

Hemingbrough Community Primary School  
Key Stage One  
Design and Technology

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 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

Pupils at Key Stage One will be taught:

DESIGN

- to design purposeful, functional, appealing products for themselves and others based on a design criteria.
- to generate, develop, model and communicate their ideas through talking, drawing, templates, mock ups and when appropriate ICT.

MAKE

- to select and use from a range of tools and equipment to perform practical tasks. ( cutting, shaping, joining and fixing)
- to select from and use a range of materials and components according to their characteristics. ( including construction kits, textiles and ingredients)

EVALUATE

- to explore and evaluate existing products.
- to evaluate their ideas against a design criteria.

TECHNICAL KNOWLEDGE

- to build structures and explore how they can be improved ( stiffer, stronger or more stable)
- explore and use mechanisms in their products. (levers, slides wheels and axles)

COOKING AND NUTRITION

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

Hemingbrough Community Primary School  
Key Stage Two  
Design and Technology

Pupils at Key Stage Two will be taught:

**DESIGN**

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

**MAKE**

- to select from and use a wider range and tools and equipment to perform practical tasks accurately (cutting, shaping, joining and finishing)
- to select from and use a wider range of materials and components according to their functional properties and aesthetic qualities. (including construction materials, textiles and ingredients)

**EVALUATE**

- to investigate and analyse a range of existing products.
- to evaluate their ideas and products against their own design criteria and consider the views of other to improve their work.
- to understand how events and individuals in design and technology have helped shape the world.

**TECHNICAL KNOWLEDGE**

- to apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- to understand and use mechanical systems in their products( eg gears, pulleys, cams, levers and linkages)
- to understand and use electrical systems in their products ( series circuits incorporating switches, bulbs buzzers and motors.
- to apply their understanding of computing to program, monitor and control their products,

**COOKING AND NUTRTION**

- to understand and apply the principles of a healthy and varied diet.
- To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- To understand seasonality, and know where and how a variety of ingredients are grown. Reared, caught and processed.