

# Woodlands Primary School

## DT Policy



<b>Written by</b>	Joselyn Hughes
<b>Date for Review</b>	
<b>Signed – Headteacher</b>	

This policy has been impact assessed by Michelle Hicks in order to ensure that it does not have an adverse effect on race, gender or disability equality.

## Introduction

We believe that Design 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.

- Document compiled in 2019 by the coordinator and approved and read by all staff, reflecting on a consensus of opinion.
- We, the staff, will ensure that all curriculum areas involved in Design Technology will work together to plan and deliver appropriate experience in a coherent and progressive programme of learning.
- This will be achieved by a combination of discrete core input and cross-curricular involvement.

## Our Aims for Design and Technology

- We will ensure that through a variety of creative and practical activities, pupils will be taught the knowledge, understanding and skills needed to engage in an iterative process of design and making.
- As pupils move up through KS1 into KS2, we will ensure a high standard of skills development and aid pupils to develop a confidence appropriate to manipulating a wide range of materials, tools and the economic management of resources.
- Pupils will work in a range of relevant contexts. For example in the home, school, leisure, culture, enterprise, industry and the wider environment.
- Pupils will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- Planning will allow for pupils to 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.
- Pupils will be taught the purpose and skills of evaluation. Opportunities will be given for them to critique, evaluate and test their ideas and products along with the work of others.
- Planning is linked directly to the new National Curriculum and makes the most of cross curricular links wherever possible. It will ensure that the needs of all pupils are met.

- During Food Technology, pupils will learn to apply the principles of nutrition and learn how to cook.

### Entitlement

- Over both Key stages, all pupils will be encouraged to develop the competence and confidence to identify, examine and solve practical problems using a variety of approaches and resources. This will be covered through the five key areas of Design Technology: Design, Make, Evaluate, Technical Knowledge, Cooking and Nutrition.
- This will be organised on a weekly basis or in a block, depending on the activities planned. In key stage 1, DT will be delivered within cross-curricular topics.

### Design

- In both key stages children will be expected to design products that are purposeful, functional and appealing to themselves and other based on a design criteria. In Key Stage 2 this will be extended as children will be expected to use research to inform their designs and make them innovative, fit for purpose and aimed at particular individuals and groups.
- In both key stages children will learn to generate, develop, model and communicate their ideas through talking, discussion, templates, mocks ups and where appropriate IT. In addition to this, Key Stage 2 will be expected to use annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.
- Pupils must design products considering the health and safety issues, consequences and operation of a product in a safe and hygienic manner.

### Make

- Pupils will learn to select from and use an increasing range of tools and equipment, with increasing accuracy to perform practical tasks as they move through both Key Stages. For example cutting, shaping, joining and finishing.
- They will be able to select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. In Key Stage 2 children will need to consider their functional properties and aesthetic qualities.

### Evaluate

- Key Stage 1 pupils will be able to explore and evaluate a range of existing products and in Key Stage 2, investigate and analyse a range of existing products.
- Key Stage 1 will be able to evaluate their ideas and products against design criteria. Key Stage 2 children will be able to evaluate their ideas and products against their design criteria and to consider the views of others to improve their work.
- In addition Key Stage 2 pupils will understand how key events and individuals in design and technology have helped to shape the world.

### Technical knowledge

- In both key stages, children will build structures but with increasing complexity as they develop their understanding of how they can be strengthened stiffened and reinforced.
- In Key Stage 1 they will explore and use mechanisms [for example wheels and axels, pulleys] in their products. In Key Stage 2 they will learn how a mechanical

system works [for example gears, pulleys, cams, levers and linkages] and use them in their own products.

- Key Stage 2 pupils will learn how to use and design electrical systems within their products [for example: series circuits, incorporating switches, bulbs, buzzers, motors].
- In Key Stage 2 using the cross-curricular link to Computing, pupils will learn to apply their understanding of computing to program, monitor and control their products.

### Cooking and nutrition

- During their work with food, pupils will be taught how to cook and will learn the value and principles of nutrition and healthy eating.
- We aim to instil a love of cooking in all our pupils and hope to equip them with a crucial life skill enabling pupils to feed themselves and others affordably and healthily.
- Pupils will learn to understand and apply the principles of a healthy diet.
- They will prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- All pupils will have an understanding of seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.
- Staff will be aware of the allergies in their class and changes will be made to accommodate this.
- A risk assessment must be completed before using cookers or hobs within the classroom.

### Resources are organised as follows:-

- General resources and materials are kept in the Design Technology area (Art/Music Room) in Oak and in the Acorn Resources Cupboard.
- In KS2 tools are kept in the Design Technology area (Art/Music Room), organised into boxes which can be taken away by teachers. In KS1, there is a DT trolley equipped with various tools which can be wheeled to classrooms. It is stored in Acorn Resources cupboard. All Food Technology equipment is stored in Acorn Resources cupboard.
- The Design Technology subject leader is responsible for ordering general resources and ensuring the Design Technology area is organised. The subject leader will also regularly check the tools and equipment and make sure they are safe to use and fit for purpose.
- The subject leader is responsible for requesting an appropriate budget and ensuring this is allocated appropriately. Year group teams are responsible for ordering the specific resources for each of the units of work. They should consult with the subject leader before buying any resources and invoices need to be signed.

### Assessment

- Specific statements of assessment will be identified in the planning stage. Children will be encouraged to evaluate their own work with the teacher to identify ways of developing future activities.

- In Key Stage 2 children will be encouraged to make self and peer assessments throughout the topic and at the end of each unit of work.
- Assessment Grids have been created in line with the new National Curriculum. They are to be printed out and stuck at the beginning of each topic as a review of skills and knowledge acquired and of the final product. The skills have been taken directly from the National Curriculum. Teachers should complete an assessment grid for each child by the end of the unit.

### Implementation

- All class teachers are responsible for the planning and teaching of Design Technology. Cross-curricular links will be made between science, maths, art, engineering and computing to ensure contextual learning. The subject leader is freely available to advise, suggest and meet colleagues for discussion.
- Equipment will be available to all children and children will be given equal opportunity to undertake Design and Technology activities, irrespective of ability, race or gender.
- Effective links will be built up with parents, advisors, local companies and the children will be encouraged to identify and observe effects of technological progression in the environment.
- Safety when using tools is paramount and guidance is taken from CLEAPSS. A paper copy will be available in the DT Resources room and the DT shelf in the PPA room. Teachers are also expected to take in to consideration the schools health and safety policy. Correct use of tools will be taught throughout the key stage as appropriate.
- Children will be encouraged to work safely during practical work, using the materials with economy of usage.