

OUR LADY IMMACULATE CATHOLIC PRIMARY SCHOOL DESIGN AND TECHNOLOGY POLICY

Aims and Objectives

At Our Lady Immaculate Catholic Primary School, we believe that Design and Technology prepares pupils to participate in an ever-changing technological world by becoming informed users and innovators. We ensure that all products are designed for a purpose or with a specific user in mind. We encourage the use of practical skills, creativity, problem-solving and critical thinking. Through DT, pupils learn how to design and make products that solve real and relevant problems within a variety of contexts. Pupils draw on their understanding of past and present design and technology, alongside practical skills, to design, make and evaluate their own products.

Our Design and Technology curriculum aims to ensure that all pupils:

- Build and apply a repertoire of knowledge, skills and understanding in order to design and make high-quality prototypes and products for a wide range of users.
- Critique, evaluate and test ideas and products.
- Nurture creativity and innovation.
- Explore values and attitudes towards the made-world and how we live and work within it.
- Develop an understanding of products and processes and their contribution to our society.
- Research and explore past design and technology and use this knowledge in their own designing.
- To develop an understanding of health and nutrition and how to cook.
- Develop an attitude that is conscious of what a healthy lifestyle is and how food contributes towards this.

Teaching and Learning

In Key Stages 1 and 2, Design and Technology is taught through a range of different strands including mechanical systems, structures, textiles, electrical systems and cooking and nutrition. At our school we use the Kapow Primary Design and Technology scheme of work. This provides a progressive, skills-based curriculum which is aligned with the National Curriculum. Structured lesson plans are carefully sequenced to follow a spiral curriculum where key knowledge and skills are revisited and built upon in a practical and engaging way.

Each key strand plans to follow the key process of **evaluating existing products, designing, skills practice, making and evaluating**. Teachers encourage children to evaluate their own ideas and methods, and the work of others, and to say what they think and feel about them. We give children the opportunity to work by themselves and in collaboration with others, on projects in two and three dimensions, and at different scales. Children also have the opportunity to use a wide range of materials and resources, including Information and Communication Technology (ICT). Many of our Design Technology units link to other areas of the curriculum and are relevant to modern day issues and themes.

Cross-Curricular Links

Design and Technology provides meaningful opportunities for pupils to apply learning from other areas of the curriculum.

DT links include:

- **Mathematics** – measuring, weighing, calculating, scaling, and understanding shape and structure.
- **Science** – understanding materials, forces, electricity, nutrition and mechanisms.
- **Computing** – using technology to research, design, and, in Key Stage 2, apply control and programming where appropriate.
- **Art and Design** – developing creativity, aesthetics, sketching and evaluating visual qualities.
- **English** – explaining ideas, writing design briefs, evaluating products and using technical vocabulary.
- **PSHE and SMSC** – teamwork, problem-solving, resilience, sustainability and understanding the needs of different users.

Early Years Foundation Stage

In EYFS, we provide a rich environment in which we encourage and value creativity and design. Design and Technology forms part of the areas of learning *Expressive Arts and Design* and *Understanding the World*. Children are encouraged to explore materials, tools and techniques and to design and make products through play-based and adult-guided activities. It takes place within many areas of the Continuous Provision such as block play, small world play and through creative play. Children are provided with opportunities to plan, create, evaluate and adapt through their play. Design and Technology is taught in a very practical, explorative and child led way. We relate the children's creative development to the objectives set out in the Early Learning Goals, which underpin curriculum planning. These links support a coherent and connected curriculum, helping pupils to see the relevance of DT in real-life contexts.