

DT: Practical Knowledge

Year Four	r:	Autumn	Spring	Summer
I know how				
Design I RHOW HOW I	Design a stable structure that is aesthetically pleasing			
	Select materials to create a desired effect			
	Build frame structures designed to support weight			
	Design a shape that reduces air resistance/ increases or decreases speed			
	Draw a net to create a structure form			
	Personalise a design			
	Consider target audience and create design and success criteria focusing on individual design ideas			
	Design a food product within a given budget, drawing on taste testing judgements			
	Write design criteria for a product, articulating decisions made			
Make	Create a range of different shaped frame structures			
	Make a variety of free-standing frame structures or different shapes and sizes			
	Select appropriate materials to build a strong structure and cladding			
	Reinforce corners to strengthen a structure			
	Create a product in accordance with a plan/ recipe			
	Create different textural effects with materials			
	Masure, mark, cut and assemble with increasing accuracy			
	Make a model based on a chosen design			
	Make a product with a working electrical circuit and switch			
	Use appropriate equipment to cut and attach materials			
	Cook safely, following basic hygiene rules			
	Adapt a recipe to improve it or to meet new criteria			
	Make and test a paper template with accuracy and in keeping with design criteria			
	Select a stitch style to join fabric, working neatly by sewing small, straight stitches			1
	Incorporate fastening to a design			1
	Evaluate products, describing what characteristics made it most effective			
Evaluate	Consider effective and ineffective designs			1
	Test the success of the product			
	Describe the impact of the budget on the outcome			
	Evaluate and compare a range of products			1
Technical Knowledge	Understand what a frame structure is			
	Know that a 'free-standing' structure is one which can stand on its own			
	Know that air resistance is the level of drag on an object as it is forced through the air			1
	Know that the shape of a moving object will affect how it moves due to air resistance			
	Know that fastenings hold two pieces of material together and that different fastenings			
	are useful for different purposes Know that a prototype is useful for checking ideas and proportions			
Cooking and Nutrition	Know that the amount of an ingredient is known as the 'quantity'			
	Know that safety and hygiene are important when cooking			
	Know the following cooking techniques: sieving, measuring, stirring, cutting out and shaping			
	Understand the importance of budgeting while planning ingredients			1
	Know products often have a target audience			