

DT



Intent

We aim to provide a DT curriculum that encourages 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 give children opportunities to reflect upon and evaluate past and present design technology. We will link our DT curriculum to other disciplines including maths, science, engineering, computing and art. Lessons are progressive throughout year groups and build on prior learning and progression of skills. Children are challenged to research information, think for themselves, give reasoned answers, work independently, be enterprising and develop good resilience and attitudes to learning.

Implementation

The DT subject coordinator oversees and leads the subject by monitoring, evaluating and sharing good practise. Key skills and knowledge for DT have been mapped across the school to ensure progression between year groups. Children learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the program of study. Design and technology lessons are also taught as a block so that children's learning is focused. The program of study incorporates the four key areas of learning:

Design:

- 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.

Make:

- 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, ingredients and components, including construction materials, textiles and ingredients, according to their functional properties, aesthetic qualities and, where appropriate, taste.

Evaluate:

- 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.

Technical knowledge:

- 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.
- Understand some of the ways that food can be processed and the effect of different cooking practices (including baking).

Impact

Children will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. Children have built and applied 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.

Children learn how to take risk, become 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.