



Danegrove Primary School

DT Overview by Year Group



Design and Technology is an inspiring, rigorous and practical subject. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. At Danegrove, we encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to, wherever possible, link work to other disciplines such as mathematics, science, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness. Moreover they are encouraged to become innovators and risk-takers.

Objectives covering Design, Make and Evaluate are detailed in the progression map for each year group. This 3 step approach should be in all units of work.

Year Group	Autumn		Spring	Summer	
Year 1	Ice Smoothies (Food and Nutrition)	Christmas (Textiles)	Dinosaur Removals (Mechanisms)	Moving Pictures (Seas and Oceans) (Mechanisms)	
	*describe textures *wash hands & clean surfaces *think of interesting ways to decorate food *say where some foods come from, (i.e. plant or animal) *describe differences between some food groups (i.e. sweet, vegetable etc.) *discuss how fruit and vegetables are healthy *cut, peel and grate safely, with support		<ul style="list-style-type: none"> To design, make and evaluate a moving vehicle for Mary Anning to transport fossils begin to understand how to use wheels and axles * understand the difference between a fixed and moving axle. *begin to construct a chassis.	*begin to use levers or slides *to select the most appropriate mechanism for product being made. *begin to select most appropriate tool for making mechanism	
Year 2	Biscuit Making 2D (Food and Nutrition)		Puppets (Textiles)	Tropical Fruit Salad (Food and Nutrition)	Drawbridges (Structures/Mechanisms)
	*explain hygiene and keep a hygienic kitchen *describe properties of ingredients and importance of varied diet		*measure textiles *join textiles together to make a product, and explain how I did it *carefully cut textiles to produce accurate pieces	*explain hygiene and keep a hygienic kitchen *describe properties of ingredients and	*measure materials *describe some different characteristics of materials

	<ul style="list-style-type: none"> *say where food comes from (animal, underground etc.) *describe how food is farmed, home-grown, caught *draw eat well plate; explain there are groups of food *describe “five a day” *cut, peel and grate with increasing confidence 	<ul style="list-style-type: none"> *explain choices of textile *understand that a 3D textile structure can be made from two identical fabric shapes. 	<ul style="list-style-type: none"> importance of varied diet *say where food comes from (animal, underground etc.) *describe how food is farmed, home-grown, caught *draw eat well plate; explain there are groups of food *describe “five a day” *cut, peel and grate with increasing confidence 	<ul style="list-style-type: none"> *join materials in different ways *use joining, rolling or folding to make it stronger *use own ideas to try to make product stronger *use levers or slides *to understand how to use wheels and axles
	Arrow Holders (Textiles)	Xmas Tree Ornament (Structures)	Buddha Bowls (Food and Nutrition)	Pneumatic opening sarcophagus (Mechanisms)
Year 3	<ul style="list-style-type: none"> *join different textiles in different ways *choose textiles considering appearance and functionality *begin to understand that a simple fabric shape can be used to make a 3D textiles project 	<ul style="list-style-type: none"> *use appropriate materials *work accurately to make cuts and holes * join materials *begin to make strong structures. 	<ul style="list-style-type: none"> *carefully select ingredients *use equipment safely *make product look attractive *think about how to grow plants to use in cooking *begin to understand food comes from UK and wider world *describe how healthy diet= variety/balance of food/drinks *explain how food and drink are needed for active/healthy bodies. *prepare and cook some dishes safely and hygienically *grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	<ul style="list-style-type: none"> *select appropriate tools / techniques *alter product after checking, to make it better *begin to try new/different ideas *use pneumatics to create movement
Year 4	Pizza (Food and Nutrition)	Xmas Tree Ornament (Textiles)	Morse Code Machines (Electrical Circuits)	Earthquake-proof Buildings (Structures)

	<ul style="list-style-type: none"> *explain how to be safe/hygienic *think about presenting product in interesting/ attractive ways *understand ingredients can be fresh, pre-cooked or processed *begin to understand about food being grown, reared or caught in the UK or wider world *describe eat well plate and how a healthy diet=variety / balance of food and drinks *explain importance of food and drink for active, healthy bodies *prepare and cook some dishes safely and hygienically *use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	<ul style="list-style-type: none"> *think about user when choosing textiles *think about how to make product strong * begin to devise a template *explain how to join things in a different way *understand that a simple fabric shape can be used to make a 3D textiles project 	<ul style="list-style-type: none"> *use simple circuit in product *learn about how to program a computer to control product. 	<ul style="list-style-type: none"> *measure carefully to avoid mistakes *attempt to make product strong *continue working on product even if original didn't work *make a strong, stiff structure 	
	Christmas Stockings (Textiles)	Make a Space Buggy (Mechanisms)	Weatherproof Clothing (Textiles)	Fair trade chocolate (Food and Nutrition)	
Year 5	<ul style="list-style-type: none"> *think about user and aesthetics when choosing textiles *use own template * think about how to make product strong and look better *think of a range of ways to join things *begin to understand that a single 3D textiles project can be made from a combination of fabric shapes. 	<ul style="list-style-type: none"> *refine product after testing *grow in confidence about trying new / different ideas *begin to use cams, pulleys or gears to create movement 	<ul style="list-style-type: none"> *think about user and aesthetics when choosing textiles *use own template * think about how to make product strong and look better *think of a range of ways to join things *begin to understand that a single 3D textiles project can be made 	<ul style="list-style-type: none"> *explain how to be safe / hygienic and follow own guidelines *present product well - interesting, attractive, fit for purpose *begin to understand seasonality of foods *understand food can be grown, reared or caught in the UK and the wider world 	

			from a combination of fabric shapes.	<ul style="list-style-type: none"> *describe how recipes can be adapted to change appearance, taste, texture, aroma *explain how there are different substances in food / drink needed for health *prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source * use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking
Year 6	<i>Christmas Crackers (Structures)</i>	<i>Grabber and Lifter (Mechanisms)</i>	<i>Food Rationing (Food and Nutrition)</i>	
	<ul style="list-style-type: none"> *select materials carefully, considering intended use of the product, the aesthetics and functionality. *explain how product meets design criteria * reinforce and strengthen a 3D frame 	<ul style="list-style-type: none"> *refine product after testing, considering aesthetics, functionality and purpose *incorporate hydraulics and pneumatics *be confident to try new / different ideas *use cams, pulleys and gears to create movement 	<ul style="list-style-type: none"> *understand a recipe can be adapted by adding / substituting ingredients *explain seasonality of foods *learn about food processing methods *name some types of food that are grown, reared or caught in the UK or wider world *adapt recipes to change appearance, taste, texture or aroma. *describe some of the different substances in food and drink, and how they can affect health *prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source. *use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. 	