



Design Technology Statement of Intent

Design is a funny word. Some people think design is how it looks, but of course if you dig deeper it's really how it works.

Steve Jobs

At Whinstone Primary School, we believe that design and technology helps to prepare children for the developing world and encourages them to become curious and creative problem-solvers, both as individuals and as part of a team.

Through the study of Design and Technology, children will combine practical skills with an understanding of aesthetic, social and environmental issues. Design and Technology helps all children to become discerning and informed consumers and potential innovators. It provides children with a greater awareness and understanding of how everyday products are designed and made.

At Whinstone, we encourage children to use their creativity and imagination, to design and make products using a range of tools and equipment that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

The children are given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become visionaries and risk-takers.

Learning to cook is a crucial life skill, children at Whinstone will understand how to apply the principles of a varied and healthy diet to their own lives. They will have a greater understanding of where our food comes from and how to use various ingredients in dishes by using a range of cooking techniques.





Whinstone Primary School Year 2 Design Technology



DT KS1 National Curriculum

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



Design Technology Implementation

DT is taught as an area of learning in its own right, as well as integrated with other curriculum areas where appropriate. There is also flexibility to seize opportunities to celebrate and acknowledge significant events.

Year 2 Design Technology Implementation – Key Concepts
<p>The Key Concepts of Design Technology at Whinstone are:</p> <ul style="list-style-type: none"> • Developing, planning and communicating ideas. • Working with tools, equipment, materials and components to make quality products • Food and Nutrition • Evaluating processes and products

In Year 2 the Key Concepts of DT are taught through the following sequence of topics::						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 2	Moving pictures		Robots		Potatoes and chips	

Key Vocabulary
Evaluate, product, lever, slider, cut, join, design, make, cut, measure, mark, evaluate, criteria, stitch, cotton, needle, plants, animals, farm, grow, protein, carbohydrates, dairy, fruit, vegetable, sugar, hygiene, peel, grate, evaluate



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These Key Concepts, knowledge and vocabulary will be taught and reinforced through the development of the specific skills listed. These Key Concepts and vocabulary will be revisited and repeated throughout a child's journey of DT at Whinstone.

Developing, planning and communicating ideas.	Working with tools, equipment, materials and components to make quality products	Food and Nutrition	Evaluating processes and products
<p>Draw on their own experience to help generate ideas</p> <p>Suggest ideas and explain what they are going to do</p> <p>Identify a target group for what they intend to design and make</p> <p>Model their ideas in card and paper</p> <p>Begin to develop their ideas through talk and drawings.</p> <p>Make templates and mock-ups of their ideas in card and paper or using ICT.</p>	<p>Make their design using appropriate techniques</p> <p>With help measure, mark out, cut and shape a range of materials</p> <p>Use tools e.g. scissors and a hole punch safely</p> <p>Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape</p>	<p>Begin to understand that all food comes from plants or animals.</p> <p>Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught.</p> <p>Start to understand how to name and sort foods into the five groups in 'The Eat well plate' (protein, carbohydrates, dairy, fruit & veg, fatty & sugary foods)</p> <p>Begin to understand that everyone should eat at least five portions of fruit and vegetables every day.</p> <p>Know how to prepare simple dishes safely and hygienically, without using a heat source.</p> <p>Know how to use techniques such as cutting, peeling and grating.</p>	<p>When looking at existing products explain what they like and dislike about products and why.</p> <p>Begin to evaluate their product by discussing how well it works in relation to the purpose</p> <p>Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make</p> <p>Begin to evaluate their product by asking questions about what they have made and how they have gone about it</p>



Design Technology Impact

At the end of each topic teachers will evaluate what knowledge and skills pupils have gained against expectations.

SKILL	Meeting expectations
Developing, planning and communicating ideas.	I can generate ideas using my own experiences
Working with tools, equipment, materials and components to make quality products	I can mark, measure, cut and shape with some accuracy
Working with tools, equipment, materials and components to make quality products	I can join materials and combine materials using a variety of temporary methods
Food and Nutrition	I understand that all food comes from plants and animals
Food and Nutrition	I can sort some foods into different categories on the 'Eat Well Plate'
Food and Nutrition	I understand that to have a healthy diet everyone should eat at least 5 portions of fruit and vegetables a day
Food and Nutrition	I can prepare a simple dish hygienically and safely
Evaluating processes and products	I can look at my product and identify a strength and something which I could change