

Methley Primary School Policy for Design and Technology

Why do we study DT at Methley Primary?

- 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.

What are the main aspects pupils will be taught:

Foundation Stage

Through a variety of creative and practical areas of provision pupils will use and explore a range of materials, tools and techniques used for designing and making. They will experiment with colour, texture, form and function, using a variety of tools safely and will represent their ideas. They will think critically and creatively to talk about their creations. They will have access to the following continuous provision for designing and making: - Large wooden blocks, - Small wooden blocks, - Box modelling equipment with tape and glue, - Painting, - Dough, - Collage

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

Key stage 2:

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

- 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

What parents can do to help:

Watch Grand Designs, Cook at home, Make anything using anything, Design imaginary things together like a dog walking machine perhaps, Look at how playground things work and discuss, How do cars work-look at the engine safely?

Methley Primary School follows the National Curriculum Guidelines and ensures that the curriculum is tailored to meet the needs of ALL our pupils. The school runs an Inquiry Curriculum and Design and Technology will form part of pupil inquiries throughout the year.