

## Aims National Curriculum Aims for Key Stage 1 & 2

### All Pupils should:

- Develop the creative, technical and practical expertise needed to perform everyday task confidently and to participate successfully in an increasingly technical world
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- Critique, evaluate and test their ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook

D&T Year 3 & 4	Year 3			Year 4		
Statutory Curriculum Objectives	Go Explore	Ancient Egypt	Moorland Life	An Island Invasion	Who Cares?	Endangered Environments
Outcomes	Seaside picture	Wrist cuffs Moving vehicles	Stew	Catapults Light up Christmas cards	Gruel and charity bake sale for Barnardo's Bookmarks	Layers of the rainforest boxes
<i>Cooking and Nutrition</i>						
understand and apply the principles of a healthy and varied diet			✓		✓	
prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques			✓		✓	
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	✓		✓		✓	
<p><i>Additional suggested content</i></p> <ul style="list-style-type: none"> <li>• Prepare ingredients hygienically using appropriate utensils</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> </ul>						
<i>Design</i>						
use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups	✓	✓		✓	✓	✓
generate, develop, model and communicate their ideas through		✓		✓	✓	✓

discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design						
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**Additional Suggested Content**  
 Textiles - Shape and stitch materials, Use basic cross stitch and back stitch, Colour fabric, Create weavings, Quilt, pad and gather fabric. (Ancient Egypt)  
 Use software to design and represent product designs.  
 Design with purpose by identifying opportunities to design

**Make**

select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately	✓	✓		✓	✓	✓
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select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	✓	✓		✓	✓	✓
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**Additional Suggested Content**  
 Make products by working efficiently (such as by carefully selecting materials)  
 Materials- Cut materials accurately and safely by selecting appropriate tools, Measure and mark out to the nearest millimetre, Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs), Select appropriate joining techniques.  
 Textiles- Understand the need for a seam allowance, Join textiles with appropriate stitching, Select the most appropriate techniques to decorate textiles.  
 Electricals and electronics- Create series and parallel circuits  
 Computing- Control and monitor models using software designed for this purpose  
 Construction- Choose suitable techniques to construct products or to repair items, Strengthen materials using suitable techniques.  
 Mechanics- Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).

**Evaluate**

investigate and analyse a range of existing products	✓	✓		✓	✓	
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evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	✓	✓		✓	✓	✓
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understand how key events and individuals in design and technology have helped shape the world		✓		✓		
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**Additional Suggested Content**  
 Refine work and techniques as work progresses, continually evaluating the product design.

**Technical Knowledge**

<i>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</i>		✓		✓		✓
<i>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</i>	✓	✓				
<i>Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</i>				✓		
<i>Apply their understanding of computing to program, monitor and control their products.</i>				✓		