



Design and Technology at Blaby Stokes



Design and technology prepares pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of autonomous and creative problem solvers, as individuals and members of a team.

At Blaby Stokes Primary School, in both KS1 and KS2, we use a creative curriculum basis for our curriculum planning in Design and Technology using a scheme of work called Cornerstones, which teaches Design and Technology both discretely and through other subjects in a cross curricular way. We ensure that coverage of all the key areas is good and that all key skills are being taught.

Design and Technology also forms part of two of the seven areas of learning in the Foundation Stage: understanding the world and expressive arts and design. Children work towards the Early Learning Goals which are the end of the Foundation Stage expectations. Children are taught basic discrete skills as well as developing knowledge, skills and understanding through exploration and investigation.

Design and Technology includes a balance of cooking and nutrition, designing, evaluating, making and gaining technical knowledge.

Throughout Key Stage 1, the children will:

- Use the basic principles of a healthy and varied diet to prepare dishes.
- Understand where food comes from.
- Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.
- Explore and evaluate a range of existing products.
- Evaluate their ideas and products against design criteria.
- Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.

Throughout Key Stage 2, the children will:

- Understand and apply the principles of a healthy and varied diet.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
- 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 and exploded diagrams, prototypes, pattern pieces and computer-aided design.
- 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.
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].
- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].
- Apply their understanding of computing to program, monitor and control their products.