



Design Technology Overview

Learning: For a better future



Design Technology Rationale:

Design and technology is a practical and valuable subject. It enables children and young people to actively contribute to the creativity, culture, wealth and well-being of themselves, their community and their nation. It teaches how to take risks and so become more resourceful, innovative, enterprising and capable.

Intent: It is planned that pupils are taught how to design and make things for a particular purpose. Pupils learn how to test, refine and develop the products they design and make, to check that they work and improve them if they don't. Pupils will know the difference between art and DT. Pupils will be challenged in DT because they cannot copy but rather, they have to develop original ideas with their own creative stamp. The products are expected to work.

Pupils learn the crucial life skill of how to cook in order to feed themselves and others affordably and well now and in later life. They are taught to apply the principles of nutrition and healthy eating including a varied diet. They are taught where food comes from. They cook a range of predominantly savoury dishes using cooking techniques; understanding seasonality and know where and how a variety of ingredients are grown, reared, caught and processed – link to our context farming, fishing (visits, visitors, hands on experiences, local businesses)

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1 Looking after our planet	All about me	Friends and Family	Where in the world am I?	A world of water	Surviving the Sahara	Remarkable Rainforests	Polar Peaks	Blue Planet
	Explore different materials freely to develop their ideas about how to use them and what to make.	Hinges and Catches Design and make a special box for a family member.		Mechanisms: Wheels and axles. Design, make, and evaluate a vehicle with axles that will move freely with securely fixed wheels.	Food: Healthy and varied diet. Design, make and evaluate a healthy sauce for a pasta pot using appropriate equipment and utensils to prepare and combine food. Demonstrating an understanding of a range of fresh and processed ingredients appropriate for their			Mechanical systems: Pulleys or gears. Design, make, and evaluate a pulley system to transport water from the bottom to the top of a mountain. Explore mechanical systems using pulleys to create working moving models.

					product, and whether they are grown, reared or caught.			
Autumn 2 Exploration and discovery	Let's Go	Let's go shopping	Dinosaur Discovery	Epic Explorers	Ancient Egyptians	Marvellous Mayans	Pole to Pole	Battle of Britain
	Explore different materials freely to develop their ideas about how to use them and what to make	Let's Look at Hats. Design and make a party hat.		Food: Preparing fruit and vegetables. Design, make and evaluate a healthy wrap for an explorer involving basic food preparation and an awareness of basic food hygiene.		Mechanical systems: Levers and linkages. Design, make and evaluate a class display about the Mayans incorporating levers and linkages. Use a linkage to join two or more pivoted levers to create a moving mechanism.	Food: Celebrating culture and seasonality. Design, make and evaluate a food product which celebrates seasonality. Demonstrate the use of how to use utensils to prepare and cook food.	
Spring 1- Counties Countries and continents	Go wild	Up ! up and away	Our Town, My Street	An Island Home	London Our Capital	Get to know Greece	Across our Continent	North American Road trip
	Develop their own ideas and then decide which materials to use to express them	Let's Look at Vehicles. Design and make vehicles.	Food: Preparing fruit and vegetables. Design, make and evaluate a healthy fruit salad involving basic food preparation. Demonstrate an awareness of basic food hygiene.	Textiles: Templates and joining techniques. Design, make and evaluate a pouch to securely carry diamonds (linked to English text). Create and use templates to cut fabric. Join fabric using the most appropriate technique, including simple stitches.	Structures: Shell structures. Design, make and evaluate a shell structure to contain a gift. Use knowledge of nets to construct a purposeful product that includes a London themed design.	Food: Healthy and varied diet. Design, make and evaluate a Greek tzatziki dip with pitta bread and crudités. Design, make and evaluate a food product which is healthy, using appropriate equipment and utensils to prepare and combine food.	Electrical systems: More complex switches and circuits. Design, make and evaluate sensor activated lights using our knowledge of electrical circuits and shell structures.	
Spring 2- Marvelous Men and women	Ready Steady grow	Changes	Kings and Queens	Disaster at Sea	Scavengers and Settlers	Ancient Greece	Saxons and Scots	Slavery through the Ages

	Develop their own ideas and then decide which materials to use to express them	Let's Look at Products.	Mechanisms: Sliders and levers. Design, make and evaluate a story board with moving parts using our knowledge of stories and cutting and joining skills.		Textiles: 2-D shape to 3-D product. Design, make and evaluate a scavenger bag that a Stone Age person may have used when hunting and gathering. Join two pieces of fabric choosing the most appropriate stitch. Create and use templates to cut fabric with accuracy.			
Summer 1 Active planet	Once upon a time	Plants and Flowers	Wonderful Weather	African Adventure	Fantastic Forests	Raging Rivers	Tectonic Trouble	Cornish Commerce
	Join different materials and explore different textures	Fantastic Fruit. Design and make fruit kebabs.	Structures: Free standing structures. Design, make and evaluate a coastal holiday home using our knowledge of free-standing structures and joining materials. Develop techniques to ensure that the finished product is strong, stiff and stable.				Structures: Frame structures. Design, make and evaluate an earthquake resistant frame structure (bridge) using our knowledge of structures and earthquakes. Understand how to use a range of joining techniques appropriate to the materials and structure.	Textiles: Combining different fabric shapes. Design, make and evaluate an apron/utility belt for a local business using my knowledge of joining fabric and different sewing techniques. Include a means of fastening using upcycled materials.
Summer 2 Changing Britain	Here comes the sun.	Treasure and the seaside	Seaside Detectives	Cornwall in Bloom	What did the Romans do for us?	Once Upon a mine	Vikings	Cousin Jacks
	Join different materials and explore different textures	Design and make an ice-cream sundae.				Electrical systems: Simple circuits and switches. Design, make and evaluate a hands-free headlight using our knowledge of simple circuits and switches.		Food: Celebrating culture and seasonality. Design, make and evaluate a savoury pasty which celebrates culture. Demonstrate knowledge of how to use utensils to prepare and cook food.

						Use knowledge of electrical systems, such as circuits to incorporate switches and bulbs.		Understand the source of different food products.
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