

## Faithful. Ambitious. Empowered.

## **DESIGN TECHNOLOGY | KPI PROGRESSION**

		Y	ear One	
Theme	Туре	Design	Make	Evaluate
Theme 1	Nutrition	Generate initial ideas and design criteria through investigating a variety of fruit and vegetables.	Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely.	Evaluate ideas and finished products against design criteria, including intended user and purpose.
Theme 2	Mechanisms	Generate ideas based on simple design criteria and their own experiences, explaining what they could make with sliders and levers.	Plan by suggesting what to do next.	Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria.
Theme 3	Structures	Generate ideas based on simple design criteria and their own experiences, explaining what they could make.	Select and use tools, skills and techniques, explaining their choices.	Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria.
		Y	ear Two	
Theme	Туре	Design	Make	Evaluate
Theme 1	Mechanisms	Generate initial ideas and simple design criteria through talking and using own experiences of wheels and axles.	Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing.	Evaluate their ideas and products throughout.
Theme 2	Nutrition	Generate initial ideas and design criteria through investigating a variety of fruit and vegetables.	Select appropriate utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely.	Evaluate ideas and finished products against design criteria, including intended user and purpose.
Theme 4	Textiles	Generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology.	Select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing.	Evaluate their ideas throughout and their final products against original design criteria.
		Υє	ear Three	
Theme	Туре	Design	Make	Evaluate
Theme 1	Structure	Experience of using different joining, cutting and finishing techniques with paper and card.	Select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy.	Investigate and evaluate a range of existing shell structures including the materials, components and techniques that have been used.
Theme 2	Mechanisms	Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.	Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost.	Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.
Theme 4	Textiles	Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s.	Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing.	Understand how a key event/individual has influenced the development of the chosen product and/or fabric.
		Y	ear Four	
Theme	Туре	Design	Make	Evaluate
Theme 1	Nutrition	Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for	Plan the main stages of a recipe, listing ingredients, utensils and equipment.	Evaluate the ongoing work and the final product with reference to the design criteria and the views of others.



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		a particular user and purpose.		
Theme 2	Structures - CAD	Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and the functional and aesthetic purposes of the product.	Select and use appropriate tools and software to measure, mark out, cut, score, shape and assemble with some accuracy.	Test and evaluate their own products against design criteria and the intended user and purpose.
Theme 3	Structures	Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.	Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks.	Evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
		Yea	ar Flve/Six	
Theme	Туре	Design	Make	Evaluate
Theme 2	Nutrition	Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification.	Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients.	Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements.
Theme 3	Structures	Develop a simple design specification, specifically focused on strengthening sea defenses, to guide the development of their ideas and products, taking account of constraints including time, resources and cost.	Select a range of materials that will suitably test the strength of the structure	Evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
Theme 4	Electrical Systems	Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.	Select from and use tools and equipment to cut, shape, join and finish with some accuracy.	Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.
		В	- Year Six	
Theme	Туре	Design	Make	Evaluate
Theme 1	Mechanisms	Develop a more complex design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost.	Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks. Through an iterative process, refine more complex elements of the build	Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests.
Theme 2	Nutrition	Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification.	Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients.	Evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements.
Theme 3	Electrical Systems	Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.	Create and modify a computer control program to enable an electrical product to work automatically in response to changes in the environment.	Test the system to demonstrate its effectiveness for the intended user and purpose.