

	Autumn Term	Spring Term	Summer Term	
Area of DT	<p><i>Mechanisms</i></p> <p><i>Moving toys</i></p>	<p><i>Food and Nutrition</i></p> <p><i>Vegan/Vegetarian</i></p>	<p><i>Material and Structure</i></p> <p><i>Viking Long Ship</i></p>	
Lessons	<p>Design (Y5)</p> <p>Use internet and questionnaires for research and design ideas. Take a user's view into account when designing. Begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose. Create own design criteria. Have a range of ideas. Produce a logical, realistic plan and explain it to others. Use cross-sectional planning and annotated sketches. Make design decisions considering time and resources. Clearly explain how parts of product will work. Model and refine design ideas by making prototypes and using pattern pieces. Use computer-aided designs</p>		<p>Design (Y6)</p> <p>Draw on market research to inform design. Use research of user's individual needs, wants, requirements for design. Identify features of design that will appeal to the intended user. Create own design criteria and specification. Come up with innovative design ideas. Follow and refine a logical plan. Use annotated sketches, cross-sectional planning and exploded diagrams. Make design decisions, considering, resources and cost. Clearly explain how parts of design will work, and how they are fit for purpose. Independently model and refine design ideas by making prototypes and using pattern pieces. Use computer-aided designs</p>	
	<p>Make (Y5)</p> <p>Use selected tools/equipment with good level of precision. Produce suitable lists of tools, equipment/materials needed. Select appropriate materials, fit for purpose; explain choices, considering functionality. Create and follow detailed step-by-step plan. Explain how product will appeal to an audience. Mainly accurately measure, mark out, cut and shape materials/components. Mainly accurately assemble, join and combine materials/components. Mainly accurately apply a range of finishing techniques. Use techniques that involve a small number of steps. Begin to be resourceful with practical problems</p>		<p>Make (Y6)</p> <p>Use selected tools and equipment precisely. Produce suitable lists of tools, equipment, materials needed, considering constraints. Select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics. Create, follow, and adapt detailed step-by-step plans. Explain how product will appeal to audience; make changes to improve quality. Accurately measure, mark out, cut and shape materials/components. Accurately assemble, join and combine materials/components. Accurately apply a range of finishing techniques. Use techniques that involve a number of steps. Be resourceful with practical problems</p>	
	<p>Evaluate (Y5)</p> <p>Evaluate quality of design while designing and making. Evaluate ideas and finished product against specification, considering purpose and appearance. Test and evaluate final product. Evaluate and discuss existing products, considering how well they've been made, materials, whether they work, how they have been made, fit for purpose. Begin to evaluate how much products cost to make and how innovative they are. Research how sustainable materials are. Talk about some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products</p>		<p>Evaluate (Y6)</p> <p>Evaluate quality of design while designing and making; is it fit for purpose? Keep checking design is best it can be. Evaluate ideas and finished product against specification, stating if it's fit for purpose. Test and evaluate final product; explain what would improve it and the effect different resources may have had. Do thorough evaluations of existing products considering how well they've been made, materials, whether they work, how they've been made, fit for purpose. Evaluate how much products cost to make and how innovative they are. Research and discuss how sustainable materials are. Consider the impact of products beyond their intended purpose. Discuss some key inventors/designers/ engineers/ chefs/manufacturers of ground-breaking products</p>	

<p><i>Technical Knowledge</i></p>	<ul style="list-style-type: none"> • Refine product after testing, considering aesthetics, functionality, and purpose • Incorporate hydraulics and pneumatics • Be confident to try new / different ideas • Use cams, pulleys and gears to create movement 	<ul style="list-style-type: none"> • Understand a recipe can be adapted by adding / substituting ingredients • Explain seasonality of foods • Learn about food processing methods • Name some types of food that are grown, reared or caught in the UK or wider world • Adapt recipes to change appearance, taste, texture or aroma. • Describe some of the different substances in food and drink, and how they can affect health • Prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source. • Use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. 	<ul style="list-style-type: none"> • Select materials carefully, considering intended use of the product, the aesthetics and functionality. • Explain how product meets design criteria • Reinforce and strengthen a 3D frame
<p><i>Key Vocabulary</i></p>	<p>Mechanism, strong, weak, test, evaluate, decorate, waterproof, stable, structure, cams, mechanisms</p>	<p>Alternative, diet, balanced diet, expensive, healthy, ingredients, nutrients, packaging, refrigerator, sugar substitute, meat, vegan, vegetarian, options.</p>	<p>Vikings, Long ship, battle, weapons, boat, sea, saw, cut, measure, stable, test, weak, strong, evaluation, sail</p>
<p><i>Cross-Curricular Links</i></p>	<p>Maths – Measurement</p>	<p>Topic – Planet in Peril</p>	<p>Topic - Vikings</p>
<p><i>Tools and equipment</i></p>	<p>Camera, picture, printer, wood, axel, hacksaw, vice, card, paper, wheels</p>	<p>Ingredients, meat, alternative foods, plates, cutlery</p>	<p>Wood, Hacksaw, vice, ruler, drill, safety goggles, paint, glue</p>
<p><i>Deeper Learning</i></p>	<ul style="list-style-type: none"> • What would you need to change to be able to sell your design? • How could you adapt... to make...? • What do you predict would happen if...? • Judge whether.... would cause/change/affect.... 		