



ELG EYFS	Years 1 and 2	Years 3 and 4	Years 5 and 6
<p>Expressive arts &amp; design/exploring media and materials</p>	<p>By the end of Year 1 pupils should have a basic grasp of all this content. By the end of Year 2 pupils should have an advancing understanding of this content, whilst some will have a deep understanding</p>	<p>By the end of Year 3 pupils should have a basic grasp of all this content. By the end of Year 4 pupils should have an advancing understanding of this content, whilst some will have a deep understanding</p>	<p>By the end of Year 5 pupils should have a basic grasp of all this content. By the end of Year 6 pupils should have an advancing understanding of this content, whilst some will have a deep understanding</p>
<ul style="list-style-type: none"> <li>• <b>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</b></li> <li>• Manipulate materials to achieve a planned effect</li> <li>• Construct with a purpose in mind, using a variety of resources</li> <li>• Use simple tools and techniques competently and appropriately</li> <li>• Select appropriate resources and adapt work where necessary</li> <li>• Select tools and techniques needed to shape, assemble and join materials they are using</li> </ul>	<p><b>Master Practical Skills</b></p> <ul style="list-style-type: none"> <li>• Cut, peel or grate ingredients safely and hygienically.</li> <li>• Measure or weigh using measuring cups or electronic scales.</li> <li>• Assemble or cook ingredients.</li> <li>• Cut materials safely using tools provided.</li> <li>• Measure and mark out to the nearest centimetre.</li> <li>• Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</li> <li>• Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen)</li> <li>• Shape textiles using templates. Join textiles using running stitch.</li> <li>• Colour and decorate textiles using several techniques (such as dyeing, adding sequins or printing).</li> <li>• Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).</li> <li>• Model designs using software.</li> <li>• Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</li> <li>• Create products using levers, wheels and winding mechanisms.</li> </ul>	<p><b>Master Practical Skills</b></p> <ul style="list-style-type: none"> <li>• bridge and claw technique, grating, peeling, chopping, slicing, mixing, spreading, kneading and baking.</li> <li>• Prepare ingredients hygienically using appropriate utensils and cutting techniques</li> <li>• Measure ingredients to the nearest gram accurately.</li> <li>• Follow a recipe.</li> <li>• Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).</li> <li>• Cut materials accurately and safely by selecting appropriate tools.</li> <li>• Measure and mark out to the nearest millimetre.</li> <li>• Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</li> <li>• Select appropriate joining techniques</li> <li>• Understand the need for a seam allowance.</li> <li>• Join textiles with appropriate stitching.</li> <li>• Select the most appropriate techniques to decorate textiles.</li> <li>• Create series and parallel circuits</li> <li>• Control and monitor models using software designed for this purpose.</li> <li>• Choose suitable techniques to construct products or to repair items.</li> <li>• Strengthen materials using suitable techniques</li> <li>• Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears)</li> </ul>	<p><b>Master Practical Skills</b></p> <ul style="list-style-type: none"> <li>• Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).</li> <li>• Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.</li> <li>• Demonstrate a range of baking and cooking techniques including knead, rub, beat &amp; mix</li> <li>• Create and refine recipes, including ingredients, methods, cooking times and temperatures.</li> <li>• 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).</li> <li>• Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</li> <li>• Create objects (such as a cushion) that employ a seam allowance.</li> <li>• Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration).</li> <li>• Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).</li> <li>• Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</li> <li>• Write code to control and monitor models or products.</li> <li>• Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding).</li> <li>• Convert rotary motion to linear using cams. Use innovative combinations of electronics (or computing) and mechanics in product designs.</li> </ul>

	<p><b>Design, make, evaluate and improve</b></p> <ul style="list-style-type: none"> <li>• Design products that have a clear purpose and intended user</li> <li>• Make products refining the design as work progresses</li> <li>• Use software to design</li> </ul>	<p><b>Design, make, evaluate and improve</b></p> <ul style="list-style-type: none"> <li>• Design with purpose by identifying opportunities to design.</li> <li>• Make products by working efficiently (such as by carefully selecting materials).</li> <li>• Refine work and techniques as work progresses, continually evaluating the product design.</li> <li>• Use software to design and represent product designs</li> </ul>	<p><b>Design, make, evaluate and improve</b></p> <ul style="list-style-type: none"> <li>• Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).</li> <li>• Make products through stages of prototypes, making continual refinements.</li> <li>• Ensure products have a high-quality finish, using art skills where appropriate.</li> <li>• Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.</li> </ul>
	<p><b>Take inspiration from design throughout history</b></p> <ul style="list-style-type: none"> <li>• Explore objects and designs to identify likes and dislikes of designs</li> <li>• Suggest improvements to existing designs</li> </ul>	<p><b>Take inspiration from design throughout history</b></p> <ul style="list-style-type: none"> <li>• Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs.</li> <li>• Improve upon existing designs, giving reasons for choices. Disassemble products to understand how they work.</li> </ul>	<p><b>Take inspiration from design throughout history</b></p> <ul style="list-style-type: none"> <li>• Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.</li> <li>• Create innovative designs that improve upon existing products. Evaluate the design of products so as to suggest improvements to the user experience.</li> </ul>



Crudgington Primary School – Design & Technology  
Year 1 & 2



Learning Objective	Key Indicators	Basic	Advancing	Deep
<b>Food</b>	Cut peel, or grate ingredients safely and hygienically	With the support of a teacher, ingredients are prepared safely and hygienically.	There is a growing awareness of safety and hygiene procedures when preparing food.	There is a good understanding of the need to work safely and hygienically when preparing food.
	Measure or weigh using measuring cups or electronic scales	With the support of a teacher, weighing and measuring is accurate.	There is a growing ability to weigh and measure accurately.	There is a good understanding of how to weigh and measure accurately using a range of scales.
<b>Materials</b>	Cut materials safely using tools provided	With the support of a teacher, materials are cut safely.	There is a growing ability to cut materials safely	There is a good level of control of tools so that materials are cut safely.
	Measure and mark out to the nearest centimetre	When supported by a teacher, maths skills are sometimes used to help measure and mark to the nearest centimetre.	Maths skills are often used to help measure and mark to the nearest centimetre.	There is a good application of maths skills to help measure and mark to the nearest centimetre.
	Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling)	During structured activities, a range of cutting and shaping techniques are used.	There is a growing use of a range of cutting and shaping techniques.	There is a wide use of a range of cutting and shaping techniques.
	Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen)	During structured activities, a range of joining techniques are used.	There is a growing use of a range of joining techniques.	There is a wide use of a range of joining techniques.
<b>Textiles</b>	Shape textiles using templates	With the support of a teacher, textiles are shaped using templates	Templates are beginning to be created and used to shape textiles.	Templates are created to a good standard and used to shape textiles effectively.
	Join textiles using a running stitch	With the support of a teacher, textiles are joined with a basic running stitch.	A basic running stitch is used well to join textiles.	A controlled running stitch is used to securely join textiles.
	Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing)	With the support of a teacher, a number of decoration techniques are experienced.	A growing number of decoration techniques are used.	Effective decoration techniques are chosen and applied to good effect.
<b>Electricals &amp; electronics</b>	Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage)	With the support of a teacher, a range of common faults are identified.	A growing range of faults are correctly identified.	A wide range of faults are identified, and possible solutions suggested.
<b>Construction</b>	Use materials to practise drilling, screwing, gluing and nailing materials to strengthen products (such as wheeled vehicles)	With the support of a teacher, materials are combined to make products.	With growing independence, materials are combined to make products.	Good choices of materials and how to combine them are made when making a wide range of products.

<b>Mechanics</b>	Create products using levers, wheels and winding mechanisms	With the support of a teacher, products using levers and winding mechanisms are made.	With growing independence, and a developing understanding of mechanisms, products using levers and winding mechanisms are made.	With a high level of independence and a good understanding of mechanisms, good-quality products using levers and winding mechanisms are made.
<b>To design, make evaluate and improve</b>	Design products that have a clear purpose and an intended user	When supported by a teacher, designs to meet a purpose are created.	With growing independence, designs that have a clear purpose and intended user are created.	With a high level of independence and a good understanding that designs require a purpose and user, very good designs are created.
	Make products, refining the design as work progresses	When encouraged by a teacher, designs are improved as the making process develops.	Generally, good-quality products are made by a process of refinement during the making process.	High-quality products are made through a process of constant refinement throughout the making process.
<b>To take inspiration from design throughout history</b>	Explore objects and designs to identify likes and dislikes of the designs	With structured activities, designs of others are evaluated to identify likes and dislikes.	With growing independence and a growing understanding of design features, likes and dislikes of the designs of others are identified.	With a high level of independence and a good understanding of design features, likes and dislikes are identified, explained and justified with examples
	Suggest improvements to existing designs	When prompted, basic improvements to existing designs are suggested.	Suitable and appropriate improvements to existing designs are generally identified.	Thoughtful and well-reasoned improvements to existing designs are identified.



Crudgington Primary School – Design & Technology  
Year 3 & 4



Learning Objective	Key Indicators	Basic	Advancing	Deep
<b>Food</b>	Prepare ingredients hygienically using appropriate utensils	When reminded, appropriate utensils are chosen to safely and hygienically prepare food	Appropriate utensils are chosen to safely and hygienically prepare food	Appropriate utensils are chosen to safely and hygienically prepare food, with clear explanations for the choices made.
	Measure ingredients to the nearest gram accurately	With support from teacher	Generally accurate	Consistently accurate using a variety of scales
<b>Materials</b>	Cut materials accurately and safely by selecting appropriate tools	When reminded, appropriate tools are chosen to safely cut materials	Appropriate tools are chosen to safely cut materials	Appropriate tools are chosen to safely cut materials, with clear explanations for the choices made.
	Measure and mark out to the nearest millimetre	With support from teacher	Generally accurate	Consistently accurate using a variety of scales
	Apply appropriate cutting techniques and shaping techniques that include cuts within the perimeter of the material such as slots, cut-outs	With support from a teacher, appropriate techniques are used to cut and shape materials	appropriate techniques are generally chosen to cut and shape materials	appropriate techniques are chosen to cut and shape materials, with a clear explanation for the choices made
	Select appropriate joining techniques	When reminded, appropriate joining techniques are used	Appropriate joining techniques are generally selected and used well	Appropriate joining techniques are selected and used to good effect, with reasons for choices clearly explained
<b>Textiles</b>	Understand the need for seam allowance	When demonstrated by a teacher, appropriate allowances are made when joining fabrics	Generally, appropriate allowances for joining fabrics are used.	Accurate and well-planned allowances for joining fabrics are used.
	Join textiles using appropriate stitching	When demonstrated by a teacher, appropriate stitching is attempted with some good effects	Generally, stitching is appropriate to the product and effective	Confident and carefully chosen stitching suitable for products purpose, is well executed
	Select the most appropriate techniques to decorate textiles	When reminded, appropriate techniques are used to decorate textiles	Generally, appropriate techniques are used to decorate textiles	Excellent choices of appropriate techniques provide interesting and eye-catching textile decorations
<b>Electricals &amp; electronics</b>	Create series and parallel circuits	When reminded by a teacher, knowledge of science is applied to create series and parallel circuits in products	Generally, knowledge of science is applied well to create series and parallel circuits in products	Science knowledge is readily applied to good effect in creating series and parallel circuits in products
<b>Construction</b>	Choose suitable techniques to construct products or to repair items	When reminded by a teacher, suitable techniques are used to construct products or repair items	Suitable techniques are generally used to construct or repair items	Suitable techniques are chosen and justified when constructing or repairing items
<b>Mechanics</b>	Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product	When reminded, knowledge of science is applied to creating mechanism products	Generally, knowledge of science is applied to creating mechanism products	Knowledge of science is readily applied when creating mechanisms and products

	such as levers, winding mechanisms, pulleys and gears			
<b>To design, make evaluate and improve</b>	Design with purpose, identifying opportunities to design	During structured activities, opportunities for design are realised	Generally, there is a good understanding of opportunities for design	Excellent examples of suggestions for design show an in depth understanding of the need for design
	Make products by working efficiently (such as by carefully selecting materials)	When supported by a teacher, appropriate materials are selected	Planning of workflows and careful selection of materials means work is generally carried out efficiently	Very effective workflows and well-reasoned choices of materials make work very efficient
	Refine work and techniques as work progresses, continually evaluating the product design	When encouraged, techniques are refined throughout a project to improve the design	Generally, designs are evaluated and refined throughout a project	Designs are continually evaluated and improved throughout a project, resulting in high-quality products
<b>To take inspiration from design throughout history</b>	Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for design.	With support from a teacher, some of the most notable designers' work is examined to provide inspiration for ideas.	A growing knowledge of a range of notable designers is used to provide inspiration for designs	An in-depth knowledge of some notable designers provides inspiration and ideas for designs
	Improve upon existing designs, giving reasons for choices.	With support from a teacher existing designs are evaluated, and improvements made.	Generally, some opportunities for improving existing designs are made, giving reasons for choices	Many good opportunities for developing existing designs are noticed and acted upon.



Crudgington Primary School – Design & Technology  
Year 5 & 6



Learning Objective	Key Indicators	Basic	Advancing	Deep
<b>Food</b>	Measure accurately and calculate ratios and ingredients to scale up or down from a recipe	When reminded, mathematical knowledge is applied to accurately calculate ratios of ingredients	mathematical knowledge is generally applied to accurately calculate ratios of ingredients	Knowledge of mathematics is readily applied to calculate ratios of ingredients
	Demonstrate a range of baking and cooking techniques	When guided, a range of baking and cooking techniques is demonstrated	A developing range of baking and cooking techniques is demonstrated	A good range of baking and cooking techniques is demonstrated
	Create and refine recipes including ingredients, methods, cooking times and temperatures	With support from a teacher, a range of recipes are created	A developing range of interesting recipes is created	A wide repertoire of recipes with interesting combinations of ingredients is created
<b>Materials</b>	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)	There are some good examples of precision cutting	There are many examples of precision cutting using a growing range of cutting implements	There are widespread examples of precision cutting using a growing range of cutting implements
	Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).	When reminded, the qualities of materials are considered when selecting tools	The properties of materials are generally considered in choosing tools	An in-depth understanding of the properties of materials is used to carefully select appropriate tools.
<b>Textiles</b>	Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration).	There are some good examples of effective joins	There is a growing range of examples of effective joining techniques that show control and some precision	There is a wide variety of very effective joining techniques that show a high level of precision and control
	Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).	There are some good examples of art skills being used to provide decoration	There are many examples of art skills being used to good effect to provide visual and tactile decoration	Well-chosen art skills are used to create eye-catching decoration
<b>Electricals &amp; electronics</b>	Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).	With support and reminders of science knowledge a range of circuits are created and used in products	Science knowledge is generally applied to the design process to create products that employ a range of electronic components	Science knowledge is readily applied to the design process to create high quality products that employ a range of electrical components
<b>Construction</b>	Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).	With support, a range of practical skills are emerging to help create or repair products	A growing range of practical skills are emerging to help create or repair products	A wide range of practical skills are put to very effective use to make or repair a wide variety of products
<b>Mechanics</b>	Convert rotary motion to linear using cams.	With support cams are created	A range of differently shaped cams are created	Combinations of differently shaped cams are used to create interesting and useful movement

<b>To design, make evaluate and improve</b>	Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).	With guidance, products are designed with some reference to the user experience	Generally user experience is used as a rational for design choices	The experience of the user drives the design process. There are many excellent examples and explanations of how choices improve the user experience
	Make products through stages of prototypes, making continual refinements.	With support, prototypes are made and later developed	Generally, improvements are continual throughout the making process, with initial prototypes often changed radically through a number of refinements	Initial prototypes and alternative designs are thoroughly explored and explained. Refinements are continually made throughout the making process
	Ensure products have a high quality finish, using art skills where appropriate.	When reminded, a high-quality finish is achieved by applying art skills	Art skills are generally applied and along with attention to detail create a high-quality finish	Impeccable attention to detail and extremely effective application of art skills create a professional quality finish
<b>To take inspiration from design throughout history</b>	Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.	With support, elements of design from notable designers are incorporated into designs	Generally there are some well-reasoned choices for combining elements from a range of designers	An in-depth knowledge of some designers' work is reflected in some striking designs. The rationale and background to the ideas are explained thoughtfully.
	Create innovative designs that improve upon existing products.	There are some good examples of designs that improve on existing products	There is a growing range of examples of designs that improve upon existing products	There are some notable examples of how the design of an existing product has been greatly improved.
	Evaluate the design of products so as to suggest improvements to the user experience.	When reminded, evaluations are carried out throughout and at the end of the design process	Evaluations are ongoing and thorough. They relate to the used experience	The user experience drives critical self-evaluation and helps to identify current and future improvements