

**National Curriculum Purpose of Study**  
 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.

**National Curriculum Aims**  
 The national curriculum for design and technology aims to ensure that 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

SCHOOL KEY DRIVERS	
<b>Oracy</b> to place speech and communication at the heart of our curriculum enabling our children to speak confidently, appropriately and sensitively, learning through talk and deepening understanding through dialogue.	
<b>Diversity</b> to develop our children's horizons and understanding of a variety of lifestyles within a broad, cultural curriculum	<b>Community</b> to develop our wish to be a central part of the local, national and world community
<b>Environment</b> to continue to reinforce that we value the environment and feel passionate about its management	<b>Enquiry</b> to encourage our children to be inquisitive, to ask questions and be resourceful, persistent and independent in their learning.
<b>Risk</b> because children need to learn to assess and manage risks by having fun and a little bit of danger!	<b>Enterprise</b> to support our children in developing more independence and the opportunity to show initiative

**National Curriculum Content:**  
 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 products.

**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:

- 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.

**Spiritual, Moral, Social and Cultural development through the teaching of Design Technology**

**Spiritual**  
 D.T supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products. It instils a sense of awe, wonder and mystery when studying the natural world or human achievement. Encouraging creativity allows pupils to express innermost thoughts and feelings and to reflect and learn from reflection, for example, asking 'why?', 'how?' and 'where?'.

**Moral**  
 D.T supports moral development by raising awareness of the moral dilemmas by encouraging pupils to value the environment and its natural resources and to consider the environmental impact of everyday products. It educates pupils to become responsible consumers.

**Social**  
 D.T Supports social development by providing opportunities to work as a team, recognising others' strengths and sharing equipment. Design Technology promotes equality of opportunity and provides an awareness of areas that have gender issues e.g. encouraging girls to use equipment that has been traditionally male dominated.

**Cultural**  
 D.T supports cultural development by encouraging children to reflect on ingenious products and inventions, the diversity of materials and ways in which design technology can improve the quality of life. It investigates how different cultures have contributed to technology and reflects on products and inventions, the diversity of materials and ways in which design can improve the quality of our lives.

Working hard to ACHIEVE our best	
<b>A</b>	<b>Aiming</b> high through an <b>Active</b> curriculum which is <b>Accessible</b> to all in order to <b>Achieve</b> the very best that we can
<b>C</b>	<b>Challenging</b> ourselves within a culture of <b>Care, Cooperation and Community</b>
<b>H</b>	<b>Helping</b> each other to achieve within a <b>Happy, Healthy</b> and <b>Hard-working</b> environment
<b>I</b>	<b>Inspiring</b> others to be <b>Independent, Involved</b> and ever <b>Improving</b>
<b>E</b>	<b>Expecting</b> the very best of ourselves and others and always aiming to be <b>Excellent</b> in all that we do
<b>V</b>	<b>Valuing</b> every individual and providing <b>Varied</b> learning experiences
<b>E</b>	<b>Encouraging</b> everyone through our <b>Enthusiasm</b> and <b>Eagerness</b> to be our very best

