

Aims of the Design and Technology (DT) Curriculum:

At Canterbury Cross Primary school, the Design and Technology curriculum is focused around creativity and imagination allowing pupils to design and make products that solve real and relevant problems within a variety of contexts. Pupils learn how to take risks, becoming resourceful, innovative and enterprising.

The national curriculum for DT 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, 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.

How is the DT programme of study implemented?

At Canterbury Cross, we aim to inspire our pupils to be innovative and creative thinkers. The children undertake a Design and Technology project twice a year where blocked afternoons are devoted to the subject. At the heart of our curriculum is the product design cycle:

- Evaluate existing products

These activities provide opportunities for the children to explore existing products and to gain skills, knowledge and understanding which can be applied in a design and make assignment.

- Build upon technical skills and knowledge

Focused practical tasks provide opportunities to learn and practice particular skills and knowledge. They develop skills when using various tools considering accuracy and safety.

- Design and Make

A design and make assignment provides an opportunity for the children to combine their skills, knowledge and understanding to develop products that meet a perceived need

- Evaluate own product

Evaluate their ideas and products against initial design criteria and consider the views of others to improve their work

All topics are planned in accordance with the National Curriculum programme of study. Our curriculum ensures there is a clear progression of skills and knowledge across each year group. Below is an overview of topics taught across school

Year group	Topic 1	Topic 2
Year 1	Structures / Mechanisms Model house with hinges (doors)	Food technology dips and dippers
Year 2	Mechanisms wheels and axles in vehicles	Textiles fabric bunting
Year 3	Mechanisms levers and linkages in moving posters	Food technology baking bread
Year 4	Electrical systems battery operated lights	Textiles Roman bulla bags
Year 5	Food technology seasonal soup	Mechanisms Moving toys (CAMs)

Year 6	Structures / mechanisms fairground ride with electric circuit	Textiles pencil cases
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Year 6 also carry out a computing unit where they are able apply their understanding of computing to program, monitor and control their 'micro bit' product.

In the Early years, Design and Technology is underpinned by the Expressive Arts and Design area of learning as well as physical development. Through adult led and child initiated activities, a range of opportunities are provided for children to develop their skills and knowledge which include

- Using tools such as scissors and cutlery to develop fine motor skills.
- Examining objects to find out more about them (how something works, what it does and what it is made from).
- Stimulating interest in how things work.
- Investigation, joining and building using construction materials with a purpose in mind.
- Trying out a range of tools and techniques safely, learning to use them competently and appropriately.
- Making models with construction equipment, boxes and materials using basic joining techniques and materials, e.g. glue, where appropriate.
- Learning about food hygiene and putting this into practise by working with an adult to cook.

How is DT assessed focusing on prior knowledge and progression?

Within the school's Design and Technology overview, progression of skills and attainment are mapped out, using vertical plans, to ensure learning builds upon prior knowledge. As this is the basis of planning, teachers are able to identify, embed and deepen knowledge. The curriculum is planned specifically with key areas being revisited with increasing complexity allowing students to revisit and build on their previous learning.

Formative assessments in Design and Technology are based on teacher observations and through marking work. Each child's Design and Technology book shows their designing, making and evaluating journey. As well as this, knowledge and understanding of key skills are tracked throughout school using the schools' formative and summative online assessment systems.

Every child working within the national curriculum has their own Design and Technology book in which they include collections of ideas, experiments and the processes involved in producing the final piece of work. Children are also taught and encouraged to evaluate their own ideas at different stages of the design process and make modifications as required. At the end of the year, books are passed up to the next academic year. The journey of key individuals is followed throughout school and this also supports in identifying prior work before moving learning on.

How do we ensure the DT curriculum is for everyone?

We at Canterbury believe that Design and Technology is a subject where children of all abilities can showcase their creativity and skills. The teaching of this subject allows opportunities for independent, peer and group work. Here, pupils are able to support each other and base roles on individual strengths. Activities are broad and allow all children to shine, whether that be through writing, designing, exploring, making and / or problem solving. Each and every child is able to access the curriculum. Where required, differentiation can be achieved by adapting a task, tool, support or outcome. These strategies can both support and challenge learners.

How do we ensure key content is remembered as pupils move through school?

Due to the way the curriculum has been designed, key skills and knowledge are revisited and built upon across school as topics have been taught before. All year groups follow a similar design process cycle: evaluate existing products, learn / refine technical skills, design, make and evaluate own product. This continued cycle provides opportunities for children to recap, refine and embed learning year on year.

Children's Design and Technology books are a journey of designing and making. As books are carried over to the following year group, children have opportunities to recap on previous learning by looking back at their own work.

How will the DT curriculum prepare children for the future and allow children to apply the key skills learnt?

Our curriculum aims to stimulate curiosity, imagination and creativity within all our learners. These characteristics should remain with the children as they move on. Design and Technology has many transferable skills that children will be able to use in their present and future. Problem solving, working as a member of a team, measuring, cutting, sewing, cooking and observing forces in action to name a few. We hope all Canterbury pupils' leave us confident in their technical ability and continue to develop and build on the key skills learnt as they move through life. Design and Technology equips children with the social skills necessary to work as a member of a team, as well as the ability to work independently when the situation demands, and this will definitely benefit our learners their future endeavours.