

# Design and Technology Implementation.

Every child has the right to access a world-class education. We exist to empower, enable and inspire children to achieve their every potential through exceptional teaching, innovative approaches to learning, and a community-oriented approach to meeting learners' needs

SAFE	HERE	INSPIRED	NEIGHBOURLY	EXCELLENT
Progression	Assessment	Enquiry-Led	Differentiation	Planning
<p><b>How EYFS prepares children for the National Curriculum.</b></p> <p>All teaching of design and technology follows the design, make and evaluate cycle. There are opportunities for this throughout EYFS within provision, particularly in junk modelling and taught, adult-led, sessions.</p> <p><b>Moving from Reception into KS1</b></p> <p>As children progress into Year 1, they are given a design brief to create a product. This is then designed and made by the children as they learn a range of skills and is later evaluated, mainly verbally, against the original design brief. In Year 2 the children will complete similar DT projects, with more formal evaluations and a choice of materials and methods.</p>	<p><b>How we assess key elements.</b></p> <p>Assessment of children's learning in Design and Technology is an ongoing monitoring of children's understanding, knowledge and skills by the class teacher throughout the lessons.</p> <p>We also sticky knowledge (elements of knowledge that the children should retain) and combine these to give us an overall view of a pupil's progress and attainment. Sticky knowledge is usually assessed in the form of an on-line quiz, however it is recognised that other assessment techniques may be more suitable for elements of the DT curriculum.</p> <p>This assessment is then used to inform differentiation, support</p>	<p><b>How opportunities planned are for.</b></p> <p>The Design and Technology Curriculum provides opportunities for the children to think of themselves as, and become, designers and producers of purposeful products that will be used in real-life contexts. We encourage the children to think and intervene creatively to solve problems both as individuals and as members of a team. The children consider 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 effectiveness and they are encouraged to become innovators and risk takers.</p>	<p>Our aim is to provide inclusive and aspirational environments and learning experiences where pupils thrive and build the cultural capital they need to make ambitious choices about their own futures, overcoming any barriers. Design and Technology allows for children to develop an understanding of six key concepts, which are:</p> <ul style="list-style-type: none"> <li>• Appraise and Analyse</li> <li>• Technical Knowledge</li> <li>• Practise</li> <li>• Generate Ideas and Design</li> <li>• Develop and make</li> <li>• Evaluate</li> </ul> <p>As children become more confident or are more able learners, they will also look at second order concepts, such as:</p>	<p><b>Long Term Plans</b></p> <p>Long term planning is used to ensure that Design and Technology fits into a broader topic and promotes links between various strands of learning. Design and Technology planning ensures that the learning is layered through the year, ensuring that prior knowledge and skills facilitate positive starting points and good attainment in current learning.</p> <p>Subject leader mapping ensures Design and Technology progression through the year groups as well.</p> <p><b>Medium Term Plans</b></p> <p>For each unit taught, the Medium Term plan will identify prior learning, establish the vocabulary to be taught, key knowledge</p>

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<p>This continues through the Key Stages, all the way to Year 6 in order to raise aspirations and prepare children for Design and Technology in Secondary Education.</p> <p><b>Explicit Examples of Progression</b></p> <p>Within Design and Technology, children will learn through topics covering:</p> <p>Within Key Stage One children will be introduced and explore simple mechanisms, such as sliders, wheels and axles in their designs. Recognise where mechanisms such as these exist in toys and other familiar products. . As they progress into Key Stage Two, children begin to learn about mechanical systems. This will extend pupils understanding of individual mechanisms, to form part of a functional system, for example: Automatas, that use a combination of cams,</p>	<p>and challenge required by the children.</p> <p><b>What Formative assessment takes place in Design and Technology?</b></p> <p>Formative assessment is used to move children's learning forward in Design Technology and to inform next steps. This should help learners recognise their weaknesses and strengths and work on areas that need improvement and help the teaching staff to identify where learners are struggling and dealing with the problems as they arise.</p> <p>Formative assessment can also be done in the form of peer assessment with Design and Technology and is most useful whilst a project is on-going so that pupil's can make adjustments as necessary, in real time.</p>	<p>Design and Technology topics have planned for opportunities that allow children to practice and develop their questioning skills through all stages of problem solving, designing, making and evaluating.</p> <p>We have created a Progression Document where objectives for each year group are progressively mapped out to ensure our pupils are given the opportunity to acquire skills and knowledge that further their education journey into KS3, whilst meeting their current needs.</p> <p>Design and Technology, where possible, is linked to real life businesses and people in order to ensure the content remains relevant to the learners.</p> <p><b>Enquiry in Design and Technology promotes questions about:</b></p> <p>people, society, real-life problems, businesses, designing, the making of a</p>	<ul style="list-style-type: none"> <li>- Responsibility: (working safely, how design can solve problems, choosing the right materials, responsibilities to customers to ensure quality / reliable products, healthy eating, quality ingredients)</li> <li>- Similarity and difference: (making comparisons, noting differences and drawing conclusions)</li> <li>- Cause and consequence: (identifying how things work, how an action can cause change/movement)</li> <li>- Significance: (significant designers and designs, real world examples of effective and successful products)</li> <li>- Written and oral expression: (Using terminology, evaluating, creating accurate designs, labelling and annotating, explaining processes, presenting)</li> </ul>	<p>and key skills. It will identify the progression of the skills and knowledge through the topic, enabling children to make links to prior learning and understand how future learning will develop.</p> <p><b>Weekly</b></p> <p>Weekly planning is used to ensure the necessary detail and coverage is prepared for and delivered. This will be derived from the KAPOW scheme of work and objectives set out within the medium-term plan.</p>
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<p>followers, axles/shaft, cranks and toppers.</p> <p><b>The importance of prior learning to support current learning</b></p> <p>There is a clear importance of recapping prior learning throughout DT. This is ensured by using our progression document and the Kapow scheme. This embeds fundamental skills into the long-term memory, through a spiral curriculum.</p>	<p><b>What Summative assessment takes place in Design and Technology?</b></p> <p>Summative assessments take place on a termly basis and attainment is tracked against National Curriculum expectations. This allows us to inform and address any trends or gaps in attainment.</p>	<p>range of products including mechanical systems and food, nutrition, materials, practical choices, costings, packaging, evaluation methods, the use of technology and designers themselves.</p>	<p><b>SEND</b></p> <p>We ensure that children with SEND are provided with equal access to a broad and balanced Design and Technology curriculum, that is appropriate to an individual's special educational needs.</p> <p>Learning materials, teaching methods and learning experiences are differentiated according to need. Class Teachers ensure that those activities are stimulating and challenging and promote the best attainment for each learner.</p>	
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