



Design and Technology at Danbury Park Community Primary School

At Danbury Park Community Primary School we believe that Design and Technology prepares children to deal with our rapidly changing world. It encourages children to become independent, creative problem solvers and thinkers. They are given the opportunity to work as individuals and as part of a team. It enables them to identify needs and opportunities, and to respond to them by developing a range of ideas, products and systems.

Through the study of Design and Technology, the children combine practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry. This allows them to reflect on and evaluate past and present technology, its uses and impacts.

At Danbury Park Community Primary School, Design and Technology is taught in all year groups through at least one topic each term. Design and Technology projects are often made cross-curricular, linking to other subjects taught. This gives the projects a meaningful context and rationale.

Design and Technology in Early Years Foundation Stage

During EYFS, children are given the opportunity to use a variety of media and materials through a combination of child initiated and adult directed activities. They are encouraged to express their own ideas, thinking about the form and function of the product they are creating. Children are given support to plan and construct with purpose and are provided with a range of tools to explore.

In EYFS, cooking and the preparation of food is an important skill to develop and we teach the children about good health and hygiene routines.

Design and Technology in Key Stage 1

Through a variety of creative and practical activities, children are taught the knowledge, understanding and skills needed to engage in an interactive process of designing and making. They work in a range of relevant contexts linked to their termly topics.

Linked to each topic, the children are encouraged to design purposeful, functional and appealing products for themselves and other users based on design criteria. They work individually and in small groups to generate, develop, model and communicate their ideas. Their designs can be represented in drawings, templates, mock-ups and through the use of information and communication technology.

Children are supported in their selection of tools and equipment to enable them to successfully perform practical tasks. On completion of their product, the children are expected to evaluate the design against the set design criteria. They will be asked to think about how they could make improvements to their design, for example increasing strength of stability.

As part of their work in design technology, children are taught how to cook and apply the principles of nutrition and healthy eating. Children learn about the importance of a healthy and varied diet and are given an understanding of where food comes from.



Design and Technology in Key Stage 2

In Key Stage 2 the children continue to build upon their previous knowledge and skills through our topic based curriculum. The use of computer programs and applications are also a key focus to be utilised by children in the design of their products.

Before beginning a project, the children are expected to research and develop design criteria to inform the design of their product and to think about the individual or group their product is designed for. Their ideas are represented through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

During the making process, the children will be encouraged to select the appropriate tools and equipment to create their design product and to use a range of materials and components, according to their functional properties and aesthetic qualities. To increase the complexity of the design of their product, the children will be encouraged to include mechanical and electrical systems in their designs. On completion of their product, the children will be asked to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Through discussion and moderation, they will show their understanding of how to strengthen, stiffen and reinforce their design for improvement.

As part of their work with food, children are taught how to cook and apply the principles of nutrition and healthy eating. They will prepare and cook using a range of cooking techniques and will be taught about where and how a variety of ingredients are grown, reared, caught and processed. In Year 6 the children also plan, bake and serve refreshments to members of our community who are invited to join the school for special celebrations.