



## Design Technology at Braunston School



Design and Technology is an inspiring and practical subject. At Braunston Primary School, 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, wants and values. We aim to, wherever possible, link work to other subjects, giving children motivation and meaning for their learning. Children will also learn basic cooking skills.

### Intent:

- To 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.
- To encourage children to learn to think and intervene creatively to solve problems.
- To design and make products that solve real and relevant problems within a variety of contexts, through researching, designing, making and evaluating.
- To reflect upon and evaluate past and present design technology, its uses and its effectiveness, as children are encouraged to become innovators.

Our D.T. curriculum encompasses the aims, breadth and programmes of study in the National Curriculum.

### Implementation:

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children design and create products that consider function and purpose. Skills are taught progressively to ensure that all children are able to learn and practice in order to develop as they move through the school. Evaluation is an integral part of the design process and allows children to adapt and improve their product - a key skill which they need throughout their life.

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 and 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).

Key skills and key knowledge for D and T have been mapped across the school to ensure progression between year groups. The context for the children's work in Design and Technology is also well considered and children learn about real life structures and the purpose of specific examples, as well as developing their knowledge and skills throughout the unit of work and year on year as pupils move through the school.

DT forms part of our school's aim to provide a broad and balanced education for all, whatever their ability. We achieve this by planning open – ended tasks that can have a variety responses, planning tasks of increasing difficulty and taking into account the learning needs of SEND pupils and those identified as highly able.

**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

They will 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

At Braunston, we have decided every year group will undertake a food based unit of work so children will understand and apply the principles of nutrition and learn how to work with food safely.

Design Technology in EYFS is encompassed within the 'Expressive Arts & Design' area of learning. This occurs through exploring and using media and materials, using their imagination. Ongoing observational assessment of each child's activities, within the various zones in the classroom, informs planning and leads to an EYFS Profile summary against the Expressive Arts & Design strand.