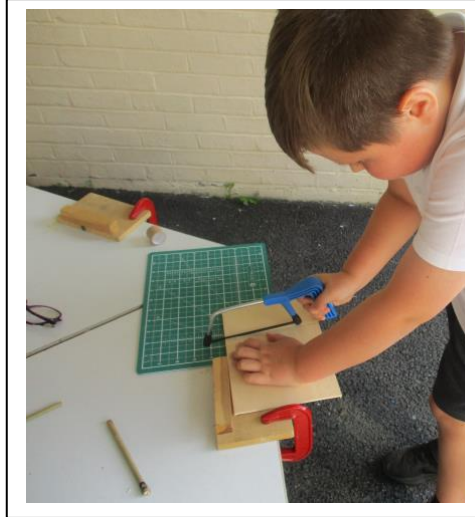




# St Mary's Catholic Primary School

## Design Technology Curriculum Statement



At St Mary's we believe that it is vital for children to be able to think with creativity and imagination. They need opportunities to investigate, apply technological knowledge, and understanding of complex principles and construction techniques as designers. These are skills embedded in the curriculum for Design and Technology but that are key features of all curriculum areas.

### **INTENT**

In Design and Technology pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They will acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing, and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising, and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education make an essential contribution to the creativity, culture, wealth, and well-being of the nation.

Pupils will develop the creative, technical, and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. Pupils will learn how to design make, test, and evaluate their ideas and products and the work of others. Opportunities such as enterprise projects and outdoor education sessions develop these skills and enable pupils to apply them in a real-life context. Opportunities also exist to exhibit their work in whole school exhibitions and through display. Cookery is also an important part of the curriculum, as pupils learn about nutrition and cookery skills. Where possible, produce grown in the garden at St Mary's is used to cook with in the classroom.

## **IMPLEMENTATION**

At St. Mary's we follow the aims of the National Curriculum. This 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 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.

Each class undertakes a Design and Technology project once a term. This may take the form of a sequence of weekly lessons, as part of a 'themed week' or a block of work that takes place over several days.

Sequences of learning are planned as part of a learning journey and build upon prior knowledge, skills, and techniques in a progressive way. When possible these sequences link with other learning.

As part of our rolling programme, children learn in KS1 undertake blocks of learning based around four key areas;

<b>Structures</b>	<b>Mechanisms</b>	<b>Cooking and nutrition</b>	<b>Textiles</b>
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In KS2, as part of our rolling programme, children undertake learning based around five key areas:

<b>Structures</b>	<b>Mechanisms</b>	<b>Cooking</b>	<b>Textiles</b>	<b>Electrical systems</b>
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Each year group will design, make, evaluate, and develop age related technical vocabulary and skills. Children learn to look closely at existing products, draw on their own experiences and using this knowledge they generate their own ideas. Children design with a purpose in mind and learn to communicate their ideas in a range of ways. They assemble, join, and combine materials to make a product They will show that they know how to make changes to improve their work, recognising this is all part of the process of becoming a designer. They will test and evaluate it against the set criteria.

Through sequences of learning children acquire knowledge about great designers and recognise why designers play a crucial role in our society.

Assessment takes place throughout the task / project.

Teachers and adults will talk with the children in small groups and on a one to one basis giving on going feedback and model practical support. This dialogue during the design process feeds into the final assessment and evaluation of the finished product.

Each child has a DT book that will help evidence the journey, by communicating ideas, resources, techniques, and evaluations. Photographic evidence will support this process.

Teachers collect evidence of children who are working below, at or exceeding expectations for their class. The co-ordinator collates these to produce files of standardised work for each age in our school.

## **IMPACT**

Children at St. Marys' design with creativity, independence, judgement, and self-reflection. Children have the skills to tackle challenges that are increasingly sophisticated. They have a sense of ownership over their work and can reflect on their experiences through evaluating their progress and development.

Children at St. Mary's are encouraged to think like designers, applying their technological knowledge, understanding of complex principles and construction techniques to each project. As designer's, children will have developed skills and attributes they can use beyond school and into adulthood.

### **Design and Technology in the Early Years**

Children in EYFS work towards meeting their Early Learning Goals. From an early age all children have opportunities to;

ELG- Creating with materials

- Safely use and explore a variety of materials, tools and techniques. experimenting with colour, design, texture, form and function
- Share their creations , explaining the process they have used;

ELG – Fine motor skills

Use a range of small tools, including scissors, paint brushes and cutlery.

Teachers and adults talk to children about what they notice and what they are making and why they are making it.