Hazelbury Learning Community

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D&T Key Stage 2

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.

Aims

The national curriculum for design and technology aims to ensure that all pupils:

1. develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
2. 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
3. critique, evaluate and test their ideas and products and the work of others
4. understand and apply the principles of nutrition and learn how to cook.

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].

	Year 3			Year 4			Year 5			Year 6		
When designing and making, pupils should be taught to:	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
Design												
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												
- 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, according to their functional properties and aesthetic qualities including: - construction materials												
- textiles												
- ingredients												
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.												

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Key Stage 2

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.

	Year 3			**Year 4**			**Year 5**			**Year 6**		
Pupils should be taught to:	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
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												