



## St Mildred's Infant Primary School

### Design and Technology Policy



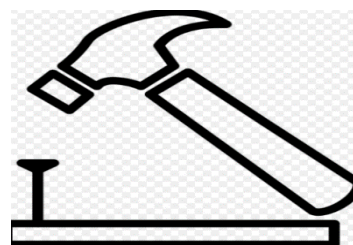
#### Our Vision

Design and technology is an inspiring and practical subject. Using creativity and imagination, pupils design and make products that solve real life problems within a variety of contexts, considering their own and others' needs wants and values. Children learn to take risks, become resourceful, innovative, enterprising and reflective. Through the evaluation of past and present design and technology, they develop an understanding of its impact on daily life and the wider world. Design and technology can be identified within a range of cross curricular links between areas of learning which deepens the children's understanding. At St.Mildreds, we aim to deliver a creative curriculum in the Early Years and Key Stage One, in accordance with the National Curriculum.

#### Intent

The national curriculum for Design and Technology aims to ensure 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 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
- Understand and apply the principles of nutrition and learn how to cook



## **Implementation**

Design & Technology is planned for within each topic that we teach and so therefore has many cross-curricular links. Through design and technology links are made to all subjects across the curriculum. Teachers ensure that the children apply their knowledge and understanding when developing ideas, planning and making products and then evaluating them. We do this through a mixture of whole-class teaching and individual/group activities. Children practically evaluate existing products and their own work and that of others. They have the opportunity to use a wide range of materials and that of others. They have the opportunity to use a wide range of materials and resources. Some aspects of ICT may be used in designing and technology. The development of skills can be divided into four main areas.

### **1. Designing**

- Design purposeful, functional and 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 appropriate, information and communication technology.

### **2. Make**

- Select from and use a range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing.
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

### **3. Evaluate**

- Explore and evaluate a range of existing products
- Evaluate their ideas and products against the design criteria

### **4. Technical Knowledge**

- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Explore and use mechanisms such as levers, sliders, wheels and axles, in the product.

We carry out the curriculum planning in design and technology in two phases: medium and short term plans

- Our medium-term plans are developed using Cornerstones. This covers the knowledge and skills that need to be taught taken from the National Curriculum. We teach a new topic each term and we base all our design and technology projects around our topics. We ensure that we cover the required key skills and knowledge and that these show progression.
- Class teachers incorporate design and technology planning into their weekly and daily plans where appropriate, giving a learning intention and showing how the lesson will be taught.
- We plan activities that build upon prior learning and give children of all abilities the opportunity to develop their skills, knowledge and understanding. Progression is built into the unit and records of the key skills covered are kept to ensure continuity.

### **Foundation Stage**

Design and Technology falls within the area of Expressive Arts and Design in the Early Years Foundation Stage. At St.Mildreds children's creativity is extended by the provision of support for their curiosity, exploration and play. Children are provided with opportunities to explore.

Children in the reception classes will be developing the crucial knowledge skills and understanding that help make sense of the world. This forms the foundation for later work in design technology. Children have the opportunities for developing effectively their knowledge and understanding of the world. Their experiences include:

- Activities based on first hand experiences that encourage exploration, observations, problem solving, prediction, decision making and discussion
- Exploring the environment with a range of indoor and outdoor activities that stimulate the children's curiosity and interest.
- Using a range of tools e.g computer, magnifiers, gardening tools, scissors, hole punchers and screwdrivers to develop practical skills.
- Exploring a range of materials in their activities e.g wet/dry sand, coloured/clear liquids, clay, compost, dough and so on.
- Opportunities to use a variety of joining methods.

### **Impact**

Pupils will show an enjoyment and confidence in design and technology and they will then apply to other areas of the curriculum. Children will be more capable of developing solutions to real life problems. They will be able to solve problems individually and as a team

They will be able to make a product and will design, make and evaluate with greater confidence. They will also show good technical skills when making their products and investigate their environment and their world around them,

The majority of children will reach the age related expectations in Design and Technology.

Please see the progression of skills and knowledge sheet to see what the children will have covered in Key Stage One.

## **Health & Safety**

- Children should be given suitable instructions on how to use tools safely
- Children should be supervised at all times
- Children should be taught to respect equipment they are using and to keep it stored safely
- Children should be taught to recognise risks and hazards

### **Food hygiene**

- Children and staff will take care to undertake appropriate hand washing and other hygiene related activities prior to preparing food.

### **Glue Guns**

- Low temperature glue guns should only be used by an adult

### **Tools**

- Craft knives should only be used by an adult
- Other tools, for sawing, hammers and so on must be used under strict supervision

## **Assessment and Recording**

We assess the children's work in design and technology whilst observing them working during lessons and teachers assess the progress made by the children against their learning objectives for their lessons. All this information is used by the class teacher to make an annual assessment of progress for each child. This information is also passed on to the next teacher. The Art team and teacher keeps evidence of the children's work in the form of photographs.



### **Monitoring & Review**

The monitoring of the standards of children's work and the quality of teaching in design and technology is the responsibility of the members in the subject team. The members of the subject team are also responsible for supporting colleagues in the teaching of design and technology, informing others about current developments in the subject and providing lead and direction for the subject in the school. Time is allocated to the members within the subject team to undertake lesson observations of design and technology teaching across the school and to monitor and review the children's work. It is also the subject teams' responsibility to ensure that the technology resources areas are kept well-stocked and tidy.



### **Resources**

The majority of our resources are kept centrally in the art cupboard, in labelled containers.

Food may be stored in the kitchen area but it is the responsibility of each teacher to buy in fresh ingredients as required. Cooking utensils and equipment are kept in the kitchen cupboards.

### **Supporting SEND in DT**

At St Mildred's we believe that all pupils are entitled to a broad, balanced and relevant curriculum and teachers match the learning to the needs and abilities of all of the pupils. We use a range of strategies to develop the pupils' knowledge, understanding and skills. Where appropriate, materials are modified or support is provided to enable pupils with SEND to access the learning. In every design and technology lesson there are a range of strategies used to ensure inclusion of all pupils. These include:

- Practical activities/ partner support
- Pre teaching of specific skills prior to the lesson
- Quality first teaching to ensure the way lessons are planned and delivered meet the children's needs
- Different levels of differentiated activities in every lesson
- Small group support
- Support with use of tools

Signed ..... Date .....

**Chairman of Governors**

Signed ..... Date .....

**Headteacher**