



Pye Bank D&T Progression of Skills

Skill	KS1 OBJECTIVES		KS2 OBJECTIVES			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Practical Skills	<p>Food: Cut ingredients safely and hygienically. Assemble or cook ingredients.</p> <p>Materials: • Cut materials safely using tools provided. • Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</p> <p>Textiles: • Shape textiles using templates. • Colour and decorate textiles</p> <p>Electricals and electronics: Recognise if a battery operated device works or</p>	<p>Food: Cut, peel or grate ingredients safely and hygienically. Measure or weigh using measuring cups or electronic scales.</p> <p>Materials: • Measure and mark out to nearest cm. • Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>Textiles: • Join textiles using running stitch. • Colour and decorate textiles using a number of techniques</p> <p>Electricals and electronics: • Diagnose faults in</p>	<p>Food: Prepare ingredients hygienically using appropriate utensils. • Measure accurately. • Follow a recipe. • Assemble or cook ingredients</p> <p>Materials: • Cut materials accurately and safely by selecting appropriate tools. • Select appropriate joining techniques.</p> <p>Textiles: • Understand the need for a seam allowance. • Join textiles with appropriate stitching.</p> <p>Electricals and electronics: Create series circuits.</p> <p>Computing: • Control and monitor</p>	<p>Food: Prepare ingredients hygienically using appropriate utensils. • Measure ingredients to the nearest gram. • Assemble and cook ingredients (controlling the temperature of the oven or hob, if cooking).</p> <p>Materials: • Measure and mark out to the nearest mm. • Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</p> <p>Textiles: • Select the most appropriate techniques to decorate textiles</p> <p>Electricals and</p>	<p>Food: • Understand the importance of correct storage and handling of ingredients (knowledge of micro-organisms). • Demonstrate a range of baking and cooking techniques.</p> <p>Materials: • Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</p> <p>Textiles: • Create objects (such as a cushion) that employ a seam allowance.</p>	<p>Food: • Measure accurately and calculate ratios of ingredients to scale up or down from recipe. • Create and refine recipes, including ingredients, methods, cooking times and temperatures.</p> <p>Materials: • Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (e.g. the nature of fabric may require sharper scissors than would be used to cut paper).</p> <p>Textiles: • Use the qualities of materials to create suitable visual</p>

<p>not.</p> <p>Construction: • Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p> <p>Mechanics: • Create products using levers and wheels.</p>	<p>battery operated devices (such as low battery, water damage or battery terminal damage).</p> <p>Computing: Model designs using software</p> <p>Mechanics: • Create products using winding mechanisms.</p>	<p>models using software designed for this purpose.</p> <p>Construction: • Choose suitable techniques to construct products or to repair items.</p> <p>Mechanics: • Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).</p>	<p>electronics: Create parallel circuits.</p> <p>Computing: • Control and monitor models using software designed for this purpose.</p> <p>Construction: • Strengthen materials using suitable techniques.</p> <p>Mechanics: • Use scientific knowledge to choose appropriate mechanisms for a product.</p>	<p>• Join textiles with a combination of stitching techniques (e.g. back stitch for seams and running stitch to attach decoration).</p> <p>Electricals and electronics: • Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</p> <p>Computing: Write code to control and monitor models or products.</p> <p>Construction: • Develop a range of practical skills to create products (e.g cutting, drilling and screwing, nailing, gluing, filling and sanding).</p>	<p>and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).</p> <p>Electricals and electronics: • Create circuits using electronics kits that employ a number of components with increasing confidence.</p> <p>Computing: Write code to control and monitor models or products.</p> <p>Construction: • Develop a range of practical skills to create products.</p> <p>Mechanics: • Use innovative combinations of electronics (or computing) and</p>
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					Mechanics: • Convert rotary motion to linear using cams.	mechanics in product designs
Design, make, evaluate	<ul style="list-style-type: none"> • Design products that have a clear purpose and an intended user. 	<ul style="list-style-type: none"> • Make products, refining the design as work progresses. • Use software to design. 	<ul style="list-style-type: none"> • Design with purpose by identifying opportunities to design. • Make products by working efficiently (such as by carefully selecting materials). • Refine work and techniques as work progresses, evaluating the end product design. 	<ul style="list-style-type: none"> • Design with purpose by identifying opportunities to design. • Make products by working efficiently • Refine work and techniques as work progresses, continually evaluating the product design. • Use software to design and represent product designs. 	<ul style="list-style-type: none"> • Design with the user in mind, motivated by the service a product will offer. • Make products through stages of prototypes, making continual refinements. • Ensure products have a high quality finish, using art skills where appropriate. 	<ul style="list-style-type: none"> • Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). • Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.
Inspiration and design	<ul style="list-style-type: none"> • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. 	<ul style="list-style-type: none"> • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created. 	<ul style="list-style-type: none"> • Identify some of the great designers in all of the areas of study to generate ideas for designs. • Improve upon existing designs, giving reasons for choices. 	<ul style="list-style-type: none"> • Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs. • Disassemble products to understand how they work. 	<ul style="list-style-type: none"> • Combine elements of design from a range of inspirational designers throughout history. • Create innovative designs that improve upon existing 	<ul style="list-style-type: none"> • Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. • Evaluate the design of products to suggest improvements to the

					products.	user experience.
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