

Design and Technology Longterm Overview



At St. Teresa's we follow the Kapow scheme of work, following a two year rolling programme.

National Curriculum (overview of learning)

EYFS –

Expressive Arts and Design

- Explore different materials freely, in order to develop their ideas about how to use them and what to make.
- Develop their own ideas and then decide which materials to use to express them.
- Join different materials, tools and techniques, experimenting with design, colour, texture, form and function.

ELG Creating with materials

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- Share their creations, explaining the process they have used.
- Make use of props and materials when role playing characters in narratives and stories.

ELG Physical development

- Fine Motor: Use a range of small tools, including scissors, paintbrushes and cutlery.

KS1 – Pupils should, through a variety of creative and practical activities, be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

KS2 – Pupils should, through a variety of creative and practical activities, be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

<p>Curriculum Intent</p>	<p>At St Teresa’s Catholic Primary School we want to prepare our children to deal with a rapidly changing world. We want them to become independent, creative problem-solvers and to be able to think both as individuals and as part of a team. We believe that a high-quality design and technology curriculum enables our children to develop critical thinking and understanding of global issues, relevant to our rapidly changing world, and how these can be solved or improved through designs of technology.</p> <p>Our Design and Technology curriculum inspires children to think creatively, innovatively and inquisitively. We provide varied learning opportunities which aim to develop not only children’s technical skills; but also to develop their wider knowledge of product design, evaluation and their ability to apply vocabulary accurately.</p>
<p>Implementation</p>	<p>Design Technology is taught as a discrete subject across KS1 and KS2 and, wherever possible, cross curricular links with Mathematics, Science, Computing and PSHE are formed. Our curriculum covers the skills outlined in the National Curriculum through broad, challenging and inspiring units of work. We currently follow the Kapow scheme of learning which clearly organises specific skills and knowledge into appropriate year groups. Due to mixed age classes, our learning takes place over a two year rolling cycle (A and B) with at least three Design Technology topics taught per year. Progression grids are used in order to ensure knowledge, skills and vocabulary are built upon each year and sequenced appropriately to maximise learning for all pupils. Children have access to knowledge organisers, where they will be able to access key knowledge, vocabulary and meanings to technological terms. In EYFS, the children are given lots of opportunities to explore skills such as problem solving, building with a purpose, designing and making. This is done through a mixture of high quality, child-led engaging continuous provision and focused adult-led tasks. Learning is designed to meet the needs of all learners including pupils with SEND and more able pupils.</p> <p>Evidence of design and technology is mostly kept in individual DT books, however it may be found in sketchbooks or Science books if there is a strong cross-curricular link for that unit. Seesaw is also used to capture photographs of the children’s DT work. Assessments take place at the end of each unit and these contribute to a summative assessment at the end of the year’s teaching.</p>
<p>Measuring the Impact</p>	<p>Through the teaching of Design and Technology, children will have:</p> <ul style="list-style-type: none"> • The ability to carry out thorough research, show initiative and ask questions to develop a detailed knowledge of user’s needs. • The ability to act as responsible designers and makers, using materials carefully and working safely. • A thorough knowledge of which tools, equipment and materials to use to make their products. • The ability to manage risks well to manufacture products safely and hygienically. • A passion for the subject and an excellent attitude to their learning. <p>The Design and Technology curriculum at St Teresa’s has the intended impact and we have a range of ways to measure its success. Monitoring activities are planned, purposeful and cyclical. The Kapow scheme is used alongside the Design and Technology curriculum and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. The curriculum is created to encourage and promote opportunities to develop specific skills and reinforce skills that have already been established.</p> <p>Teachers continually assess the children’s design and technology skills through formative assessments, such as questions, evidence collected in the children’s DT books and discussion with the children. The key skills and knowledge from each unit are used for formative, ongoing assessment. Assessment quizzes from the start and end of each unit are analysed to measure the impact of our teaching and learning. Staff use this information to identify gaps in knowledge and key strengths; informing assessments and future teaching. Pupils demonstrate their enjoyment of Design Technology through their participation in lessons. The curriculum is developed to give pupils the confidence to be creative and perform everyday tasks confidently to participate successfully in an increasingly technological world.</p> <p>Monitoring in design technology includes book scrutinies to ensure that each project is meeting the specific skills outlined in the progression of skills map, learning walks, staff discussions and pupil voice. We understand the importance and value of giving children the opportunity to discuss their learning and establish the impact of the teaching taking place. All of this information is collected and reviewed, which is then used to inform further curriculum developments and provision is adapted accordingly. Each year Governors are informed of progress, updates and impact on children’s learning in Design and Technology through a presentation with Subject Leader.</p>

Design and Technology Longterm Overview

	Cycle A			Cycle B			
	Autumn	Spring	Summer	Autumn	Spring	Summer	
EYFS	Structures – Junk modelling	Flower threading	Designing and making a rainbow salad	Structures – Junk modelling	Flower threading	Designing and making a rainbow salad	
KS1	Food- Fruits and Vegetables. <i>Linked to Science and PSHE Healthy Eating.</i>	Structures – Windmills	Mechanisms – Levers and Sliders – Making a moving storybook	Food – A balanced diet <i>Linked to Science and PSHE Healthy Eating.</i>	Mechanisms – Wheel and Axles	Textiles – Pouches	
LKS2	Structures – Constructing a castle (lessons 2-4) <i>Link to History: Romans</i>	Electrical Systems – Torches <i>Linked to Science Electricity</i>	Mechanisms – Pneumatic toys	Food – Eating Seasonally	Textiles - cushions	Food – Adapting a recipe	Digital World – Electronic charm
UKS2	Food – What could be healthier? <i>Linked to Science & PSHE.</i>	Electrical Systems– greetings cards (Lessons 2-4) <i>Link to Science</i>	Mechanical Systems – Automata toys (Levers and linkages)	Textiles – Stuffed toys	Structure – Bridges	Digital World – Monitoring devices <i>Link to PSHE: protecting the environment; use of plastic, how everyday choices can affect the environment</i>	Food – Come dine with me