



Design Technology (DT) Curriculum

Intent and Implementation



Our School Vision:

Recognising the unique light that shines in every individual, we strive to 'encourage one another and build each other up' (1 Thessalonians 5:11) to ensure that all can thrive. Through our core Christian values of Love, Hope and Justice, we inspire learning for life, empowering everyone to flourish and make a positive difference in the world.

Curriculum Intent:

- To develop articulate, resilient and empowered citizens who make a difference to others
- To provide a coherent and ambitious curriculum that leads to a greater depth of understanding for all
- To inspire pupils with purposeful and interconnected learning experiences

Intent

Our Design and Technology curriculum aims to develop creative, technical and practical expertise so that pupils can confidently design, make and evaluate products that solve real and relevant problems. Pupils learn to think and work like designers, engineers, makers and problem-solvers, developing an understanding of how design and technology shape our lives and the wider world.

Through a carefully sequenced curriculum, pupils build knowledge of materials, mechanisms, structures, electrical systems, food, tools and techniques, alongside the vocabulary and processes needed to design and make effectively. They learn to consider users, purpose, function, aesthetics, sustainability and the social and environmental impact of design.

Pupils encounter the work of designers, engineers and makers and use this knowledge to inform and inspire their own designs. They develop the ability to generate, communicate, test and refine ideas, combining practical skills with technical knowledge and making informed evaluations of their products and processes.

Our curriculum encourages pupils to be resourceful, resilient, innovative and enterprising, while developing their confidence to take considered risks, solve problems and learn from mistakes. Links with other subjects are used purposefully where they strengthen pupils' understanding and application of Design and Technology.

Implementation

Our Design and Technology curriculum is informed by the National Curriculum and is organised around the key areas of Designing and Making and Cooking and Nutrition. Pupils develop both the knowledge needed to understand materials, products, processes and technologies and the disciplinary skills needed to design, make, test and evaluate.

Learning is carefully sequenced across our two-year rolling programme to ensure coverage, progression and increasing independence, particularly within our mixed-year-group classes. Key knowledge, vocabulary, tools, techniques and processes are revisited and developed over time.

D&T is taught for a half term each term, alternating with Art. Units may be taught as focused blocks or through weekly lessons, depending on the nature of the learning and the needs of the project. This provides pupils with sufficient time to develop, practise and apply their knowledge and skills across the design and make process.

Units follow an iterative design process in which pupils investigate existing products and users, develop design criteria, generate and communicate ideas, select appropriate materials and techniques, make and test products, and evaluate and refine their work. Teachers explicitly model the safe and accurate use of tools, equipment, materials and techniques, while developing pupils' subject-specific vocabulary and understanding.

Projects are purposeful and provide opportunities for pupils to make meaningful connections with other areas of learning where appropriate. Pupils are taught to make informed choices about materials, processes and techniques and to understand how design and technology can respond to users, purpose, function, sustainability and the wider world.

DT for Every Child

We ensure that all pupils can access and succeed within an ambitious Design and Technology curriculum. Teaching is adapted to meet individual needs while maintaining the key knowledge, skills and expectations of the subject.

Teachers use careful task design, modelling and appropriate scaffolding to support pupils in developing practical skills and understanding. Visual representations, worked examples, word banks, demonstrations and accessible resources are used where appropriate to reduce barriers to learning. Key vocabulary is explicitly taught, displayed and revisited so that pupils can develop confidence in using subject-specific language.

For pupils with SEND, adaptations may include breaking processes into manageable steps, providing additional opportunities to practise techniques, using adapted tools or materials, and giving appropriate adult or peer support. These adaptations enable pupils to participate meaningfully in the same curriculum rather than routinely reducing the ambition or complexity of the learning.

Practical and collaborative learning provides opportunities for pupils to discuss ideas, solve problems, develop independence and learn from one another. Teachers provide appropriate support and challenge so that every pupil can develop their creativity, technical understanding, practical skills and confidence as a designer and maker.

Assessment

Assessment in Design and Technology is ongoing and focuses on pupils' developing knowledge, understanding and practical skills. Teachers use questioning, observation, discussion, practical outcomes and pupils' design and evaluation work to identify what pupils know, understand and can apply.

Assessment informs teaching, including opportunities to revisit knowledge, address misconceptions, develop practical skills and provide appropriate support and challenge. Teachers consider both the quality of the final product and the knowledge, decision-making, processes and skills demonstrated throughout the design and make process.

Summative assessment is completed termly to provide an overview of pupils' progress in Design and Technology and to identify knowledge, skills or techniques that require further development. This information is used by the subject leader to monitor progression and inform future curriculum development.

The subject leader monitors Design and Technology through work sampling, pupil discussions, learning walks and professional dialogue with staff. This provides evidence of curriculum coverage, progression, teaching and pupils' developing knowledge and skills.

What makes a Preston Candover Designer?

End of KS1: A Preston Candover designer can generate and communicate ideas, select and use appropriate materials, tools and techniques to make purposeful products safely, and evaluate their work against simple design criteria.

End of KS2: A Preston Candover designer can investigate and develop ideas for functional, appealing products, select and use appropriate materials, tools and techniques accurately, apply technical knowledge, and evaluate and refine their designs against clear criteria, considering the user and purpose.