# St. Teresa of Lisieux Catholic Primary School

# Design and Technology Policy

#### Introduction

This is a statement of the aims, principles and strategies for the teaching and learning of Design and Technology at St. Teresa of Lisieux Catholic Primary School.

# The importance of Design Technology

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, 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 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 makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

(The National Curriculum 2014)

#### **Vision**

Every pupil is entitled to become a confident and competent user of design and technology. Every learner has the opportunity to develop and practice their design and technology skills.

#### **Aims**

All children will be given the opportunity to:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- develop imaginative thinking and design techniques and enable them to talk about what they like\ dislike
- talk about how things work and model their ideas
- 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
- \ select appropriate tools and techniques for making a product, whilst following safe procedures
- foster positive attitudes\enjoyment and purpose in designing and making things
- understand and apply the principles of nutrition and learn how to cook.

#### Inclusion

All learning opportunities will respond to an individual child's needs. A flexible approach will allow for those that who are working below the expected ability of the class and for those that require SEND support. Children who are deemed to be achieving beyond the class standard will be set suitable challenges.

#### Hygiene, Health and Safety

Because children may be using tools and materials that could possibly present a hazard if used incorrectly, children will be taught to use the correct methods and will be encouraged to recognise

the risks involved. Teachers will promote these in order to ensure the health and safety of their pupils. Children will also be taught the necessity of looking after equipment, by using it correctly and keeping it clean and tidy.

#### Resources

The Design and Technology Subject Leader is responsible for discussing\ ordering\ storing resource needs with\for teachers

#### **Planning**

DT is planned using National Curriculum 2014 and Projects on a Page to ensure coverage throughout key stages. Activities are planned so they build upon prior learning. Each Key Stage covers 3 topics per year to ensure continued progression. Children follow a 4 stage process; investigate, plan, make and evaluate. Every child has a DT book (starting in Y1) which follows them throughout school to Y6.

## Teaching and Learning

# **Key Stage 1**

DT in KS1 will be taught as part of the topic based curriculum, with links to other subjects. KS1 children will be taught

- Design: to design functional and attractive products to appeal not only to themselves, but also to other identified users.
- Make: to select and use a range of tools and materials.
- Evaluate: to evaluate their own designs against the design criteria and to evaluate existing products.
- Technical Knowledge: to build structures, exploring how they can be made stronger, stiffer and more stable and explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
- Cooking and nutrition: to understand where food comes from and the basic principles of a healthy and varied diet. To design and prepare dishes based on this knowledge.

# Key Stage 2

It is intended that work of Key Stage2 will build on, and develop the skills learned in Key Stage 1. Children will be taught the skills and knowledge needed to successfully design and make and evaluate their work.

- Design: to carry out research of existing products. To develop design criteria in order to produce a product which is fit for purpose and aimed at a specific group of people.
- Make: to select and use a range of tools and materials, taking into account their product's functional and aesthetic qualities.
- Evaluate: to evaluate existing products, their own work and the work of others in order to improve their design. To have an understanding of how designers and their products have helped to shape the world.
- Technical Knowledge: to 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 and apply their understanding of computing to program, monitor and control their products.
- Cooking and nutrition: to have an understanding of the seasonal nature of foods, and where and how it is produced. To understand what it means to have a healthy diet. To cook and prepare a range of predominantly savoury foods using a range of techniques.

### **Assessment and Recording**

Children will be assessed termly against the Design and Technology KPIs.

# **Monitoring and Reporting**

The Design and Technology Subject Leader will be responsible for the monitoring and evaluation of Design and Technology planning, teaching and work throughout the school and reviewing this policy. The Design and Technology Subject Leader will carry out termly monitoring which may include:

- interviewing children to discover their perceptions of the subject.
- work/planning sampling and scrutiny to ensure coverage and progression throughout the school,
- a climate walk to check the regularity and impact of the displays for the subject

The Design and Technology Subject Leader will feed back to staff findings from monitoring and advise them on good practice/areas for development.

## **Display**

- The purpose of display is to:
- value work, especially if the work is put up by or with the child present;
- provide a stimulating and interesting working atmosphere, where Design and Technology is valued;
- show good presentation and a standard to aim for;
  motivate children;
- promote self esteem and boost confidence;
- give information around a topic;
- give a point of reference;
- set agendas and ethos of teacher requirements, and make a pleasant environment to work in.