



Curriculum Intent for DT

Vision:

Building a Hopeful Future through Kindness, Learning and Trust

At Kirkby la Thorpe, we strive to ensure that each person is empowered to flourish and contribute positively to society. We seek to equip our pupils with the knowledge, skills and qualities necessary to navigate the complexities of our world, rooting this in Christian love.

We are inspired by the life of St Thomas in all that we do so that we can:

Be Positive and Active Citizens: We strive for our pupils to communicate clearly, embracing tolerance and respect for the diverse beliefs and aspirations of others.

Be Curious and Independent Members of Society: We encourage curiosity and a thirst for knowledge, instilling a longing for justice and an empathy for those in need.

Have Confidence and Perseverance: Through trusting each other, we empower everyone to embrace challenges with confidence and perseverance, striving to achieve their full potential in all aspects of life so that they can be the best that they can be.

Have the Courage to Respectfully Challenge: We foster an environment where respectful dialogue and critical thinking are encouraged, empowering pupils to voice their opinions with courage and integrity so they can **build** a better future.

Know their heritage: We cultivate an appreciation for both local and national heritage, helping pupils understand their roots and identity within the broader context of history so that they have a sense of where they are from.

Kindness	Learning	Trust
<p>Using tools respectfully and responsibly</p> <p>Evaluating final designs thoughtfully and respectfully</p> <p>Collaboratively engage in planning designs</p> <p>Appreciating existing products and designs</p>	<p>Learning from mistakes when evaluating products</p> <p>Identify intended purpose and functionality of products</p> <p>The process of the four stages: inquiring and analysing; developing ideas; creating the product; evaluating.</p> <p>Identifying new skills that they need to acquire in order to be able to fulfil the task</p>	<p>Accept critique from peers</p> <p>Trust the process, so that the design will come to fruition</p> <p>Peers will use tools that will keep everyone safe</p>

Intent	Implementation	Impact
<p>We intend that our DT curriculum will:</p> <p>Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. At KLT, we encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems. We aim to, wherever possible, link work to other disciplines such as mathematics, science, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its</p>	<p>Curriculum Content</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.</p> <p>When designing and making, the children are taught to:</p> <p>Design:</p> <ul style="list-style-type: none"> • 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 diagrams, prototypes, pattern pieces and computer-aided design 	<p>By the time pupils leave Kirkby la Thorpe at the end of Y6, they will:</p> <p>Within our curriculum, we ensure that children will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They will 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 and critique, evaluate and test their</p>

<p>effectiveness and are encouraged to become innovators and risk-takers.</p> <p>Design and technology at KLT develops children’s skills and knowledge in design, structures, mechanisms, electrical control and a range of materials as well as food. Our aim is to provide the children with a breadth of memorable experiences that inspire children to be creative and encourages them to think about important issues including recyclable materials and the impact this has on our world. By the time our children leave us, they will be well equipped with the skills and the knowledge to research, design, make and evaluate their work and have a greater understanding of how D&T makes an essential contribution to the creativity, culture, wealth and well-being of the world.</p>	<p>Make:</p> <ul style="list-style-type: none"> • select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately • 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>Evaluate:</p> <ul style="list-style-type: none"> • investigate and analyse a range of existing products • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • understand how key events and individuals in design and technology have helped shape the world <p>Technical knowledge:</p> <ul style="list-style-type: none"> • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products • understand and use electrical systems in their products • apply their understanding of computing to program, monitor and control their products <p>Key skills and key knowledge for Design and Technology have been mapped across the school to ensure progression throughout year groups. This also ensures that there is a context for the children’s work in Design and Technology; that they learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study. Design and technology lessons are also taught as a block so that children’s learning is focused throughout each unit of work.</p>	<p>ideas and products and the work of others. They will be able to design and make a range of products and 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>
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Research links

Curriculum Maestro

The design and technology projects are well sequenced to provide a coherent subject scheme that develops children’s designing, planning, making and evaluating skills. Each project is based around a design and technology subject focus of structures, mechanisms, cooking and nutrition or textiles. The design and technology curriculum’s electronic systems and IT monitoring and control elements are explicitly taught in our science projects to ensure the links between the subjects are highlighted.

Design and Technology Association

D&T brings learning to life. Children like making decisions for themselves and doing practical work. By combining their design and making skills with knowledge and understanding they learn to create quality products.

Design and technology in the primary school: case studies for teachers, 1992

Design and technology activity is seen as the process of satisfying needs by solving practical problems that involve pupils in working in a variety of materials.

Design and technology programmes of study: National curriculum in England, 2013

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

Education Policy Institute, 2022

Choosing D&T as a subject at GCSE level is shown to be particularly critical to continuing study in the subject at 16-19 level ... This shows that without the option or encouragement to begin studying D&T an early age, students are far less inclined to pursue D&T subjects at a higher level of education.