

Year 3 – Design & Technology Progression Curriculum Documents

Prior Learning	In Year 3	Future learning:	Key Vocabulary
<p>Designing:</p> <ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. <p>Making:</p> <ul style="list-style-type: none"> Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. <p>Evaluating:</p> <ul style="list-style-type: none"> Identify what they could have done differently or how they could improve their work in future 	<p>Designing:</p> <ul style="list-style-type: none"> Children can identify qualities of a range of materials and suggest possible uses. Children can design a functional, appealing product that is fit for a stated purpose. Children can use words, labelled sketches and models to communicate realistic design ideas. <p>Making:</p> <ul style="list-style-type: none"> Children can select appropriate tools and techniques for making my product. Children can measure, cut, shape and join materials with some accuracy using a range of techniques. Children understand how to strengthen, stiffen and reinforce to create a stable structure. Children can use decorative techniques to enhance my product's appearance. <p>Evaluating:</p> <p>Children can evaluate their own and others' finished products against design criteria and suggest improvements.</p>	<p>Exploring existing products:</p> <ul style="list-style-type: none"> Children can generate ideas by researching and using information. <p>Developing ideas:</p> <ul style="list-style-type: none"> Children can use words, labelled sketches and models to communicate design ideas and step-by-step plans. <p>Making new products</p> <ul style="list-style-type: none"> Children can construct simple electrical circuits and incorporate into a model Children can join and combine materials to create mechanisms achieving movement Children can construct a model incorporating a mechanism to achieve movement Children can cut, shape and join materials with increasing accuracy using a range of techniques. <p>Evaluating</p> <ul style="list-style-type: none"> Children can evaluate my finished product, suggesting alternative techniques which could achieve improvements. 	<p>Mechanisms</p> <p>Loose pivot, fixed pivot, system, input, process</p> <p>Construction and textiles:</p> <p>Fastening, compartment, zip, finishing technique, function, prototype, back stitch, felted, woven, knitted, bonded, Shell, structure, net, marking out, material, joining, three dimensional, stiff</p> <p>Cooking:</p> <p>Texture, taste, appearance, preference, greasy, moist, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested</p> <p>Electrical systems and Digital world</p> <p>User, fault, toggle switch, insulator, conductor, battery holder, crocodile clip</p>
<p>Common Misconceptions:</p> <p>Doesn't understand terminology</p> <p>Lack of skills to complete a task</p> <p>Lack of understanding of how to use specific tools</p>		<p>Famous Designers:</p> <p>The Greek Dionysius the elder of Syracuse</p> <p>David Misel</p>	

Year 3 – Design & Technology Progression Curriculum Documents

Pedological Knowledge					
Cooking	Mechanisms	Construction	Textiles	Evaluating processes and products	Working with tools
<p>Develop sensory vocabulary/knowledge using, smell, taste, texture and feel.</p> <p>Analyse the taste, texture, smell and appearance of a range of foods.</p> <p>Join and combine a range of ingredients e.g. snack foods.</p> <p>Measure and weigh ingredients with increasing accuracy.</p> <p>Understand and follow safe procedures for food safety and hygiene.</p>	<p>Begin to explore how mechanisms such as levers, pivots and cogs can be used to make things move in different ways using a range of equipment.</p> <p>Use and explore complex pop ups.</p> <p>Create nets.</p>	<p>Measure, mark out, cut and shape a range of materials.</p> <p>Assemble, join and combine components and materials with increasing accuracy.</p> <p>Know how electrical circuits, including those with simple switches can be used to achieve results that work.</p> <p>Create wood frame structures and strengthen frames with diagonal struts.</p> <p>Understand and follow safe procedures for using a range of tools.</p> <p>Use glue gun with close supervision (one to one).</p>	<p>Join fabrics using running stitch, over sewing, back stitch.</p> <p>Understand seam allowance.</p> <p>Explore fastenings e.g. sew on buttons and make loops.</p> <p>Prototype a product using J cloths.</p> <p>Use appropriate decoration techniques e.g. appliqué(glued or simple stitches).</p> <p>Create a simple pattern.</p>	<p>Identify what does and does not work in the product.</p> <p>Make suggestions as how their design could be improved.</p> <p>Discuss how well the finished product meets the design criteria and how well it meets the needs the needs of the user.</p>	
<p>Key Questions</p> <p>How can we make the structure more stable?</p> <p>How do we create movement to allow the catapult to work efficiently?</p> <p>Can you describe a basic circuit?</p> <p>Can you follow a recipe and use tools appropriately?</p>			<ul style="list-style-type: none"> • End of Unit Assessment: • Viking settlement- structure • Mindful timer- digital • Catapult- Mechanism • Egyptian collar- Textiles • Torch- Electrical • Seasonal foods- Food 		

Year 3 – Design & Technology Progression Curriculum Documents