

# Caton St Paul's C of E Primary School Design and Technology Curriculum Statement

INTENT	<p>“Technology makes possibilities, Design makes solutions, Art makes questions.” John Maeda.</p> <p>The Intent, Implementation and the impact of our Design Technology Curriculum. Design and Technology enables children to build a greater knowledge to deal with tomorrows rapidly changing world. It inspires children to become independent, creative problem solvers and thinkers, working both as individuals and part of a team. It enables them to identify needs and opportunities and to respond to them by developing a range of ideas and by making products and systems. Design and Technology opens up such a wide range of learning opportunities for our children, they combine practical skills with an understanding of visual aspects, eco-friendly issues, as well as purposes and engineering.</p>											
	<p><b><u>Vocabulary:</u></b></p> <p>Our intentions for vocabulary in D&amp;T is to expose all pupils to year group specific technical language taking from our school’s knowledge and skills progression document. Teachers will share with the pupils the vocabulary that will be required to be used within the lesson. Pupils will be expected to use the vocabulary both verbally and in written form to discuss, reason and communicate about D&amp;T.</p>	<p><b><u>Knowledge/Skills:</u></b></p> <p>Design and Technology is an inspiring, rigorous and practical subject. D&amp;T encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. We aim to, wherever possible, link work to other subjects in our creative curriculum such as mathematics, science, history, computing and art. For example, when learning about space the children may design their own form of space vehicle and make it according to their age group expectations.</p>	<p><b><u>Progression:</u></b></p> <p>At CSP we aim to create lessons that cover the knowledge and skills that are expected for each year group. The D&amp;T subject lead has created a rolling programme for teachers to use alongside their own planning and POS documentation to ensure we cover the EYFS framework, National Curriculum and progression of skills for each year group.</p>	<p><b><u>Concepts:</u></b></p> <p>At Caton St Paul’s, we encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others’ needs, wants and values. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.</p>								
IMPLEMENTATION	<p><b><u>Inclusive teaching and learning:</u></b></p> <p>Design Technology will be delivered in a variety of ways from a class block of lessons to a themed Design Technology week across the school. Key skills and key knowledge for Design Technology have been mapped across the school to ensure progression between year groups. The context for the children’s work in D&amp;T is also well considered and children learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study. D&amp;T lessons are also taught as a block so that children’s learning is focused throughout each unit of work.</p>	<p><b><u>Subject coverage/curriculum:</u></b></p> <p><b>Design:</b> • use research and develop design criteria. • generate, develop, model and communicate their ideas  <b>Make:</b> • select from and use a wider range of tools and equipment                      • select from and use a wider range of materials  <b>Evaluate:</b> • investigate and analyse a range of existing products.                      • evaluate their ideas and products against their own design.                      • understand how key events and individuals in D&amp;T have helped shape the world.  <b>Technical knowledge:</b> • understand and use mechanical systems in their products. • understand and use electrical systems in their products. • Understand some of the ways that food can be processed</p>	<p><b><u>Resources:</u></b></p> <p>The implementation of HQTl in D&amp;T is supported by all teachers having access to online tools to support their teaching of the D&amp;T Curriculum.</p> <p>Teachers to have supplies ordered to complete D&amp;T week.                      Teachers to send list of needed supplies for needed resources as and when DT supplies are needed.</p>	<p><b><u>SMSC:</u></b></p> <p>Children learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.</p>								
	<p><b><u>Local context:</u></b></p> <p>Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children design and create products that consider function and purpose and which are relevant to a range of sectors (for example, the home, school, leisure, culture, enterprise, industry and environment). Pupils are taught about the local environment and are given opportunities to investigate and make links to the wider world.</p>	<p><b><u>Adaptations and Prioritisation:</u></b></p> <p>Our lessons and evaluations consider the disruption to teaching, and to secure firm foundations before moving on to new learning. D&amp;T planning for the rest of 2021/22 will consider disrupted schooling in the past two academic years rather than starting the summer curriculum as usual. Linked topics can be addressed together, starting with those from the year below. We will prioritise key topics, rather than trying to teach everything.</p>	<p><b><u>Evidencing teaching and learning:</u></b></p> <p>Summative assessments take place throughout the year and teachers record the progress and attainment against the NC and POS. Teachers use this information to inform future lessons, ensuring children are supported and challenged appropriately. EYFS are assessed within Expressive Arts and Design and their progress is tracked termly for their individual pupil profiles. Age related expectation levels are reported to parents at the end of the reception year.</p>	<p style="text-align: center;"><b><u>Primary and Early Years overview</u></b></p>								
				<p><b>EYFS</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Creating with Materials</td> <td style="padding: 2px;">Being Imaginative and Expressive</td> </tr> </table>	Creating with Materials	Being Imaginative and Expressive						
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			<p><b>Primary National Curriculum</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Design</td> <td style="padding: 2px;">Make</td> <td style="padding: 2px;">Evaluate</td> </tr> <tr> <td style="padding: 2px;">Technical knowledge</td> <td style="padding: 2px;">Cooking and nutrition</td> <td style="padding: 2px;">Mechanisms</td> </tr> <tr> <td style="padding: 2px;">Structures</td> <td style="padding: 2px;">Electrical systems</td> <td style="padding: 2px;">Textiles</td> </tr> </table>	Design	Make	Evaluate	Technical knowledge	Cooking and nutrition	Mechanisms	Structures	Electrical systems	Textiles
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IMPACT	<p>By the end of the Early Foundation Stage and each Key Stage, pupils are expected to know, apply and understand the knowledge and skills specified in the subject of D&amp;T (EYFS and National Curriculum)</p>											
	<p><b><u>Pupil voice:</u></b></p> <p>Our whole-school curriculum approach means listening to the voices of everyone in the school community. This includes children and young people as well as parents and carers, and school staff. Our children and young can offer unique perspectives on what it is like to be part of a D&amp;T lesson; involving them in decision-making creates a meaningful change and better academic outcomes.</p>	<p><b><u>Knowledge:</u></b></p> <p>D&amp;T knowledge has been mastered when a child can confidently and securely talk about their D&amp;T knowledge using design and technology language to explain their ideas and can independently apply the knowledge to new learning in unfamiliar situations. All children will be able to retrieve D&amp;T knowledge and be able to reason by following a line of enquiry and develop and present a justification, argument or proof.</p>	<p><b><u>Skills:</u></b></p> <p>All children will have the skills and the resilience to solve problems by applying skills linked to D&amp;T to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.</p>	<p><b><u>Cultural capital:</u></b></p> <p>Our children face unique economic, environmental, and humanitarian challenges. The problem solving required to address these challenges requires solutions that have never been thought of before. In order to tackle these problems, our teachers must challenge problem-solving methodologies used in D&amp;T lessons through incorporation of facilitating of creative problem solving/puzzles and real-world investigations.</p>								