



## Design and Technology

At St. Godric's RC Primary School, our goal is for every child to develop their learning and experience success while using creativity and imagination to design and make products using a variety of skills and techniques.

In order to become resourceful, innovative, enterprising and capable citizens, children need to develop the skills and positive attitudes that can be developed through design and technology. We encourage pupils to consider their own and others' needs, wants and values to solve real and relevant problems within a variety of contexts and aim, wherever possible, to link work to other disciplines such as mathematics, science, history, computing and art. Children will be given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and use these ideas to help develop their own designs. They will be encouraged to become innovators and risk-takers who are prepared to continually evaluate and upgrade designs, processes and products. As part of their work with food, pupils will be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. 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.

### Intent – What we are trying to achieve

Our principal aim is that children leave St Godric's RC Primary School having enjoyed a range of interesting and exciting experiences in Design and Technology. They will have improved their confidence and creative, practical and technical skills within the subject and developed an awareness of their own abilities and strengths as a learner. Our goal is for children to see learning in Design and Technology as an on-going process rather than a one-off event, with relevance to their future lives as learners, employees and pursuers of leisure activities.

Children will meet the National Curriculum expectations in Design and Technology, which will be taught by enthusiastic and skilled staff who will support children to develop mastery of concepts and inspire enthusiasm and interest in the subject.

There will be opportunities for children of all ages to experience learning through additional provision, such as enterprise workshops provided by visitors, demonstrations of healthy nutrition and food preparation and after school clubs. They will also develop wider links to the community by working with people from the parish and nearby area.

Children will deepen their understanding and build on skills previously taught to solve increasingly complex problems and improve the sophistication of their work in Design and Technology.

Children will develop a real understanding and appreciation of the world by learning about key individuals, eg architects, chefs or engineers.

Children will understand how Catholic virtues and British Values relate to Design and Technology.

### Characteristics of designers and makers

- Carrying out thorough research, showing initiative and asking questions to develop an exceptionally detailed knowledge of users' needs.
- Evaluating existing products and designs



- Communicating ideas and plans to others through discussion, sketches, diagrams, templates, prototypes and, where appropriate, using IT
- Working constructively and productively with others as well as developing an excellent attitude to learning and independent working
- Demonstrating significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes.
- Producing meaningful and quality products while being reflective of their processes and outcomes, working ethically and using finite materials carefully
- Developing a thorough knowledge of which tools, equipment and materials to use to make their products and how to use them safely
- Applying mathematical skills and knowledge
- Managing risks exceptionally well to manufacture products safely and hygienically.
- Developing a passion for the subject

### Implementation – How do we translate our vision into practice?

The curriculum and timetable for Design and Technology will be followed by all staff in the school and monitored by the subject leader and Senior Leadership Team.

Where necessary, staff will receive coaching and training in Design and Technology.

Carefully designed schemes of learning in Design and Technology ensure consistency and progress of all learners.

There will be enrichment opportunities such as guest speakers who are specialists in their field, trips to businesses, and fieldwork to relevant places of interest.

Success criteria in every Design and Technology lesson will guide children to achieve their potential. This ensures work is demanding and matches the aims of the curriculum.

High quality input from experts and educational resources will complement the delivery of the Design and Technology curriculum. Children will understand how Design and Technology is used in the wider world including relevance to careers.

Teaching in measuring and drawing skills will be focused on and students with the aim of students being able to draw a range of 3D shapes accurately and using a ruler.

Presentation skills be will taught to ensure that students are taking pride in their design work and in work that may be shared as part of a whole class activity. Children should be confident in explaining their design work to peers and teachers and acknowledge feedback as a measure of driving work and progress forward and not a criticism to hold on to.

Students will have a clear understanding of basic health and safety procedures and how this is linked to the equipment that they use during practical sessions.

In Design and Technology students will be confident when using equipment and understand and explain simple manufacturing processes that have been taught when completing any practical element.

An understanding of different material areas should also be covered in relation to; Textiles (Fabrics), Product Design (Wood/Plastic/Metal), Graphics (Paper, Board and Printing) and Food (Ingredients).

Gifted and talented students should be encouraged to develop their skills further and use them to extend their work.

### Cultural Capital

- learning about and becoming more familiar with key figures and design work locally, nationally and internationally eg Antoni Gaudi, Anthony Gormley, Friedensreich Hundertwasser.
- Visits to museums and galleries

### Impact – What is the impact of our curriculum on the students?

Children will enjoy their learning within Design and Technology. They will experience a wide range of learning challenges and know appropriate responses to them. Children will improve their problem-solving skills and use their resilience to ensure that work is amended rather than started again.

Visits within Design and Technology will enrich the lives of the children and they will be able to explain how their knowledge and understanding has been improved.

Children will develop their confidence through the presentation of their work in group settings and by their individual achievements. They will feel a sense of pride in overcoming difficulties and challenges.

Children of all abilities and backgrounds will make good progress in Design and Technology. They will talk enthusiastically about their learning in and will be eager to further their learning in the next stages of their education.

Fundamental British Values are evident in Design and Technology and children understand how it can celebrate difference.

The use of different media such as magazines, design books and online sources will enable wider reading in Design and Technology so that children will discover a range of design work in different areas such as; architecture, cuisine, fashion and motor industries. Through this exposure, children will produce work that is influenced by outstanding designers.

Through the planning and provision of a broad and balanced design and technology curriculum, pupils will be encouraged to investigate, plan, adapt and evaluate their own work. This will help them appreciate design as being a dynamic and ever-changing process and ensure positive outcomes:

- Pupils will learn to consider purpose and audience.
- Within projects pupils will work independently and collaboratively, which will develop their co-operation and understanding that people have different areas of strength and expertise.
- Pupils will develop the ability to make informed decisions through increasing knowledge and understanding of materials, mechanisms and structures.



- A safe and supervised environment will give pupils the confidence to learn how to use a variety of tools safely and efficiently.
- Throughout their design and technology work children will be supported in becoming reflective learners, celebrating their successes and learning from their experiences.