



Work Together, Learn Together, Grow Together

At Langdale Primary School, we are committed to providing our children with a curriculum that has a clear intention and impacts positively upon their needs.

Curriculum statement for the teaching and learning of Design and Technology

<b>INTENT</b>	<p>At Langdale Primary we value Design Technology as it provides an opportunity to teach children maths, English and other subjects in a fun and practical way. It provides a stimulating context for these subjects making them more applicable and therefore easier to understand. It provides children with the opportunity to make decisions for themselves or as a team and to learn how to think critically. We believe that design is embedded within history as a basis to explore how design has helped to shape the world in which we live in today. It also provides children with excellent life skills that they will use throughout their lives such as cooking.</p> <p>The national curriculum for design and technology aims to ensure that all pupils:</p> <ul style="list-style-type: none"> <li>• • develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world</li> <li>• • 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</li> <li>• • critique, evaluate and test their ideas and products and the work of others</li> <li>• • understand and apply the principles of nutrition and learn how to cook</li> </ul>			
	<b>Underpinned By</b>	<b>High Expectations</b>	<b>Modelling</b>	<b>Fluency</b>
	<p>All children are expected to succeed and make progress from their starting points.</p>	<p>Teachers teach the design and evaluation skills needed to succeed in DT, providing examples of good practice and having high expectations.</p>	<p>Children soon become confident at applying their skills into other areas of the curriculum, eg. When making Viking longboats in history or river models in geography.</p>	<p>Subject specific vocab is taught explicitly and is expected to be used when talking about the processes that they are going through to meet their design</p>

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<b>Implementation</b>	<p><b>Design</b></p> <p><b>KS1</b></p> <p>Design purposeful, functional, appealing products for themselves and other users based on design criteria. Children generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p><b>KS2</b></p> <p>Children 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. Children generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p>	<p><b>Make</b></p> <p><b>KS1</b></p> <p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing. Children select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p><b>KS2</b></p> <p>Children select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Children 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.</p>	<p><b>Evaluate</b></p> <p><b>KS1</b></p> <p>Explore and evaluate a range of existing products. Children evaluate their ideas and products against design criteria. They build structures, exploring how they can be made stronger, stiffer and more stable. They explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products.</p> <p><b>KS2</b></p> <p>Children investigate and analyse a range of existing products. They evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. They understand how key events and individuals in design and technology have helped shape the world. They apply their understanding of how to strengthen, stiffen and reinforce more complex structures. They understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. They understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. They apply their understanding of computing to program, monitor and control their products</p>
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	<p><b>Taught discreetly</b> Children learn about different designers and about aspects of design in history. Is it important that children know how design contributes, shapes and reflects our history.</p>	<p><b>Design Development</b> Children are encouraged to regularly evaluate their designs and products against the original design focus, asking whether their product will meet the needs outlined at the start of the process. Children are encouraged to develop and refine their ideas and designs through the use of art and design sketch books.</p>	<p><b>Health and Safety</b> Children will develop responsibility and autonomy, following important safety procedures when making new products. Children will learn about healthy eating through design and the important life skills of cooking. Through this children will learn about personal hygiene and how to work safely with food.</p>
	<p><b>Cross Curricular</b> Children have lots of opportunity to apply skills that they have been taught in other curriculum areas, e.g. measuring and angle work in maths, problem solving skills, computing skills, drawing skills in art and forces and motion in science.</p>	<p><b>Showcasing our Achievements</b> We celebrate designs children have created through community afternoons, parent exhibitions within schools and photographs of the children's work.</p>	<p>It is important to take into account children's safety during DT lessons as we aim to provide the children with opportunities to use different tools safely. The class teacher is responsible for the safety of children. When using the cooking equipment children must always follow the correct procedures for food hygiene and safety. Children need to be made aware of these procedures before the lesson begins. All staff working with the children need to be made aware of the safety procedures for each lesson. When using cutting equipment children need to be closely monitored by adults.</p>

	<p><b>PUPIL VOICE</b> Through discussion and feedback, children talk enthusiastically about their design intentions, the processes that they went through including any problems that they encountered along the way and how they overcame them, and about their final products.</p>	<p><b>EVIDENCE IN KNOWLEDGE</b> Pupils can choose suitable techniques and explain the advantages and disadvantages of each design technique.</p>	<p><b>EVIDENCE IN SKILLS</b> Children are taught how to use and apply skills, and have opportunities to practise these skills when making different products.</p>	<p><b>OUTCOMES</b> At the end of each year we expect the children to have achieved Age Related Expectations (ARE) for their year group. Some children will have progressed further and achieved greater depth (GD). Children who have gaps in their knowledge receive appropriate support and intervention.</p>
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