



St. Mary's Catholic Primary School

At St. Mary's we live and learn, sharing God's love.

MISSION STATEMENT

'As a Catholic school community, we strive to live as a Christian family showing our love for God in the way we treat each other with dignity and respect and by promoting the development of each child as a unique individual.'

Design and Technology is an exciting and practical subject which allows children to have first-hand experience and explore the world around them. We believe that children have an innate curiosity as to how and why things work. Therefore, in order to develop children's full potential as designers and makers, we must ensure that there is continuity, progression, breadth and balance throughout the school in our planning and teaching of Design and Technology. This should enhance and harness their natural curiosity by providing pupils with opportunities to evaluate past and present design and technology, apply and develop the skills that they have mastered in a wide range of relevant contexts.

Aims of Subject

- To develop creative thinking in children and enable them to talk about what they specifically like and dislike when designing and making.
- To enable children to talk about how things work and to design, draw and model their ideas.
- To encourage children to consider a user for the product, having a clear purpose in mind throughout the designing and making process.
- To teach children to select appropriate tools and techniques for making a product whilst considering and acting upon safe procedures.
- To manage risks well and to manufacture products safely and hygienically.
- To use time efficiently and work constructively and productively with others.
- To develop an understanding of technological processes, products and their manufacturing and the subsequent contribution to our society.
- To foster enjoyment, satisfaction and purpose in designing and making.
- To fulfil the requirements of the National Curriculum Document
- That all children have an equal opportunity to learn in Design and Technology.



St. Mary's Catholic Primary School

Learning Objectives

In this subject Key Stage 1 pupils should be taught to:

- 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
- select from and use a range of tools and equipment to perform practical tasks
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients
- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria
- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms
- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Using the National Curriculum as a guideline, Key Stage 2 builds upon the skills developed in Key Stage 1. Children should be taught to:

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- select from and use a wider range of tools and equipment to perform practical tasks accurately



St. Mary's Catholic Primary School

- 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
- 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
- understand how key events and individuals in design and technology have helped shape the world
- 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
- apply their understanding of computing to program, monitor and control their products
- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Planning

Working towards National Curriculum, the teachers at St Mary's ensure that plans are skills based and enable pupils to undertake more complicated and demanding projects as they progress through school. Planning should ensure that there is the opportunity for children to demonstrate the expected outcomes at different depths of understanding.



St. Mary's Catholic Primary School

Resources

Our school has available resources for teaching DT and these are held either in the DT trolley or in class. The DT co-ordinator is also available to give advice to year groups when buying new resources.

Monitoring

Design and Technology will be monitored by the Senior Leadership Team and Subject Leader on a regular basis. Plans are scrutinised and lessons are observed on a planned basis.

Design and Technology and Special Needs

Every individual's needs are taken into account by the class teacher when planning the DT unit of work. Any individual requirements will be met *e.g. food allergies, safety issues, gross motor skills, fine motor skills*. Where activities take place off site, a full risk assessment will have been undertaken to ensure that everyone is able to access the full curriculum, be successful and make progress.

Health and Safety

Teachers and support staff will always supervise the safe use of tools and materials. Children are taught to follow appropriate procedures for safety. When cooking, children will follow both food safety and hygiene guidelines. All activities are assessed prior to teaching to ensure that every situation has been managed carefully and children are encouraged to self-assess risk prior to DT lessons, to engage them in the safety process.

Reviewed: January 2019

Next review date: January 2020