

# **White Court School**



## **Design Technology Policy March 2019**

White Court School aims to create an environment where all pupils will have opportunities to develop not only their intellectual, social, physical and moral qualities, but also their independence and their creative, practical and technological skills.

Design and Technology is an inspiring, imaginative and practical subject. It is an integral part of today's ever increasing technological world, which children should fully explore, evaluating technology in both the past and the present. A fulfilling design and technology curriculum assists critical thinking and encourages the exploration of existing products, the work of others, and develops practical and perceptual skills. Children should acquire a range of subject knowledge, using aspects of mathematics, science, engineering, computing and art to enhance their learning and understanding of design and technology. High quality design and technology education should support British Values by making a positive contribution to the creativity, culture, wealth and wellbeing of the British Nation.

### **Aims**

- 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.

### **Objectives**

- To allow children to investigate, disassemble and evaluate manufactured products, and those which have been made by themselves.
- For children to carry out focused practical tasks used to develop particular skills, techniques and subject knowledge.
- For children to research, design, make and evaluate products which draw together their skills and knowledge.
- To think about who their products are aimed for e.g. individuals/groups.
- To fulfil the National Curriculum's progression of skills requirements – see Appendix B
- For children to work in a range of relevant contexts e.g. the home and school, gardens and playgrounds, the local community and the wider environment to gain a deeper understanding of the impact existing and their own products have on the world.
- Children gain the technical knowledge they should according to their year group, (reference National Curriculum progression framework)

### **Continuity and Progression**

Continuity and progression follows revised National Curriculum guidelines. Where possible, attempts have been made to identify cross-curricular links. Some activities and skills will be taught as discrete units.

### **Equal Opportunities**

The school will ensure that all children have equal opportunity to access the curriculum offered, regardless of gender, race, religion or disability, as far as is possible – in line with the school's policy.

### **Early Years and Foundation stage**

Within Early Years and Foundation stage, design and technology is present everyday within the stimulating learning environment. Children are given a choice of a range of activities, including painting, cutting and sticking and play-dough, which allows children to choose appropriate tools and build on their creativity skills. Children also take part in a cooking session each week, where they design and make a range of food products.

### **Special Educational Needs**

Teachers will assess individual pupils' needs and set differentiated work – refer to school's policy. Each year group will identify Gifted and Talented children and provide for their learning appropriately.

**Health and Safety** – refer to school's Health, Safety and Wellbeing Policy and Food Policy.

Risk assessments must be completed before activities involving cookers, glue guns or tools.

The correct and safe use of tools is vital.

Children should be taught to handle and use tools correctly.

**Food Technology** - refer to Food Policy.

**Assessment of Skills –** To assess children's learning of skills, we use Monitoring Made Easy to input their attainment at the end of each term. From this we can track children's progress in each area taught.

### **Attainment targets**

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

**Schools are not required by law to teach the example content in [square brackets].**

### **Monitoring and Evaluation**

The governing body, in partnership with the Headteacher and D.T. Subject Leaders, determine the school policy for D.T. The Headteacher and D.T. Subject Leaders are responsible for working with staff to devise, monitor, evaluate and review procedures for D.T.

### **Review**

This policy will be reviewed as part of the policy review cycle. It will also be monitored for its effect on different racial groups with reference to our Racial Equality Statement.

**Policy ratified at the Full Governing Body Meeting Spring 2022**

**Policy due for review Spring 2022**

## National Curriculum of England and Wales

### Subject content

#### Key stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

#### Design

- 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

#### Make

- select from and use a range of tools and equipment to perform practical tasks [for example, 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

#### Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

#### Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

#### Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

#### Design

- 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

#### Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- 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

#### Evaluate

- 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

#### Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

apply their understanding of computing to program, monitor and control their product.

#### Cooking and Nutrition

As part of their work with food, pupils should 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.

Pupils should be taught to:

**Key stage 1**

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

**Key stage 2**

- 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.