

## Callowell Primary School - Progression of DT skills

Year	Design	Make	Evaluate	Technical Knowledge	Cookery
Birth to 3	A. Use their imagination as they consider what they can do with different materials.	<ul> <li>B. Explore natural materials, indoors and outside.</li> <li>C. Make simple models which express their ideas.</li> </ul>	D. Explore materials with different properties.		
3 & 4 Year olds	A. Develop their own ideas and then decide which materials to use to express them.	B. Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.	<ul> <li>C. Explore how things work.</li> <li>D. Explore different materials freely, in order to develop their ideas about how to use them and what to make.</li> </ul>	E. Use one-handed tools and equipment, for example, making snips in paper with scissors.	
Rec	<ul> <li>A. Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> <li>B. Create collaboratively, sharing ideas, resources and skills.</li> </ul>	C. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	<ul> <li>D. Return to and build on their previous learning, refining ideas and developing their ability to represent them.</li> <li>E. Share their creations, explaining the process they have used.</li> </ul>	<ul> <li>F. Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</li> <li>G. Use a range of small tools, including scissors, paintbrushes and cutlery.</li> </ul>	
1	A. Design products that have a definite function for a particular person (Christmas card e.g.)	<ul> <li>B. Make products to meet basic design brief</li> <li>C. Use a running stitch to join fabric</li> <li>D. Use methods such as dyeing, adding sequins or printing alter the appearance of fabric</li> <li>E. Make use of template to produce shapes</li> </ul>	F. Investigate historic designs to find their strengths and weaknesses (houses for example)	G. Practice techniques to join and/or strengthen materials eg , gluing and reinforcing card	H. Select from and use ingredients according to their characteristics (Healthy sandwich e.g.)
2	<ul> <li>A. Design and make products, modifying the product as the project evolves</li> <li>B. Take an existing design and propose improvements</li> <li>C. Explore the processes used to create products</li> </ul>	D. Design and make products, modifying the product as the project evolves	E. Explore and use mechanisms in their products	<ul> <li>F. Demonstrate safe use of a given tool.</li> <li>G. Perform a range of cutting and shaping techniques eg tearing, cutting, folding and curling</li> <li>H. Use a range of joining techniques eg gluing, hinges or combining materials to strengthen.</li> </ul>	<ul> <li>I. Safely cut, peel or grate ingredients in a hygienic manner</li> <li>J. Use measuring cups or electronic scales to measure the required amounts</li> <li>K. combine ingredients to produce food</li> <li>L. Understand where food comes from</li> </ul>

3	A. Produce designs with a clear purpose having explored needs	<ul> <li>B. Use correct stitch to join materials</li> <li>C. Add decorative finish using a suitable technique</li> </ul>	<ul> <li>D. Select materials carefully to suit the design and use</li> <li>E. Know the work of some recognised designers in all areas of study</li> </ul>	F. Select appropriate techniques to construct products	<ul> <li>G. Use correct utensils to hygienically prepare food</li> <li>H. Combine ingredients and or cook</li> <li>I. Understand and apply the principles of a healthy and varied diet</li> </ul>
4	<ul> <li>A. Refine methods and design as work progresses, constantly reassessing design</li> <li>B. Use computer packages to design and model products</li> </ul>	<ul><li>C. Construct series and parallel circuits</li><li>D. Choose suitable joining techniques</li></ul>	<ul> <li>E. Make improvements to established designs and be able to explain why</li> <li>F. Disassemble designs to discover how they work</li> </ul>	<ul> <li>G. Use suitable cutting and shaping techniques</li> <li>H. Apply understanding of forces to select a suitable mechanism e.g. levers, winding mechanism, pulleys and gears</li> </ul>	
5	A. Design by considering the user, prioritising good function before profit	<ul> <li>B. Create circuits using electronics kits that combine a number of parts (e.g. LEDs, resistors, chips etc.)</li> <li>C. Use a variety of stitching techniques to join fabrics</li> <li>D. Understand the purpose of and include a seam allowance</li> </ul>	<ul> <li>E. Produce several prototypes each building upon the previous to optimise design</li> <li>F. Combine designs from several significant designers explaining the selections</li> </ul>	G. Practice practical skills to a reasonable standard to produce products	
6	<ul> <li>A. Include designing processes such as prototypes, cross- sectional diagrams and CAD (Computer aided design)</li> <li>B. Combine electronics and mechanics to produce original designs</li> </ul>	C. Produce a good quality finish to products using art techniques	<ul> <li>D. Start with existing designs and invent improved ones</li> <li>E. Evaluate the design of products and identify possible further changes to improve it performance</li> </ul>	<ul> <li>F. Cut with precision and produce a good finish</li> <li>G. Select appropriate tools to cut and shape a particular type of material</li> <li>H. Use cams to change a rotation into a push/pull movement</li> </ul>	<ul> <li>I. Understand how to store and handle food ingredients properly</li> <li>J. Invent and modify own recipes including ingredients, methods, cooking times and temperatures</li> <li>K. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed</li> </ul>