Design & Technology

Design and Technology is an inspiring and practical subject. It encourages children to learn to think and act creatively to solve problems as individuals and as members of a team. 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. We aim to, where possible, link work to other curriculum subjects. The children are also given opportunities to reflect upon and evaluate their design technology, its uses and effectiveness and are encouraged to become innovators and risk-takers. Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in the process of designing and making. When designing and making, the children are taught to:

Design

• use 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 and components, including construction materials, textiles and ingredients.

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 and electrical systems in their products

• apply their understanding of computing to program, monitor and control their products

Key skills and key knowledge for DT are planned across the school to ensure progression between year groups. The context for the children's work in DT is also well considered and children learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study. DT lessons are often taught as a block so that children's learning is focused throughout each unit of work.

<u>Impact</u>

We 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.