



ENSTONE PRIMARY SCHOOL

DESIGN AND TECHNOLOGY POLICY

Aims:

The purpose of teaching Design and Technology in our school is 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.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Curriculum Coverage:

Pupils in Reception will be taught according to the guidance and requirements of the Early Years Foundation Stage Curriculum. As pupils in a mixed age and key stage class they will also encounter some of the content from the Key Stage 1 DT curriculum as part of their umbrella topic each term. Teaching and learning in DT will be adapted to suit the needs of these pupils, at all times making reference to the EYFS curriculum and early learning goals.

At Key Stages 1 and 2 pupils will be taught according to the programmes of study and attainment targets for the National Curriculum in England, 2014.

Key stage 1

Through a variety of creative and practical activities, pupils will be taught the knowledge, understanding and skills needed to engage in an iterative process (repeating a process) of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils will be taught to:

Design

- 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

Make

- 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

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- 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

Key stage 2

Through a variety of creative and practical activities, pupils will be taught the knowledge, understanding and skills needed to engage in an iterative process (repeating processes) of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be 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 and exploded 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], 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

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 [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.

Cooking and nutrition

As part of their work with food, pupils will be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils will be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from

Key stage 2

- 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.

Approach to Teaching and Learning

The children will work individually, in groups and as a whole class. We select appropriate teaching styles for a variety of activities. We aim to achieve a balance between direct teaching of processes and techniques and opportunities for challenging and open-ended projects that are dependent upon pupil autonomy.

Our Design and Technology curriculum is based on the KAPOW scheme of work.

Children will learn

- That Design and Technology is gender neutral. Its experiences are undertaken by both boys and girls without stereotyped or biased expectations.
- To be aware of good safety practice and understand the appropriate use of tools and techniques, which safeguard pupils at work.
- To develop an awareness of the implications of Design and Technology on the environment and of the need for human sensitivity towards the use of the world's resources.

Access

In Design and Technology, we aim to teach the programmes of study at the appropriate level for each individual child in order to enable each child to achieve his or her potential.

Equal opportunities

We make the design and technology curriculum available to all, with equal and appropriate access to children of both sexes, all races, all faiths and all abilities.

Standards

Assessment of children's development is made through ongoing teacher assessment. Each child will be working to his or her own potential and accepting any challenges to improve.

Health and safety

Teachers will always teach the safe use of tools and equipment and insist on good practice. Children will be taught to return tools to the tool board or box when not in use.

Sharp tools will only be used by children under direct adult supervision. The glue gun will be used by KS2 children under supervision only when there is no other appropriate joining technique.

Hygiene and safety – food

Food will be bought on the day, or day before, it is needed. Adults and children will wear aprons when working with food. Adults and children will always follow the Health and Safety and hygiene procedures that are displayed in food preparation areas around the school. Key members of school staff will complete the relevant safe food handling training and qualification in order to lead teaching and learning in food technology.

Date Adopted: June 2024

Review Date: June 2027

Signature of Chair of Governors:



Signature of Headteacher:

