



Design and Technology Curriculum Statement

Intent

The national curriculum for Design and Technology aims to ensure that all pupils:

- 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
- 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.

At Archbishop Wake Primary School, children receive a Design and Technology curriculum, which allows them to exercise their creativity through designing and making. Through scaffolding and inclusion, we maximise the potential of all of our pupils, intellectually, socially, morally, emotionally and culturally. Design and Technology should provide children with a real life context for learning. Through the DT curriculum, children will be motivated by engineers, designers, chefs and architects to enable them to create a range of structures, mechanisms, textiles, electrical systems and food products with a real life purpose.

Implementation

Where possible, Design Technology projects are cross-curricular, linking to other subjects taught and allowing children to easily make connections to their learning in these subjects. Teachers use the scheme 'Projects on a Page' to ensure all aspects of DT are covered according to the children's prior learning and their age. Teachers identify this previously learning from elicitation tasks, then plan according to key learning within **designing, making, evaluating and technical knowledge and understanding**. Key vocabulary including technical vocabulary is identified and explicitly taught.

Our progression grid ensures skills and knowledge taught across the school are built upon and revisited.

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 (for example, cutting, shaping, joining and finishing, as well as chopping and slicing) 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 and grilling).

We ensure that practice in the subject is healthy, safe and hygienic. Children are taught to work safely, using tools, equipment, materials, components and techniques appropriate to the task.

Impact

Assessment of children's learning in Design and Technology is an ongoing monitoring of children's understanding, knowledge and skills by the class teacher. It is monitored by the subject leader throughout the year in the form of work scrutiny, lesson observations and pupil interviews.

By Year 6, the children at Archbishop Wake have an understanding of the design process and realise the importance of planning and evaluating their products. Each topic ends with all children creating a final product; these products are a way for children to demonstrate the skills they have acquired independently. An important impact of Design and Technology in our school is that the children can explain their work with confidence using the appropriate language, thus demonstrating their depth of learning

The longer-term impact is to ensure the children leave our school prepared for the next step in their Design and Technology journey, are motivated, and try to achieve their aspirations in the future.

