



Design and Technology Policy



Why is Design Technology important?

Design Technology helps us to develop as reflective learners, as we work through the design process.

Through design technology, we are able to work collaboratively to solve problems and find solutions, teaching us to deal with uncertainty whilst developing communication, organisational and other practical life skills.

In design technology, we learn to appreciate the needs of others, the built environment, and the likely impact of future technologies.

When is Design Technology taught?

Design Technology is taught both through Skills Development Tasks and through design projects. The Satellite View maps out which thematic units feature this subject and clearly shows the objectives taught.



Design Technology



Subject Overview

	Autumn			Spring			Summer		
Learning Pathway	Culture	Conflict		Communication		NC Essentials	Competency	Competency	Conservation
Pathfinders 1 (Year 1)	Zero to Hero	Unity in the Community	Christmas Theme Week	<u>Happily</u> Ever After	Christmas & Winter Health Week	Never Eat Shredded Wheat	Jurassic Hunter	Royal Patrons	Light Up the World
DT Focused Task	Design and Pair of Trainees	Model of a local area		The Fairy Design Project					Sun Protection
Learning Pathway	Culture	Conflict		Communication		NC Essentials	Competency	Competency	Conservation
Pathfinders2 (Year 2)	Come Fly with me Arctic Circle	Land Ahoy	Christmas Theme Week	Inter-Nation Media Station	Christmas & Winter Health Week	Paddington's Passport	The Visionary	Record Breaker	Going Wild
DT Focused Task	Build a Lego Igloo	The Pirate Design Project		Design Nan's outfit					
Learning Pathway	Culture	Conflict		Communication		Competency	NC Essentials	NC Essentials	Conservation
Adventurers 1 (Year 3)	Come Fly with me Africa	Athens V Sparta	Christmas Theme Week	'That's all Folks'	Christmas & Winter Health Week	<u>Lincoln</u> Man	Out and About	Rocky the <u>Endangerous</u>	Picture our <u>Planet</u>
DT Focused Task	Food Technology Bonin Plaque	Model Parthenon							Weaving Food Technology
Learning Pathway	Culture	Conflict		Communication		Competency	NC Essentials	NC Essentials	Conservation
Adventurers 2 (Year 4)	A World of Difference	Law and Order	Christmas Theme Week	Lightning Speed	Christmas & Winter Health Week	Viking Warrior	Window on the World	May the Force be with You	Under the Canopy
DT Focused Task				Evil Genius Design Project					Tribel Child Design Project
Learning Pathway	Culture	Conflict		Communication		NC Essentials	Competency	NC Essential	Conservation
Navigators 1 (Year 5)	Come Fly with me America	You're not Invited	Christmas Theme Week	Mission Control	Christmas & Winter Health Week	Go with the Flow	Pharaoh Queen	Been around the world	The Rescuers
DT Focused Task	Dream Catchers	Soldier Design Project		Spaceman Design Project					Global Warning
Learning Pathway	Culture	Conflict		Communication		Competency	Competency	NC Essential	Conservation
Navigators 2 (Year 6)	'I have a dream...'	Wars of the World	Christmas Theme Week	A World of Bright Ideas	Christmas & Winter Health Week	True Crime	Fighting Footballer	In your Element	Time Team
DT Focused Task	Paper Clip Jewellery			Greetings Cards					Food Technology

How Does Our Learning Grow?



How is Design Technology taught?

Design Technology is taught through a combination of subject knowledge, skill building and design and make projects. Food technology is also taught through thematic units and our 3D PSHE programme. Learning takes place both inside and outside the classroom.

What do we learn in Design Technology?

Within the 'Learning Means the World' Curriculum we learn about:-

Mechanisms
Sliders
Levers
Structures
Textiles
Food technology
Electronics

We also complete design technology projects in each phase for specified clients e.g. the pirate, the evil genius, allowing pupils the opportunity to both experiment and apply their knowledge and skills.

How do we assess and monitor design technology?

Children are assessed at the end of each thematic unit based on their knowledge and understanding of the individual curriculum strands. Teachers use professional judgement and class work to make accurate assessments. These are stored on a central Excel spreadsheet including all the subjects from the unit.

Supporting Children with SEND

Teachers will plan lessons so pupils with SEN and/or disabilities can study Design Technology wherever possible and ensure that there are no barriers to every pupil achieving. This personalized approach ensures that additional support is readily available when needed, enabling each child to thrive in their Design Technology education.

How Does Our Learning Grow?



National Curriculum Design Technology Key Stage 1

Design Technology National Curriculum Objectives (KS1)		Where are they taught?
Pupils should be taught to...		
Design	design purposeful, functional, appealing products for themselves and other users based on design criteria	Come Fly With Me! Arctic Circle Light Up the World Inter-Nation Media Station Happily Ever After Zero to Hero Land Ahoy!
	generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	Come Fly With Me! Arctic Circle Light Up the World Happily Ever After Zero to Hero Land Ahoy!
Make	select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)	Come Fly With Me! Arctic Circle Light Up the World Inter-Nation Media Station Going Wild Happily Ever After Unity in the Community Land Ahoy!
	select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	Inter-Nation Media Station Going Wild Happily Ever After Zero to Hero Land Ahoy!
Evaluate	understand the importance of exploring and evaluating a range of existing products	Happily Ever After Land Ahoy!
	evaluate their ideas and products against design criteria	Happily Ever After Land Ahoy!
Technical Knowledge	build structures, exploring how they can be made stronger, stiffer and more stable	Unity in the Community
	explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products	Come Fly With Me! Arctic Circle Light Up the World
Cooking and Nutrition	use the basic principles of a healthy and varied diet to prepare dishes	KS1 3D PSHE C1 U1 L2-3
	understand where food comes from	KS1 3D PSHE C1 U1 L1-2

How Does Our Learning Grow?



National Curriculum Coverage Design Technology Key Stage 2

Design Technology National Curriculum Objectives (KS2)		Where are they taught? (LKS2)	Where are they taught? (UKS2)
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	Lightning Speed Under the Canopy 'That's All, Folks!'	You're Not Invited Mission Control Global Warning
	generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	Lightning Speed Under the Canopy 'That's All, Folks!' Picture Our Planet	You're Not Invited Mission Control "I Have a Dream..." Global Warning
Make	select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately	Lightning Speed Under the Canopy Athens v Sparta Come Fly With Me! Africa Picture Our Planet	You're Not Invited Mission Control Come Fly With Me! America A World of Bright Ideas
	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	Lightning Speed Under the Canopy Come Fly With Me! Africa Picture Our Planet	You're Not Invited Mission Control "I Have a Dream..." Global Warning

How Does Our Learning Grow?



Progression within Design Technology



Design Technology Knowledge Building

Know how to use a range of techniques such as peeling, slicing, grating, kneading and spreading

Know how to prepare and cook safely and hygienically, including use of a heat source

Know how to prepare food safely and hygienically, without using a heat source

Know that food comes from plants or animals and that food has to be grown or caught

Food Technology

Know what impact products have beyond their intended purpose

Understand the purpose of their product and know which design features will appeal to intended users

Know why they need to make products suitable for intended end users and how this influences design

Know what they are designing and making and say what its purpose is

Users and Purposes

Know how to gather information about the needs and wants of groups and individuals

Understand the link between choice of materials, functionality and aesthetics

Know the importance of research and using their findings in the design process

Know what they like and dislike about a product

Product Research

Design Technology Knowledge Building

Know the correct technical vocabulary for the projects they are undertaking

Know the names of a wide range of tools and techniques, including how to employ them

Know the names and properties of materials commonly used in the manufacture of products

Know the names of simple construction tools and equipment

Design Technology Vocabulary

Understand the relationship between a product's features and its functionality and usability

Understand how important performance and appearance are in product design

Know the importance of including useful features within a product design

Know the key features that define a product

Product Features

Know and understand the importance of patent, copyright and trademark in the design process

Understand the role and importance of problem-solving within the invention process

Know about significant inventors and developers and how they improved life for others

Understand what inventors do and why they are important

Invention and Development

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How Does Our Learning Grow?