Design Technology - Overview

	Autumn Term		Spring Term		Summer Term
Area of DT	Food and Nutrition Make a healthy sandwich	Materials and Structure Make sandwich packaging	Food and nutrition Food around the world	Mechanisms Catapult	Materials and Structures Photo Frames
Lessons	Design (Y3) Begin to research others' needs, Show design meets a range of requirements, Describe purpose of product, Follow a given design criteria, Have at least one idea about how to create product, Create a plan which shows order, equipment, and tools, Describe design using an accurately labelled sketch and words, Make design decisions, Explain how product will work, Make a prototype, Begin to use computers to show design			Use research for design ideas, Show design meets a range of requirements and is fit for purpose, Begin to create own design criteria, Have at least one idea about how to create product and suggest improvements for design, Produce a plan and explain it to others, Say how realistic plan is, Include an annotated sketch, Make and explain design decisions considering availability of resources, Explain how product will work, Make a prototype, Begin to use computers to show design.	
	appropriate materials, fit for powill be, Begin to measure, mar	k out, cut and shape materials/combine materials and componen	them accurately, Select rder, Consider how good product omponents with some accuracy., ts with some accuracy., Begin to	Make (Y4) Select suitable tools and equipment, explain choices in relation to required techniques and use accurately, Select appropriate materials, fit for purpose; explain choices., Work through plan in order., Realise if product is going to be good quality, Measure, mark out, cut and shape materials/components with some accuracy., Assemble, join and combine materials and components with some accuracy., Apply a range of finishing techniques with some accuracy	
	Evaluate (Y3) Look at design criteria while designing and making, Use design criteria to evaluate finished product, Say what I would change to make design better, Begin to evaluate existing products, considering how well they have been made, materials, whether they work, how they have been made, fit for purpose., Begin to understand by whom, when and where products were designed, Learn about some inventors/designers/ engineers/chefs/ manufacturers of ground-breaking products			Refer to design criteria while designing and making, Use criteria to evaluate product, Begin to explain how I could improve original design, Evaluate existing products, considering how well they've been made, materials, whether they work, how they have been made, fit for purpose., Discuss by whom, when and where products were designed., Research whether products can be recycled or reused., Know about some inventors/designers/ engineers/chefs/manufacturers of ground-breaking products	

Technical Knowledge	 Carefully select ingredients Use equipment safely Make product look attractive Think about how to grow plants to use in cooking Begin to understand food comes from UK and wider world Describe how healthy diet= variety/balance of food/drinks Explain how food and drink are needed for active/healthy bodies. Prepare and cook some dishes safely and hygienically Grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	 Select appropriate tools / techniques Alter product after checking, to make it better Begin to try new/different ideas Use simple lever and linkages to create movement 	 Measure carefully to avoid mistakes Attempt to make product strong Continue working on product even if original didn't work Make a strong, stiff structure 			
Key Vocabulary	Adapt, budget, equipment, evaluation, ingredients, method, net, packaging, prototype, quantity, recipe, target audience, target customer, template	Aesthetic, assemble, air resistance, chassis, design, design criteria, function, graphics, kinetic energy, mechanism, net, structure	Aesthetic, frame, structure, function, inspiration, pavilion, reinforce, stable, theme, picture, portrait, landscape			
Cross- Curricular Links	PSHE – Healthy eating	Topic - Romans	Geography – Deforestation			
Deeper learning	 Explain what you could change and how it would improve your design? How would you change your design for the 'real world'? How effective at Is your? 					
Tools and equipment	Craft knife, scissors, glue, tape, bread, ingredients, paper, card	Wood, glue, card, plastic lids, elastic bands, hacksaw, vice	Wood, glue, card, hacksaw, vice, camera, printer			