

Design and Technology Intent Statement

St Hubert's Mission Statement is at the heart of all our Intent Statements.

Believe to Achieve: Love God, Love Learning, Love One Another.

Design and Technology Intent:

At St Hubert's, we aim to deliver an engaging, practical and problem solving based Design Technology curriculum. To offer children a chance to use creative thinking after research, where they follow a design, make and evaluate system. Technology of the modern world is rapidly changing and at St Hubert's, we aim to prepare the children in advance for this.

How this is implemented:

Teaching of Art and Design Technology in Early Years Foundation Stage

Children are taught to represent their own ideas, thoughts and feelings through design and technology, art, music and dance. Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. Children know about similarities and differences in relation to places, objects, materials and living things. They use ICT hardware to interact with age-appropriate computer software which enables them to complete activities such as simple programmes and games.

Teaching of Design Technology in Key Stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative 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 should 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.

Cooking and Nutrition

- Use the basic principles of a healthy and varied diet to prepare dishes
- Understand where food comes from.

Teaching of Design Technology in Key Stage 2

Children should be taught to:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process 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

Children should 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 group. They should generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

The children will select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. They shall also 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

The children will investigate and analyse a range of existing products as well as evaluating their ideas and products against their own design criteria and consider the

views of others to improve their work. They will learn to understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

Children will apply their understanding of how to strengthen, stiffen and reinforce more complex structures as well as understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. They will engage in understanding and using electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Children will apply their understanding of computing to program, monitor and control their products.

Cooking and Nutrition

Children need to understand and apply the principles of a healthy and varied diet, being able to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. They shall learn to understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Impact of Design and Technology at St Hubert's:

Children will learn a wide range of Design Technology skills, from cooking and nutrition, to computer coding and programming. These skills are integral life skills that will provide a basis for the real world. Children will be competent at designing and assessing each other's work and skills, creating children who are confident self and peer-evaluators.