



Design Technology at St Dunstan's

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:

- 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

Intent:

At St. Dunstan's we aim to provide a high-quality design technology education. This should engage, inspire and challenge pupils, equipping them with the knowledge and skills to design, make and evaluate a range of products. As pupils progress, they should be able to think and work creatively to solve problems both as individuals and as members of a team. The children should also be given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and be encouraged to become innovators and risk-takers.

D&T allows children to apply the knowledge and skills learned in other subjects, particularly maths, science and art. Children's interests are captured through theme learning, ensuring that links are made in a cross curricular way, giving children motivation and meaning for their learning.

Children at St Dunstan's are encouraged to develop their imagination, their critical thinking and their understanding of the world around them through their love of Design and Technology. We aim for our children to question and think innovatively about the world around them in order to design and develop their own products with a purpose in mind.

Implement:

Design and Technology at St Dunstan's is taught throughout topics as part of the 'Cornerstones' scheme of work. This curriculum allows children to exercise their creativity through designing and making. Children are taught to combine their designing and making skills with knowledge and understanding in order to design and make a product. From stitching a pirate's jacket in Year 2 to building a Tudor house in Year 5, skills are taught progressively to ensure that all children are able to learn and practise in order to develop as they move through the school. Evaluation is an integral part of the design process and allows children to adapt and improve their product. This is a key skill which they need throughout their life

Impact:

- Good design technology outcomes are shown through work in the children's Learning Journals. The progression of design technology skills is clear across the school and there is evidence of individual progress from starting points to final pieces.
- Design technology opportunities are carefully planned, linking where possible to units of work in other subjects.
- Effective modelling of skills allows children to create products safely.
- Displays not only promote and celebrate excellence in design technology across the curriculum, but also encourage children to value their own work and that of others.
- Clear teaching and learning objectives enable high quality teaching of core skills to enable good design technology outcomes.
- Real life contexts are selected carefully to motivate children and promote problem-solving skills.

Topics taught across each year group

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
R	In Reception the projects will change and follow the interest of children and the children also use the materials independently for their own projects.					
	Aut1					
	<ul style="list-style-type: none"> • Handling tools and equipment with increasing control - this includes stencils/scissors/tweezers/PVA glue applicators - learning how to use these • without dripping everywhere • Selecting resources for a purpose ie drawing around a stencil /using a crayon to make rubbings of different textures • Printing with paint using fingers / hands • Selecting colours for a purpose – self-portraits/family portraits • Junk modelling • Building using a variety of construction kits 					
	Aut2					
	<ul style="list-style-type: none"> • Handling tools and equipment safely and with increasing independence - exploring clay and using different tools to model with • Using a hammer and pins to create a shape picture with tap tap • Using hands to form a simple clay pinch pot • Junk modelling - exploring different means of joining materials: ie PVA glue / sellotape /masking tape /glue sticks • Folding paper to make a simple card • Using natural and found materials, i.e. leaves to make a collage picture 					
	Spr1					
	<ul style="list-style-type: none"> • Exploring print-making using vegetables/ sponges • Exploring texture / combining different materials to achieve an effect - paint and other materials • Junk modelling - making an animal /dragons using recycled materials • Chinese new year - folding paper to make a fan / dragon 					

	<ul style="list-style-type: none"> Chinese new year - manipulating materials to make a simple drum <p>Spr2</p> <ul style="list-style-type: none"> Using simple techniques competently - Exploring salt dough using a variety of natural materials - shells/ leaves/ twigs to explore transfer printing and make their own dinosaur 'fossil' Manipulating materials to achieve a planned effect: pattern work - creating repeated patterns using a variety of materials/junk modelling Safely exploring and using different tools and equipment, including staplers and hole punchers <p>Sum1</p> <ul style="list-style-type: none"> Manipulating materials to achieve a planned effect: Exploring symmetrical patterns in nature - link to our mini-beast topic Exploring folding paper to make legs on their own mini-beast Making an animal habitat using a range of natural resources Exploring more complex construction kits – i.e. ones that include nuts and bolts/ cogs and wheels Junk modelling - experimenting with colour, design, form and function <p>Sum2</p> <ul style="list-style-type: none"> Safely exploring a technique -- Exploring pointillism - using a fingertip to create a picture Selecting own resources and adapting their work if necessary - junk modelling Exploring more complex construction kits – i.e. ones that include nuts and bolts/ cogs and wheels to make something of their own design Junk modelling 					
1	Memory Box Making Picnic Foods; Celebration cards Making a Memory Box	Bright Lights, Big City Exploring Mechanisms; Constructing Moving Models; Understanding Where Food Comes From; Models of London Landmarks	Paws, Claws & Whiskers Designing Labels; Designing and Making Animal Enclosures	Rio de Vida Carnival Instruments; Flag Making; Recipes	The Enchanted Woodland Building Structures; Making Party Food	Superheroes Superfoods; Mask-making
2	Street Detectives Selecting Tools and Materials; Designing Buildings	Land Ahoy Designing and making pirate jackets (sewing)	Towers, Tunnels & Turrets Making Models of Towers, Bridges and Tunnels; Mechanisms; Structures	Scented Gardens Making Fragrant Products	Wiggle & Crawl Origins of Food; Selecting Natural Materials	Beachcombers DT- Finger Puppets; Mechanisms (pop ups/levels/sliders)
3	Predator Selecting & Using Materials (Collage/Textiles)	Scrumdiddlyumptious! Cooking and Nutrition; Product Evaluation; Using Research to Inform Design; Selecting Materials	Tremors Structures	Ancient Egypt Mechanical systems; structures	Mighty Metals Designing and making a robot pet; Using Electrical Circuits	Gods and Mortals 3-D Sculpture; Greek Art & Design
4	I am A Warrior Weaponry; Sculpture	Misty Mountain Sierra 3D modelling	Burbs, Bottoms and Bile Healthy Foods; Working Models	Traders and Raiders Jewellery and Weapon Making; Construction	Road Trip USA Preparing US Dishes	Blue Abyss Submarine Design; Working Models
5	Peasant, Princes & Pestilence Sketch books; Printmaking	Stargazers Selecting Materials; Design Research; Structures; Evaluation	Alchemy Island Electrical Circuits; Designing a Board Game	Off with her Head Designing and building Tudor buildings (joinery – strengthening joints, external beams)	Allotment Cooking Nutrition – healthy recipes/adapting recipes; Making Planters; Making Structures for Growing Plants	Time Travellers Selecting Materials

6	Tomorrow's World Key Individuals in Design and Technology; Assistive Technologies; Programming, Monitoring and Controlling Products; Website Header Design; Product Design	A Child's War Following Recipes; Building Structures	Frozen Kingdom Joining materials	ID Using Tools; Design; Fashion & Clothing	Hola Mexico! Food of Mexico; Evaluating and Making Instruments	Gallery Rebels Selecting and Using Tools and Materials
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