



## **Design and Technology**

### **Purpose of study:**

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation

### **Aims:**

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.

### **Intent**

Our thoughtfully crafted DT curriculum provides children with opportunities to develop their skills using a range of media and materials. It is planned to be progressive over time.

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. Design and Technology is an inspiring and practical subject. It can be found in many of the objects children use each day and is a part of children's immediate experiences. Design and Technology encourages children to learn to think and intervene creatively to solve problems, both as individuals and as members of a team.

Our Design and Technology curriculum combines skills, knowledge, concepts and values to enable children to tackle real problems. It can improve analysis, problem solving, practical capability and evaluation skills. Although we teach subjects discreetly, we aim to, wherever possible, link work to other disciplines such as mathematics, science, history, computing and art. The children are encouraged to become ambitious and resilient. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

In DT, we aim for our children to be ambitious, reflective and evaluate their work, thinking about how they can make changes and keep improving. This should be meaningful and continuous throughout the process, with evidence of age-related verbal and written reflection. Children are encouraged to be ambitious and experiment and then reflect on why some ideas and techniques are successful, or not, for a particular project. The DT curriculum is reviewed, refined and adapted (by class teachers and subject leaders) to ensure that the curriculum meets the diverse needs of our children.



## **Implementation**

As a school and in accordance with the National Curriculum's expectations, we aim 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.

The needs of all children are met through the planning and delivery of this subject. This is carried out in a variety of ways, such as: differentiation through outcome/task, adult support, adapted tasks/materials and pre-teaching of skills and vocabulary if necessary. On some occasions, skills, knowledge and understanding may be adapted to make learning accessible for all, whilst at the same time ensuring challenge.

Class teachers are usually responsible for teaching DT, although there will be times when professional artists/helpers will be involved in the teaching of the topic. We take every opportunity to develop links with outside agencies and experts, in order to enrich our Design Technology provision. Children are encouraged to problem solve co-operatively together when designing and making products in order to create an end product. DT is sometimes planned alternatively with Art, per half term, and usually through weekly lessons. However, depending on the nature of the topic being taught, teachers may decide to block lessons.

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Key design vocabulary has been identified for each element of DT studied to aid progression and demonstrate acquisition of key knowledge, skills and understanding. Vocabulary identified is progressive through the school.

## **Impact**

We aim for our children enjoy the self-expression that they experience in DT. We hope they are always keen to learn new skills and work hard to improve those shown to them. The children's DT can be cross-curricular and helps them to work co-operatively and be ambitious, as well as being able to show their knowledge and understanding in other subjects such as history, geography and science.

We believe that by developing this, we can contribute to the quality of our children's lives, both within and beyond school. We see Design Technology as a means to support learning in a range of ways. The skills that are developed in this subject can be transferred across the curriculum and thus aid learning.



Children are assessed in art each term, based on the skills/focus area studied. The art subject leader may moderate within school, across classes to ensure accurate assessment and teaching of progressive skills. A wide range of evidence is gathered through: work scrutiny, teacher and pupil conferencing or surveys and learning walks in order to support the development of this subject area.

We aim to celebrate children's achievements in this subject in a variety of ways. This could include displays, celebration assemblies, sharing on school website, peer evaluation and whole class discussions. This not only supports pupils' self-esteem and motivation but raises the profile of the subject throughout the school community.