



**LIMITLESS POTENTIAL**

**IGNITE PASSION**

**EMBRACE DIFFERENCE**

## **Design and Technology**

### **Intent**

Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. At Hazlewood 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 disciplines such as mathematics, science, engineering, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

To provide children with stimulating, challenging and engaging lessons that ignite passion for Design and Technology.

Unlocking limitless potential through inspiring curiosity which is appropriate for preparing them for adult life in the 21<sup>st</sup> Century.

Embrace difference through delivering an inclusive and rigorous scheme of learning for all children regardless of needs, ability or background.

Encourage higher order subject skills such as developing explanations, reaching conclusions, making judgments, evaluating and applying information learned in one context to another.

### **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 work in a range of relevant contexts (for example home, school, leisure, culture, enterprise, industry and the wider environment).

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, 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) 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
- understand and use electrical systems in their products
- apply their understanding of computing to program, monitor and control their products

Key skills and key knowledge for D and T have been mapped across the school to ensure progression between year groups. This also ensures that there is a context for the children's work in Design and Technology; that they learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study. Design and technology lessons are also taught as a block so that children's learning is focused throughout each unit of work.

Children who have shown their understanding at a deep level within the unit, will have opportunities to apply these skills in a greater depth activity. This should be challenging and allow the children to apply what they have learnt in previous years to make an informed opinion.

Design and Technology is enriched through the use of ICT. Children are regularly given opportunities to research and present their findings in a variety of apps including KeyNote and Clips.

Strong links between school and home ensure parents and carers have a strong understanding of how we teach Design and Technology at Hazlewood and how they can help their child improve.

Regular, structured conversations with children will take place to ensure we include the pupil's voice in improving the teaching of History.

## **Impact**

Assessment of children's learning in Design Technology is an ongoing monitoring of children's understanding, knowledge and skills by the class teacher, throughout lessons. This assessment is then used to support and challenge the children. Assessment of key vocabulary will be ongoing through constant revision and questioning.

Summative assessment is conducted termly by class teachers across each year group of the school to inform the subject leader of progress or skills and knowledge still to be embedded.

Design Technology is also monitored by the subject leader throughout the year in the form of monitoring, looking at outcomes and pupil interviews to discuss their learning and understanding and establish the impact of the teaching taking place.

Children show a high level of pride in the presentation and understanding of the work.