

Netherton J & I School
Design Technology Policy



Aims:

Design and Technology helps us to teach Maths and English and indeed other compulsory subjects on the curriculum in a fun manner and put these subjects into context making them easier to digest and more understandable to our pupils.

D&T at Netherton gives children the opportunity to develop skills, knowledge and understanding of designing and making functional products. We feel it is vital to nurture creativity and innovation through design, and by exploring the designed and made world in which we all live and work.

- 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.

KS1 Objectives

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

KS2 Objectives

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

The Foundation Stage:

We encourage creative work in our expanding Reception class, as this is part of the Foundation Stage Curriculum. We relate the creative development of the children to the objectives set out in the Foundation Stage Assessment, which underpin the curriculum planning.

The children's learning includes art, music, dance, role-play and imaginative play. The range of experience encourages children to make connections between one area of learning and another and so extends their understanding.

Setting the children's learning in a brand new Foundation Stage area, we provide a rich environment in which we encourage and value creativity. Children experience a wide range of activities that they respond to, using the various senses. The activities that they take part in are imaginative and enjoyable.

Teaching and Learning:

Design Technology activities are taught in blocks at the end of a half term or in short skills-based activities where necessary. Design Technology has relevance across the curriculum and links with other

subjects throughout the school. For example, most of our Design Technology has been incorporated into our long-term planning of History, Geography and Science topics. These links can be seen on our whole-school planning grids. We are members of the Design and Technology Association and use Projects on a Page to enhance our planning. We have adapted our Long Term Plans to take into account our mixed age classes so that children will not miss DT topics or go over the same ones throughout the year. The long-term plan maps the scientific topics studied in each term across the whole school over the year.

Breadth and balance:

We will ensure that in any key stage the activities of drawing, painting, printmaking, collage, sculpture, textiles, 3D design and digital media are covered. We will ensure that pupils will develop their creative ideas in both expressive and craft design contexts and that their work will be informed by visual investigation from direct observation and other reference materials.

The study of the work of artists, craftspeople and designers from the locality, the past and present and a variety of cultures will be an integral part of practical art and design activities.

English

Design and technology contributes to the teaching of English in our school by providing valuable opportunities to reinforce what the children have been doing during their English lessons. The evaluation of products requires children to articulate their ideas and to compare and contrast their views with those of other people. Through discussion children learn to justify their own views and clarify their design ideas.

Computing

We use ICT to support design and technology teaching when appropriate. Children use software to enhance their skills in designing and making, and use draw-and-paint programs to model ideas. They use databases to provide a range of information sources and CD-ROMs to gain access to images of people and environments. The children also use ICT to collect information and to present their designs through draw-and-paint programs.

Personal, social and health education (PSHE) and citizenship

Design and technology contributes to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own

health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

EXPECTATIONS:

Assessment and recording:

Assessment is based on a combination of teacher assessment, peer assessment and pupil self-assessment. Each term, all pupils' records are updated and this should be used to inform the End of Year Reports, which give a grade for 'Effort' and 'Achievement'.

Beginning September 2020, Design Technology the subject leader will keep evidence of the children's work (one higher, one middle and one lower level) in a portfolio each academic year. This will be used to demonstrate what the expected level of achievement is in Design Technology in each year at Netherton. We will also include photos, videos and activities on our Design Technology page on our website.

Inclusion:

We recognise the fact that we have children of differing ability in all our classes, and so we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this through a range of strategies that are essential to developing a more inclusive curriculum:

- Setting common tasks that are open-ended and can have a variety of responses;
- Setting tasks of increasing difficulty where not all children complete all tasks;
- Providing a range of challenges with different resources;
- Using additional adults to support the work of individual children or small groups.
- ICT programmes and appropriate tools and equipment are provided to ensure that all pupils have sufficient access to the Design Technology curriculum.
- Ensuring that children with Special Educational Needs will be given an equal opportunity to study Design Technology. These children will be provided with all of the necessary materials to succeed and be inspired, supported by their 1-1 support where necessary.

Resources

Our school has a wide range of Design Technology resources. Some of these are based in classrooms however the majority are based in the DT store cupboard in the shared area. We are members of 'Design and Technology Association' and take some of our planning from PlanBee.

The role of parents and carers:

Parents and carers are encouraged to be involved with their pupils' learning through looking at Design Technology displays, and viewing and commenting on any work that has been added to Netherton school website or on our Twitter page.

Review: Autumn 2026

Curriculum plans, samples of pupils' work, classroom displays and discussions with staff will be used by the Design Technology Leader to evaluate the quality of the art and design curriculum in the school.

Design Technology Subject Leader- Alison Cunliffe

Date: September 2025