

**DESIGN TECHNOLOGY - Skills Progression**

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
	TEXTILES	MECHANISMS	TEXTILES	ELECTRICAL	MECHANICAL	ELECTRICAL/MECHANICAL
<b>DESIGN</b>	<p><b>Explore</b> how textiles can be used to make products.</p> <p><b>Generate</b> ideas based on investigations of products.</p> <p><b>Know</b> that the texture and other properties of materials affect choice.</p> <p><b>Use</b> models, pictures and words to describe designs</p>	<p><b>Explore</b> of how moving objects work and how mechanisms can be used in different ways (e.g. levers/ sliders/ wheels and axles that allow movement).</p> <p><b>Explore</b> wheels, axles, sliders and simple levers.</p> <p><b>Generate</b> ideas based on investigations of products, mechanisms and movement.</p> <p><b>Know</b> how moving objects work and how mechanisms can be used in different ways</p> <p><b>Use</b> models, pictures and words to describe designs</p>	<p><b>Generate</b> ideas based on research/ investigations of products.</p> <p><b>Recognise</b> that designs have to meet a range of different needs.</p> <p><b>Make</b> realistic plans and <b>clarify</b> ideas by using including annotated sketches, cross sectional/exploded diagrams, prototypes, pattern pieces and computer aided design</p> <p><b>Think</b> ahead about the order of work, choosing appropriate tools, equipment, materials, components and techniques.</p>			
<b>MAKE</b>	<p><b>Make</b> a product out of textiles</p> <p><b>Select</b> the appropriate textile(s) for a product.</p> <p><b>Measure, mark out</b> and <b>cut</b> fabric.</p> <p><b>Join</b> fabrics using glue, staples, tying or a simple stitch.</p> <p><b>Use</b> non standard objects to measure out such as rods of varying length, lengths of paper.</p> <p><b>Use</b> scissors to cut textiles.</p>	<p><b>Make</b> a product that uses movement.</p> <p><b>Join</b> materials so that they are strong.</p> <p><b>Select</b> the appropriate materials and components for a product.</p> <p><b>Select</b> a range of tools to perform practical tasks.</p> <p><b>Measure, mark out</b> and <b>cut</b>.</p> <p><b>Join</b> using glue, staples etc.</p> <p><b>Begin to use</b> standard measure.</p> <p><b>Use</b> scissors accurately.</p>	<p><b>Select</b> the appropriate textile(s) for a product.</p> <p><b>Select</b> and <b>use</b> tools and equipment for measuring, cutting and joining.</p> <p><b>Use</b> techniques such as plaiting or weaving to create new products such as rope, belts, bracelets etc.</p>	<p><b>Select</b> the appropriate electrical components for a product.</p> <p><b>Select</b> and <b>use</b> tools and equipment suitable for the task.</p> <p><b>Develop</b> increasing accuracy in measuring, and cutting</p> <p><b>Use</b> simple circuits to either illuminate or create motion.</p>	<p><b>Make</b> a product that uses mechanical components.</p> <p><b>Select and use</b> a wide range of tools and equipment</p> <p><b>Measure and cut</b> with accuracy.</p> <p><b>Use</b> other DT skills to create housings for mechanical components.</p>	<p><b>Make</b> a product that uses electrical &amp; mechanical components and ICT to control.</p> <p><b>Use</b> other DT skills to create housings for mechanical components.</p>

<p><b>EVALUATE</b></p>	<p><b>Evaluate</b> a range of existing textile products.  <b>Improve</b> a design as the process goes along.  <b>Evaluate</b> textile products and <b>know</b> what is meant by having a good finish and the ability to do the job it was made for.</p>	<p><b>Evaluate</b> a range of existing moving products and how mechanisms are used.  <b>Improve</b> a design as the process goes along.  <b>Evaluate</b> products and <b>know</b> what is meant by having a good finish and the ability to do the job it was made for</p>	<p><b>Understand</b> how key events and individuals have helped shape the world  <b>Research</b> a range of innovative, functional, appealing products and determine whether they are fit for purpose  <b>Explore, investigate and analyse</b> a range of existing products  <b>Evaluate</b> a product against the design criteria  <b>Understand</b> a product should be well finished in a way that would appeal to users.  <b>Listen and respond</b> to the views of others on how to improve their work</p>			
<p><b>TECHNICAL SKILLS</b></p>	<p><b>Learn</b> about the working characteristics of materials (e.g. folding paper, plaiting yarn to make it stronger).</p>	<p><b>Build</b> structures, exploring how they can be made stronger and more stable  <b>Explore</b> and <b>use</b> mechanisms in products</p>	<p><b>Join</b> textiles using skills such as stitching, and plaiting to make a durable and desirable product</p>	<p><b>Understand and use</b> electrical systems in a product.  <b>Use</b> scientific knowledge of electricity such as circuits, lamps, conductors  <b>Apply</b> computing to program and control the product.</p>	<p><b>Understand and use</b> mechanical components such as gears, pulleys, levers in a product.  <b>Apply</b> knowledge of strengthening to reinforce.  <b>Apply</b> computing to program and control the product.</p>	<p><b>Understand and use</b> mechanical components such as gears, pulleys, levers in a product.  <b>Choose</b> components that can be controlled by switches or by ICT equipment.  <b>Apply</b> computing to program and control the product.</p>
<p><b>COOKING &amp; NUTRITION</b></p>	<p><b>Use</b> the basic principles of a healthy and varied diet to prepare dishes  <b>Understand</b> where food comes from.</p>		<p><b>Understand and apply</b> the principles of a varied and healthy diet.  <b>Select</b> ingredients for a recipe/ <b>Select</b> ingredients that are currently in season  <b>Know</b> where and how the selected ingredients are grown, reared, caught and processed.  <b>Follow</b> an increasingly detailed recipe.  <b>Measure</b> out ingredients by weight or quantity, using scales where appropriate / <b>Understand</b> that by varying, altering the weight and quantity of the ingredients from the recipe, the end product will vary in taste and flavour.  <b>Select</b> a cooking technique such as, baking, roasting, casseroles, stir fry etc/ <b>Understand</b> that cooking alters the flavour and texture of foods and apply this knowledge.  <b>Describe</b> food products in terms of taste, texture, flavour and <b>relate</b> this to the intended purpose of the food.  <b>Understand</b> that some foods may not be eaten raw, as it is unsafe/ <b>Work</b> in a safe and hygienic way.</p>			