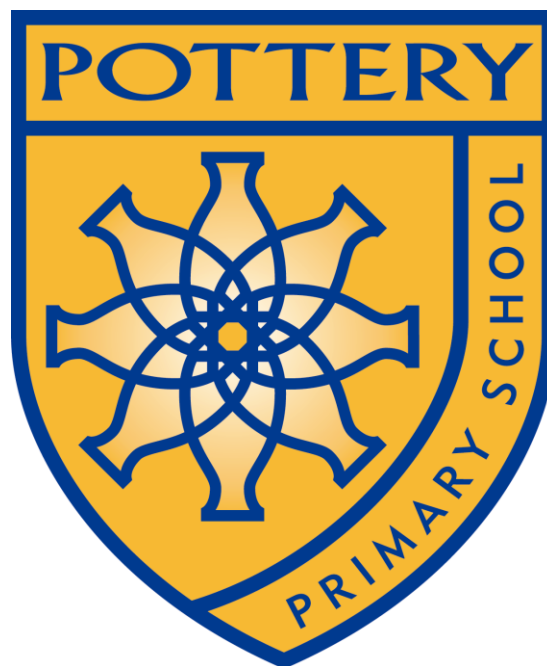


Design and Technology Policy



Updated 13/12/22
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What is Design and Technology?

Design Technology prepares children to deal with our rapidly changing world. It encourages children to become independent, creative problem-solvers and thinkers as individuals. It enables them to identify needs and opportunities in their community around them, to respond by developing their own ideas and designs, subsequently making these products and systems. Through the study of Design and technology, they combine practical skills with an understanding of aesthetic, social and environmental considerations as well as considering their function. This enables children to reflect on a range of past, present designs and evaluate their use/impacts. Design and Technology helps all children to become creative thinkers and problem solvers which will be invaluable in our ever-developing world.

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, skills, understanding in order to design and make carefully planned products for a wide range of uses
- critique, evaluate and test their ideas and products as well as their peers work.
- understand and apply the principles of nutrition and learn how to cook.

Inclusion

All learning opportunities will respond to an individual child's needs. A flexible approach will allow for those that who are working below the expected ability of the class and for those that require SEND support. Children who are deemed to be achieving beyond the class standard will be set suitable challenges.

Hygiene, Health and Safety

Because children may be using tools and materials that could possibly present a hazard if used incorrectly, children will be taught to use correct methods and will be encouraged to recognise the risks involved prioritising the health and safety of their pupils. Children will also be taught the necessity of looking after equipment, by using it correctly and keeping it clean and tidy.

Curriculum Teaching and Learning

EYFS

Early Years Foundation Stage children are expected to make good progress achieving their early learning goal at the end of Foundation Stage in the areas of 'Knowledge and Understanding of the World' and 'Expressive Art and Design'. Opportunities for developing designing and making skills will be given as set out under this area of learning, preparing children for Design and Technology in Key Stage 1.

Key Stage 1

Through a variety of creative and practical activities, pupils will be taught the knowledge, understanding, skills and vocabulary needed to engage in a process of designing and making. They

will work in a range of relevant contexts such as gardens and playgrounds, the local community, industry and the wider environment. When designing and making children are 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 and school, leisure, culture, enterprise, industry and the wider environment].

Design • use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose • generate, develop, model and communicate their ideas through discussion, annotated sketches and computer-aided design.

Make • select from and use a wider range of tools and equipment to perform practical tasks • 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 • explore 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

Cooking and Nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

EYFS • safely use and explore a variety of materials, tools and techniques. • recognise that a range of technology is used in places such as homes and schools. • know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe.

Key Stage 1 • use the basic principles of a healthy and varied diet • understand where food comes from.

Key Stage 2 • understand and apply the principles of a healthy and varied diet • prepare and cook a variety of foods using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown and processed.

Monitoring and Evaluation

As indicated in the long-term plan, DT will be taught 3 half terms throughout the year. Teachers will assess and monitor the children's progress in the subject against the National Curriculum expectations of attainment. Attainment levels will be recorded on Itrack and monitored by the subject leads. A final end of year assessment is made, identifying the level in which the child is working. Children in Foundation Stage are assessed within Expressive Arts and Design and Knowledge and understanding of the World and their progress is tracked termly working to achieve their Early Learning Goals in the final assessment.

Role of Design and Technology Leader

The subject leader will monitor and evaluate design technology throughout the school in a variety of ways; including checking planning, lesson observations, work scrutiny, pupil and staff questionnaires as well as resource audits. The subject leader will also support fellow colleagues in the planning, teaching and CPD of design technology. The leader will use the Itrack data to monitor the attainment in their subject to ensure that levels of development are in line with National expectations. They will also ensure there is a broad and balanced curriculum, which clearly identifies progression in skills and vocabulary throughout the school. The coordinator will keep an overview of the yearly coverage in each year group and support staff where necessary.

Review

This policy is a working document and is subject to change and amendment when necessary. Governors will work with the subject leader to ensure this policy is current and relevant and that the design technology curriculum is delivered to a high standard in an effective manner ensuring coverage and quality teaching and learning.