

Design & Technology Curriculum statement

Intent

At St Mark's, we are committed to providing an outstanding Design and Technology (D&T) curriculum that sets high standards and fosters ambition. Our intent is to empower our students by developing their product design skills, consolidating and expanding upon their prior knowledge and practical skills, promoting a healthy nutritious lifestyle and opening doors to the wider world linking inspiring careers within the world of design.

Our areas of focus within our Design & Technology curriculum are: Textiles, Mechanisms, Cooking & Nutrition, Structures and Electronics.

Textiles: Introduction to sewing, fabric properties, and creating textile products such as bags, cushions, and clothing.

Mechanisms: Understanding simple mechanisms, such as levers and pulleys, and applying this knowledge to design and create moving products.

Cooking and Nutrition: Learning about food hygiene, nutrition, and basic cooking and food preparation skills.

Structures: Exploring the principles of stability and strength in building structures and bridges.

Electronics: Introduction to basic circuits and electronic components, allowing students to create simple electronic projects.

Implementation

We will adopt the 'Explore, Design, Make and Evaluate' process to our Design & Technology curriculum.

Explore

- Inquiry-Based Learning: Teachers will employ inquiry-based teaching methods to encourage curiosity and exploration. Students will investigate real-world problems and analyse existing products
- Trips and Visitors: Where possible, we will organise visits to relevant places (e.g., museums, workshops) and invite visitors in the design field (e.g., local artisans, engineers) to inspire students and provide real-world context
- Research and Documentation: Students will learn research skills, including data collection, surveys, and interviews, to gather information about the product they are exploring

Design

- Collaborative creation: Students will engage in brainstorming sessions to generate ideas for their projects, promoting creativity and innovation
- Prototyping: The design phase will involve creating sketches, diagrams, and rough prototypes to visualise, test and refine their ideas
- Critical Thinking: Teachers will encourage critical thinking by challenging students to justify their design choices based on research and practicality

Make



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- Safety Training: Safety is paramount. Before any hands-on activities, students will receive comprehensive safety training to handle tools and materials responsibly
- Hands-On workshopping: We will provide well-equipped workshops with age-appropriate tools and materials, ensuring students can safely bring their designs to life
- Progressive Skill Development: The making phase will progress from simple projects to more complex ones, allowing students to build their skills gradually through EYFS to UKS2

Evaluate

- Self-Assessment: Students will regularly reflect on their progress and make selfassessments based on set criteria, encouraging self-awareness and improvement
- Peer Review: Collaborative learning will be fostered through peer reviews, where students provide constructive feedback to their peers
- Teacher Feedback: Teachers will offer guidance and feedback during various stages of the projects, emphasizing both the process and the final product

Impact

We believe that a high-quality Design and Technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. Through our school curriculum children will have a clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum. Through carefully planned and implemented learning activities the pupils develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

We will ensure the children:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- 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 ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook. Children will
 design and make a range of products. A good quality finish will be expected in all design
 and activities made appropriate to the age and ability of the child
- 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

Pupil's skills and knowledge are assessed ongoingly by the class teacher, throughout lessons and a summative assessment is completed termly. This informs the Design and Technology coordinator of any further areas for curriculum development, pupil support and/or training requirements for staff.