

Levendale Curriculum Intent Statement

At Levendale, the curriculum is based on a carefully considered progression of transferable skills and knowledge acquisition from 3-11. The Levendale Curriculum is tailored to our local area and context, allowing children to acquire relevant knowledge and skills whilst allowing them to appreciate the historical and cultural importance of both their local area and other areas of the country and world. Children are encouraged to develop life skills that can be applied in a wide range of disciplines to prepare them to make a positive contribution to society.



Our curriculum fosters a deep-rooted love of learning through developing the key skills of questioning, investigating and evaluating. Children are encouraged to be resilient and increasingly independent learners in all areas; they demonstrate positive attitudes to learning and apply key skills in multi-disciplinary areas through meaningful links across curriculum areas. Children develop a base of secure factual knowledge through appropriate support and challenge for all.

Learning experiences should be stimulating, engaging, purposeful, relevant and accessible to all, taking account of prior learning and giving all children the opportunity to consolidate and embed their understanding and knowledge across all subject areas. Children should be encouraged to develop an appreciation and understanding of the world in which they live, at both local, national and global levels. The curriculum should be responsive to individual and/or cohort need, taking into account changes at local, national and global levels. Children should depart from Levendale in Y6 having had the opportunities and experiences necessary to take responsibility for their own learning at KS3 and beyond whilst being willing and able to make positive contributions to wider society. Children should be encouraged to fulfil their potential and be given the opportunities to do so, whether in curriculum areas, through extra-curricular provision or through established links with other agencies or individuals.

Assessment is used to form meaningful and relevant judgements on a child's progress and attainment at regular points throughout the year. Assessment, both formative and summative, informs planning and provision, addresses gaps in learning where these are evident and offers support and challenge where required.

DT Curriculum Intent Statement

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 Levendale, 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. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering, computing and art. 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. 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.

Key skills and key knowledge for D and T have been mapped across the school to ensure progression between 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.



National Curriculum 2014 age-related statutory coverage

KEY STAGE ONE LEARNING	KEY STAGE TWO LEARNING
<p><i>Design</i> Design purposeful, functional, appealing products based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT</p> <p><i>Make</i> Select from and use a range of tools and equipment to perform practical tasks Select from and use a wide range of materials and components, including construction materials, textiles, ingredients</p> <p><i>Evaluate</i> Explore and evaluate a range of existing products Evaluate ideas / products against design criteria</p>	<p><i>Design</i> Use research and develop criteria to inform the design of innovative, functional, appealing products that are fit for purpose Generate, develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p><i>Make</i> Select from and use a wider range of tools and equipment to perform practical tasks accurately Select from and use a wider range of materials and components</p> <p><i>Evaluate</i> Investigate and analyse a range of existing products Evaluate ideas and products against own design criteria and consider the views of others Understand how key events and individuals have helped shape the world</p>

KEY STAGE ONE LEARNING	KEY STAGE TWO LEARNING
<p><i>Technical knowledge</i></p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable</p> <p>Explore and use mechanisms in their products.</p> <p>Use the basic principles of a healthy and varied diet to prepare dishes</p> <p>Understand where food comes from.</p>	<p><i>Technical knowledge</i></p> <p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>Understand and use mechanical systems in their products</p> <p>Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>Apply understanding of computing to program, monitor and control products.</p> <p>Understand and apply the principles of a healthy and varied diet</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>

Our DT curriculum coverage across KS1 and KS2

	Autumn Term	Spring Term	Summer Term
Year 1	Structures – Homes	Mechanisms – Moving Pictures	Cooking & Nutrition
Year 2	Vehicles	Puppets	Cooking & Nutrition
Year 3	Structures	Cooking & Nutrition	Mechanisms – pulleys
Year 4	Clay/structures	Brazilian Food	Control mechanisms – storybooks/buzzer games
Year 5	Cooking & Nutrition – bread	Controllable vehicles	Structures – shelters
Year 6	Structures – bridges		Cooking & Nutrition

Skills and knowledge progression

The continuum below outlines the developmental progression of skills and knowledge across our D.T. curriculum. The colour bands correspond approximately to the following year groups:



	DESIGN AND DEVELOP	MAKING	PRODUCT AND EVALUATION
	Talk about what they want to make	Make models randomly	Be excited about what they have made
	Generate ideas from their own experience Talk about their ideas and say what will be done Describe what they want to do using pictures and words Make lists of materials they will need	Know the features of some familiar products Join two materials together, often with glue Use scissors or a knife to cut, sometimes with help Make simple models, not necessarily with a purpose Use simple construction kits – e.g. Lego Know about basic hygiene and safety	Recognise the characteristics of familiar products Know how some moving objects work Use simple terms to talk about their own and others' work Identify materials and mechanisms in familiar products Know the benefits of fruit and vegetables
	Generate ideas, and plan what to do next, using their experience of materials and components Use their knowledge of some working characteristics of materials when designing Use wheels, slides and levers in plans Use plans to show how to put their ideas into practice	Begin to select tools for folding, joining, rolling Measure out and cut fabric Use a simple template for cutting out Practise skills before using them Use simple finishing techniques Select tools and techniques appropriate to the job Follow basic safety rules Understand and use the terms ingredient and component	Talk about how moving objects work Describe how a commercial product works Use like and dislike when evaluating or describing Explain why some products are useful Use digital photography to present design or finished work

<p>Say how the product will be useful to the user</p> <p>Draw pictures with labels, with some text</p>	<p>Use simple scales or balances</p> <p>Understand main rules of food hygiene</p>	<p>Recognise what they have done well and talk about what could be improved</p> <p>Seek out the views and judgements of others</p> <p>Predict how changes will improve the finished product</p>
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DESIGN AND DEVELOP	MAKING	PRODUCT AND EVALUATION
<p>Use others to help generate their ideas</p> <p>Use what they know about the properties of materials</p> <p>Plan their work to include a range of joins</p> <p>Ensure that plans are realistic and appropriate for the aim</p> <p>Show the order of working in plans</p> <p>Use models, pictures and words in designs</p> <p>Make increasing use of ICT to plan ideas</p> <p>Recognise that designs must meet a range of needs</p> <p>Say why something will be useful</p> <p>Apply what they know about mechanisms to create movement when planning and designing</p> <p>Investigate a range of products to see how they work</p>	<p>Measure and cut out using centimetres and weigh in grams</p> <p>Choose tools and equipment which are appropriate for the job</p> <p>Prepare for work by assembling components together before joining</p> <p>Use scoring and folding for precision</p> <p>Make holes using a punch and drill</p> <p>Work out how to make models stronger</p> <p>Alter and adapt materials to make them stronger</p> <p>Combine a number of components together in different ways</p> <p>Make the finished product neat and tidy</p> <p>Begin to select their own ingredients when cooking or baking</p> <p>Make good presentation of food</p>	<p>Be clear about their ideas when asked</p> <p>Can alter and adapt original plans following discussion and evaluation</p> <p>Recognise what has gone well, but suggest further improvements for the finished article</p> <p>Suggest which elements they would do better in the future</p> <p>Identify where evaluation has led to improvements</p> <p>Understand safe food storage</p>

	DESIGN AND DEVELOP	MAKING	PRODUCT AND EVALUATION
	<p>Collect and use information to generate ideas</p> <p>Consider the way the product will be used</p> <p>Understand designs must meet a range of criteria and constraints</p> <p>Take users' views into account</p> <p>Understand how some properties can be used – e.g. waterproof</p> <p>Think ahead about the order of their work</p> <p>Add electricity to create motion or make light</p> <p>Produce step by step plans</p> <p>Make ongoing sketches and annotations</p>	<p>Increasingly model their ideas before making</p> <p>Measure accurately to centimetres and grams</p> <p>Combine materials for strength and to improve how the product looks</p> <p>Use permanent and temporary fastenings to join</p> <p>Join with a greater range of techniques – e.g. staples</p> <p>Strengthen joins and corners in a variety of ways</p> <p>Understand how wheels, axles, turning mechanisms, hinges and levers all work together</p>	<p>Talk about what they like and dislike, giving reasons</p> <p>Develop their designs through their own reflection and the evaluation of others</p> <p>Carry out tests before making improvements</p> <p>Evaluate food by taste, texture, flavour etc.</p>
	<p>Make more complex designs to include belts and pulleys, and a combination of other mechanisms</p> <p>Plan the order of work by thinking ahead</p> <p>Use sketches to show other ways of doing things – and then make choices</p> <p>Meet an identified need – e.g. a meal for an older person – by selecting ingredients or materials</p> <p>Use various sources of information and draw on them in design</p>	<p>Carry out tests to see if their design works</p> <p>Make improvements from design suggestions</p> <p>Work in a safe and hygienic way</p> <p>Measure and cut precisely to millimetres</p> <p>Make stable and strong joins to stand the test of time</p> <p>Use proportions when cooking, by doubling and halving recipes</p>	<p>Identify what is working well and what might be improved – and make choices from several alternatives</p> <p>Refine the quality of the finished product, including making annotations on the design</p> <p>Clarify ideas through drawing and modelling</p> <p>Increasingly use testing to improve models and finished products</p>

DESIGN AND DEVELOP	MAKING	PRODUCT AND EVALUATION
<p>Keep cost constraints in mind when selecting materials in design</p> <p>Use their knowledge of –e.g.– science and art when designing</p> <p>Be aware of commercial aspects and incorporate these into their designs</p> <p>Design including hydraulics and pneumatics when where appropriate</p> <p>Draw scaled diagrams with increasing use of ratio Calculate the amount of materials needed use this to estimate cost</p>	<p>Measure and cut out in precise detail, and make sure that finished products are carefully finished</p> <p>Make separate elements of a model before combining into the finished article</p> <p>Understand how an article might be mass produced</p> <p>Produce a simple instruction manual or handbook for their product</p>	<p>Research products using the internet</p> <p>Test and evaluate commercial products, understanding how this information supports their own designs</p> <p>Evaluate a range of different sources of information such as advertising and handbooks</p>