Mechanics** • That forces can be transferred. • That there are different mechanisms that can be used to transfer force. • The names of the mechanisms that can be used to transfer force (pulley, gear, lever, winding mechanism). • How to select an appropriate/the most appropriate mechanism for the intended purpose of a product. • How to make a mechanism. • How to apply a mechanism to a product.	**Construction** • How to select a suitable technique to construct structures including using nets to create 3D shapes, scoring and cutting. • How to select a suitable technique to repair a product. • How to strengthen materials in different ways e.g. folding, adding tubing, struts, corrugating, ribbing, gluing to make a material thicker (cardboard layering).

• How to select and use the most appropriate utensil to prepare ingredients for the meal that I am making e.g. grater, knife etc. • How to weigh ingredients to the nearest gram using electronic scales or analogue scales accurately. • How to assemble and cook food safely and hygienically. • How to use cooking equipment such as the microwave, hob, or oven. • How to control the temperature of the hob/oven when being used.		

Designing and Evaluating:

- How to research and identify opportunities to develop designs.
- How to work efficiently by making the most appropriate selections of tools and materials at the beginning of the process (during the design stage).
- How to generate and communicate own designs through annotated sketches.
- How to discuss my own and others current designs with some criticality.
- The name and works of some great designers.
- How to use work and ideas from great designers to generate ideas for my own designs.
- How to look at and discuss current designs with some criticality.
- How to adapt, change and refine designs to improve them.
- How to adapt my design as I work and give reasons for the changes to my design.
- How to evaluate my own product with support (peer/self) and take on board the ideas of others.
- How to design a product using computer software.
- How to represent a product using computer software.