



Bramcote Hills Primary School
'Make the future better for all'



Curriculum Depth Map - D&T

Intent:

At BHPS we provide children with a challenging and engaging D&T curriculum which is designed to prepare children for the developing world. The subject encourages children to become creative problem-solvers, both as individuals and as part of a team. Through the study of design and technology children combine practical skills with an understanding of aesthetic, social and environmental issues, in order to design and make a product. 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. Design and Technology helps all children to become discriminating and informed consumers and potential innovators.

Implementation:

Our design and technology curriculum is built around essential knowledge, understanding and key skills. These are broken into year group expectations and show clear continuity and progression. Our teaching of design and technology follows the design, make and evaluate cycle. The design process should be relevant in context, to give meaning to learning. While making, children should be given choice and a range of tools to choose freely from. When evaluating, children should be able to evaluate their own products against a design criteria. Each of these steps should be rooted in technical knowledge and vocabulary. We motivate and enthuse pupils by creating deep links with other curriculum areas including maths, science, history, art and SMSC. This ensures that their curiosity and fascination are maintained and that D&T is delivered in an exciting and engaging way.

Our D&T curriculum is designed to allow children time to think, discuss, practise, explore and embed. This allows time for teaching, practice and repetition - both in a year group and across both key stages. Curriculum coverage is mapped out carefully from EYFS to Year 6 which allows some key concepts to be developed at a deeper level of learning, understanding and mastery. Fundamental *knowledge* and **skills** are covered at key points throughout the primary phase and repeated to allow pupils to build on what has been taught before. Where year groups are covering an area in more depth, this will be highlighted in green on the Curriculum Depth Map below. Lessons will be planned and a knowledge organiser provided for pupils, which outlines the area to be taught, where the new knowledge and skills fit in with their prior learning, any sticky knowledge they need to understand and key vocabulary they need to learn.

Impact:

Impact is evidenced through:

- Pupils will have clear enjoyment and confidence in design and technology that they will then apply to other areas of the curriculum
- Pupils will ultimately know more, remember more and understand more about Design Technology
- Demonstrating *knowledge* when using tools or **skills** in other areas of the curriculum and in enrichment opportunities both in and out of school
- The use and outcomes of the varied activities
- Low-stakes tests/quizzes
- As designers pupils will develop skills and attributes they can use beyond school and into adulthood.

Key Stage One

Year 1	Year 2
<p>Plan Bee - Homes</p> <p>Plan Bee - Moving pictures</p> <p>Plan Bee - Eat More Fruit & Veg</p>	<p>Plan Bee- Christmas decorations</p> <p>Bread (Warburtons)</p> <p>Plan Bee - Making Fire Engines</p> <p>Plan Bee - Pizza Party</p> <p>Plan Bee - Stable Structures</p>
Designing	
Design - purposeful, functional, appealing products for themselves and other users based on design criteria	Design - purposeful, functional, appealing products for themselves and other users based on design criteria
Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	Design - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
Think of an idea and plan what to do next	Think of an idea and plan what to do next
Explain to someone else how they want to make their product and make a simple plan before making	Use own ideas to design something and describe how their own idea works
Design a product which moves	Design a product which moves
	Explain why they have chosen specific textiles
Making	
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 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	Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
Use own ideas to make something	Use own ideas to make something
Make a product which moves	Make a product which moves
Choose appropriate resources and tools	Choose tools and materials and explain why they have chosen them
	Join materials and components in different ways
	Measure materials to use in a model or structure
Evaluating	
Explore and evaluate a range of existing products	Explore and evaluate a range of existing products
Evaluate their ideas and products against design criteria	Evaluate their ideas and products against design criteria
Describe how something works	Describe how something works
Explain what went well with their work	Explain what works well and not so well in the model they have made
Technical Knowledge	
Build structures, exploring how they can be made stronger, stiffer and more stable	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.	Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Make their own model stronger	Make a model stronger and more stable
	Use wheels and axles, when appropriate to do so
Food Technology	
Use the basic principles of a healthy and varied diet to prepare dishes	Use the basic principles of a healthy and varied diet to prepare dishes
Understand where food comes from	Understand where food comes from
	Weigh ingredients to use in a recipe
Describe the ingredients used when making a dish or cake	Describe the ingredients used when making a dish or cake
Know what a healthy and varied diet is	Know what a healthy and varied diet is

Key Stage Two

Year 3	Year 4	Year 5	Year 6
Bread Aqueducts Sewing felt trousers Pneumatics - skeleton	Money containers Pitched, stringed instrument (guitar) Seasonal vegetables	Recorder Case Pizza making Structures , levers and gears, cams	Caribbean cooking Textiles - Upcycling Clothes Electrical systems - Fairgrounds
Designing			
Prove that a design meets a set criteria.	Prove that a design meets a set criteria.	Explain how a product will appeal to a specific audience	Explain how a product will appeal to a specific audience
<i>Design a product and make sure that it is fit for purpose</i>	<i>Design a product and make sure that it is fit for purpose</i>	<i>Use market research to inform plans and ideas.</i>	<i>Use market research to inform plans and ideas.</i>
Choose a material for both its suitability and its appearance	Choose a material for both its suitability and its appearance	Choose a material for both its suitability and its appearance	Choose a material for both its suitability and its appearance
After collecting information from different sources, including from peers and professionals when designing, develop an idea	After collecting information from different sources, including from peers and professionals when designing, develop an idea	Develop a range of suitable ideas after collecting information from different sources, including from peers and professionals when designing	Develop a range of suitable ideas after collecting information from different sources, including from peers and professionals when designing
Produce a plan and explain it	Produce a plan and explain it	Produce a detailed, step-by-step plan	Justify planning in a convincing way
Persevere and adapt work when original ideas do not work	Persevere and adapt work when original ideas do not work	Follow and refine original plans	Follow and refine original plans
<i>Communicate ideas in a range of ways, including by sketches and drawings which are annotated</i>	<i>Communicate ideas in a range of ways, including by sketches and drawings which are annotated</i>	<i>Communicate ideas in a range of ways, including by sketches and drawings which are annotated</i>	<i>Communicate ideas in a range of ways, including by sketches and drawings which are annotated</i>
		Design a product that requires pulleys or gears	
Ensure that culture and society is considered in plans and designs	Ensure that culture and society is considered in plans and designs	Ensure that culture and society is considered in plans and designs	Ensure that culture and society is considered in plans and designs
Making			
Follow a step-by-step plan, choosing the most appropriate equipment, materials and techniques for a given task	Follow a step-by-step plan, choosing the most appropriate equipment, materials and techniques for a given task	Competently follow a step-by-step plan, using a range of appropriate equipment, materials and techniques for a given task	Competently follow a step-by-step plan, using a range of appropriate equipment, materials and techniques for a given task
Make a product which uses mechanical components		Make a product which uses mechanical components	Make a product which uses both electrical and mechanical components
Work accurately: to measure, to make cuts and to make holes	Work accurately: to measure, to make cuts and to make holes	Work accurately: to measure, to make cuts and to make holes	Work accurately: to measure, to make cuts and to make holes
<i>Know what each tool is used for and how it correctly and safely</i>	<i>Know what each tool is used for and how it correctly and safely</i>	<i>Know which tool to use for a specific practical task and explain why a specific tool is best for a specific action</i>	<i>Know which tool to use for a specific practical task and explain why a specific tool is best for a specific action</i>

<i>Know which tools to use for a particular task and show knowledge of handling the tool</i>	<i>Know which tools to use for a particular task and show knowledge of handling the tool</i>		
<i>Know which material is likely to give the best outcome</i>	<i>Know which material is likely to give the best outcome</i>	<i>Know which material is likely to give the best outcome</i>	<i>Know which material is likely to give the best outcome</i>
Make a template before making a final version	Make a template before making a final version	Make a prototype before making a final version	Make a prototype before making a final version
		Make a product that relies on pulleys or gears	
Evaluating			
<i>Know why a model has, or has not, been successful</i>	<i>Know why a model has, or has not, been successful</i>	Evaluate product against clear criteria	Evaluate product against clear criteria
Evaluate products for both their purpose and appearance	Evaluate products for both their purpose and appearance	Evaluate appearance and function against original criteria	Evaluate appearance and function against original criteria
<i>Know how to test and evaluate designed products</i>	<i>Know how to test and evaluate designed products</i>	Evaluate and suggest improvements for design	Evaluate and suggest improvements for design
Explain how the original design has been improved	Explain how the original design has been improved	Explain how to improve a finished model	Explain how to improve a finished model
		Present a product in an interesting way	Present a product in an interesting way
		Suggest alternative plans; outlining the positive features and draw backs	Suggest alternative plans; outlining the positive features and draw backs
Technical Knowledge			
<i>Links scientific knowledge by understanding how ingredients come from plants.</i>	<i>Know how to strengthen a product by stiffening a given part or reinforce a part of the structure</i>	<i>Use knowledge to improve a made product by strengthening, stiffening or reinforcing</i>	<i>Use knowledge to improve a made product by strengthening, stiffening or reinforcing</i>
	<i>Links scientific knowledge by using lights, switches or buzzers</i>	Uses more complex IT program to help enhance the quality of the product produced	<i>Know which IT product would further enhance a specific product</i>
			<i>Links scientific knowledge by using lights, switches or buzzers</i>
		<i>Links scientific knowledge to design by using pulleys or gears</i>	
			Use electrical systems correctly and accurately to enhance a given product
Food Technology			
Describe how food ingredients come together	Describe how food ingredients come together	Describe how food ingredients come together	Describe how food ingredients come together
Weigh out ingredients and follow a given recipe to create a dish	Weigh out ingredients and follow a given recipe to create a dish	Weigh out ingredients and follow a given recipe to create a dish	Weigh out ingredients and follow a given recipe to create a dish
<i>Understand the principles of a healthy and varied diet</i>	<i>Understand the principles of a healthy and varied diet</i>	<i>Understand the principles of a healthy and varied diet</i>	<i>Understand the principles of a healthy and varied diet</i>

	<i>Know which season various foods are available for harvesting and when food is ready for harvesting</i>		
<i>Know how to be both hygienic and safe when using food</i>	<i>Know how to be both hygienic and safe when using food</i>	<i>Know how to be both hygienic and safe when using food</i>	<i>Know how to be both hygienic and safe when using food</i>
		Bring a creative element to the food product being designed	
<i>Know how to prepare a meal by collecting the ingredients in the first place</i>			<i>Know how to prepare a meal by collecting the ingredients in the first place</i>
		Work within a budget to create a meal	Work within a budget to create a meal
Explain how food ingredients should be stored and give reasons	Explain how food ingredients should be stored and give reasons	Explain how food ingredients should be stored and give reasons	Explain how food ingredients should be stored and give reasons
<i>Understand the difference between a savoury and sweet dish</i>	<i>Understand the difference between a savoury and sweet dish</i>	<i>Understand the difference between a savoury and sweet dish</i>	<i>Understand the difference between a savoury and sweet dish</i>

Appendix - Key Knowledge and Vocabulary

D&T - KS1		
Key Vocabulary		
planning investigating purpose	evaluate make	design user
		ideas product
Key Knowledge	Key Vocabulary	
Year 1- Designing		
<ul style="list-style-type: none"> <input type="checkbox"/> Designs identify the materials you will need to make a product and what it will look like. <input type="checkbox"/> 'Design criteria' - what a product needs to be able to do. <input type="checkbox"/> Designs can change as you make a product. <input type="checkbox"/> A plan helps you to think about the steps you will need to take to make your product. 	project discussion materials criteria plan	label identify adapt equipment diagram
Making		
<ul style="list-style-type: none"> <input type="checkbox"/> When cutting a shape or covering, draw around a template or measure the object first. <input type="checkbox"/> Use a ruler or straight edge to draw a straight line. <input type="checkbox"/> Glue goes on the outside edge of something as well as in the middle. <input type="checkbox"/> Pritt Stick will only stick paper or thin card. PVA glue is stronger than Pritt Stick. A glue gun will stick heavier or thicker objects together. <input type="checkbox"/> Sellotape - strong but can be seen on a product. <input type="checkbox"/> Finishing touches - added at the end and make the product look more attractive. 	covering template measure edge thin/thinner thick/thicker	heavy/heavier light/lighter attractive finishing touches decoration
Evaluating		
<ul style="list-style-type: none"> <input type="checkbox"/> Evaluate means to test your product to see if it works and if it fits your design criteria. <input type="checkbox"/> Evaluate means to think what you would do differently next time to make your product even better. 	test improve change effective	taste texture sturdy neat
Technical Knowledge		
<ul style="list-style-type: none"> <input type="checkbox"/> Structures can be made stronger by adding more layers (stiffer) or adding supports near the base of the object. <input type="checkbox"/> Textiles - used for softer finishes e.g. curtains, clothing or bedding. They are soft and flexible. <input type="checkbox"/> Slider mechanisms - used to move in a straight line or move up and down. <input type="checkbox"/> Lever mechanisms - used to move up and down. The lever is attached on a pivot. <input type="checkbox"/> A split pin can act as a pivot. 	base fabric flexible layers mechanism pivot	soft stable strong/stronger structure textile
Food Technology		
<ul style="list-style-type: none"> <input type="checkbox"/> Food comes from either animals or plants. <input type="checkbox"/> Ingredients means what a food is made up of. <input type="checkbox"/> A healthy diet has lots of carbohydrate and fruit & veg, some protein, dairy and a smaller amount of fat and sugar. <input type="checkbox"/> Aim to eat at least 5 portions of fruit & vegetables a day. <input type="checkbox"/> Aim to drink 6-8 glasses of water a day. <input type="checkbox"/> Wash your hands before handling food. <input type="checkbox"/> Peel - to take off the outside layer of skin. <input type="checkbox"/> Chop - to cut something up into smaller pieces. Grip the food with your fingers and cut down through the food. Keep your fingers away from the blade. <input type="checkbox"/> Core - to take out the middle that contains the seeds. Cut the fruit into sections first or use a coring tool. 	aim blade carbohydrate core dairy fat fruit & veg	grate grip healthy ingredients layer protein sugar

D&T - KS1			
Key Vocabulary			
investigating	make	design criteria	evaluate
planning	user	product	function
design	purpose	ideas	
Key Knowledge		Key Vocabulary	
Year 2 - Designing			
<input type="checkbox"/> 'Design criteria' tells you what the purpose and function of a product is. <input type="checkbox"/> Designs should be based on the design criteria. <input type="checkbox"/> Designs focus on the function and appearance of a product. <input type="checkbox"/> Designs consider how the purpose of the object will be met. <input type="checkbox"/> Planning involves drawing and discussion. <input type="checkbox"/> Designs change as you practice making skills.		design criteria successful diagram label functional purpose appealing develop equipment	
Year 2 - Making			
<input type="checkbox"/> Fabric should be cut by drawing around a paper template first. <input type="checkbox"/> Templates should be positioned on fabric or paper near the edge to avoid waste. <input type="checkbox"/> Fabric scissors cut fabric. The sharp part of fabric scissors is usually closer to the handle. <input type="checkbox"/> Sewing - used to join fabric using a needle and thread. <input type="checkbox"/> Running stitch is the simplest stitch to join two fabrics. <input type="checkbox"/> An axle can be fixed or moving. <input type="checkbox"/> Wheels can be fixed or moving. <input type="checkbox"/> The chassis is the body of a vehicle. <input type="checkbox"/> Sellotape cannot be covered with paint, felt tip or pencil crayon.		join running stitch over stitch thread needle eye (needle) knot felt fabric stuffing accurate fixed axle not-fixed axle washer wheel chassis body vehicle roll wood rigid stiff hygiene yeast flour measuring jug knead shape dough bake measure decorate	
Year 2 - Evaluate			
<input type="checkbox"/> Evaluation means to test your product to see if it is effective and meets the design criteria. <input type="checkbox"/> Evaluate means to think what you would do differently next time to make your product even better. <input type="checkbox"/> Evaluating includes thinking about how well you have applied the making skills. <input type="checkbox"/> The senses should be used to evaluate food.		improve change effective purpose taste texture sturdy neat accurate colourful inviting feel look taste smell	
Year 2 - Technical Knowledge			
<input type="checkbox"/> Structures can be made more stable by ensuring the base is longer and wider than the height and that the weight of decorations is easily balanced. (Great fire of London) <input type="checkbox"/> Stitches that are taut (the thread is pulled tight), even (the same size) and closer together make fabric products more stable. <input type="checkbox"/> Axles allow wheels to be positioned on a stable object so that it can roll backwards or forwards. <input type="checkbox"/> Washers are needed to ensure axels remain stable.		structure strong stable balanced base height taut even washers mechanism	
Year 2 - Food Technology			
<input type="checkbox"/> A healthy diet has lots of carbohydrate and fruit & veg, some protein, dairy and a smaller amount of fat and sugar. <input type="checkbox"/> Aim to eat at least 5 portions of fruit & vegetables a day. <input type="checkbox"/> Aim to drink 6-8 glasses of water a day. <input type="checkbox"/> Wash your hands before handling food. <input type="checkbox"/> Food can be farmed, caught or grown. <input type="checkbox"/> Wash hands before handling food and ensure the work space is hygienic. <input type="checkbox"/> Chop - Cut something into pieces. Grip the food with your fingers and cut down through the food. Keep your fingers away from the blade. <input type="checkbox"/> Core - to take out the middle that contains the seeds. Cut the fruit into sections first or use a coring tool. <input type="checkbox"/> Grate - to rub something against a grating machine to make it into small pieces. Push the food away from you along the grating blade. (Pizza Making) <input type="checkbox"/> Knead - To work moistened flour into dough with hands by pushing and folding.		hygiene measuring jug knead shape whisk dough roll sugar ingredients healthy carbohydrate fruit & veg protein dairy fat measure weigh cut chop chopping board baking tray skewer	

D&T - KS2			
Key Vocabulary			
model	annotated sketch	label	user
evaluate	functional	drawing	purpose
prototype	innovative	function	design
Key Knowledge		Key Vocabulary	
Year 3			
Food Technology: Bread <ul style="list-style-type: none"> <input type="checkbox"/> Understand the importance of washing hands before preparing food. <input type="checkbox"/> Dough can be sweet or savoury. <input type="checkbox"/> Kneading is used to mix ingredients and add strength to the final product. <input type="checkbox"/> Water can be used as a 'glue' for pastry. <input type="checkbox"/> Savoury foods are salty or spicy rather than sweet. <input type="checkbox"/> Herbs are the leaves of a plant. <input type="checkbox"/> Spices come from non-leafy parts, including roots, bark, berries, flowers, seeds 		spice herb hygiene savoury pastry knead	
Pneumatics <ul style="list-style-type: none"> <input type="checkbox"/> Pneumatic means filled with air. <input type="checkbox"/> Air pressure can be used to produce and control movement when it is trapped within a closed system. <input type="checkbox"/> A few common examples of things we use in our daily life that contain pneumatic fittings are: bicycle/ball pumps, the buttons which operate automatic doors, soft close fittings. 		pneumatic pressure closed system syringe tubing	
Aqueducts <ul style="list-style-type: none"> <input type="checkbox"/> Some features of Roman architecture and engineering were arches, columns, pediments, colonnades. <input type="checkbox"/> Roman aqueducts used a colonnade of arches for strength <input type="checkbox"/> Aqueducts needs to be built out of waterproof materials. 		columns pediment colonnade aqueduct architecture engineering	
Sewing <ul style="list-style-type: none"> <input type="checkbox"/> A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. <input type="checkbox"/> I can name some desirable features of clothing for example, they need to be flexible and durable. <input type="checkbox"/> Use of a template pinned on to fabric allows for more accuracy. <input type="checkbox"/> Running stitch is the basic stitch in hand sewing. <input type="checkbox"/> The smaller the stitches, the stronger the sewing. <input type="checkbox"/> Sewing right sides of the fabric together and turning it out avoids stitches being seen. 		textile flexible durable running stitch overstitch backstitch garment applique	

D&T - KS2			
Key Vocabulary			
appealing design brief design criteria	evaluating function	innovative prototype	purpose user
Key Knowledge		Key Vocabulary	
Year 4			
<input type="checkbox"/> Designers have to know what the purpose for their design is. <input type="checkbox"/> Designers have to know who the end-user for their design is. <input type="checkbox"/> Designers have to know where their product will be used. <input type="checkbox"/> Designers need to know about the manufacturing process for their product.			
Money containers: <input type="checkbox"/> Designers research to influence their design ideas. <input type="checkbox"/> Seams are sewn inside-out to hide the stitches. <input type="checkbox"/> A running stitch is worked by passing the needle in and out of the fabric at a regular distance. The needle is always pushed through both layers of cloth starting on the side it is on and ending on the other side. <input type="checkbox"/> Running stitches are most often not visible as they are used to close seams. <input type="checkbox"/> The backstitch can be used when you need a solid line, like when creating outlines or hand embroidered letters.		aesthetics annotated sketches back stitch components cutting	finishing joining materials pattern pieces running stitch shaping template textiles
Cooking (Seasonal vegetables): <input type="checkbox"/> It is important to eat a healthy and varied diet. <input type="checkbox"/> Some foods can be eaten cooked or raw and some must be cooked. <input type="checkbox"/> Some vegetables will only grow in this country at certain times of the year (seasons) and some don't grow here at all. <input type="checkbox"/> Food is produced all around the world. <input type="checkbox"/> Climate and conditions affect when and where food is produced. <input type="checkbox"/> Food is processed on different levels to make it edible and safe. <input type="checkbox"/> Heat can be applied to cook dishes in different ways. <input type="checkbox"/> Ingredients can be combined in different ways and seasoned to suit a variety of tastes.		diet healthy hygiene ingredients nutrition raw recipe savoury	seasoning smell sweet taste texture utensils varied
Pitched, stringed instrument (guitar): <input type="checkbox"/> Sounds made by a stringed instrument are a result of the strings vibrating. <input type="checkbox"/> The longer the string, the lower the pitch of the sound. <input type="checkbox"/> The thicker the string, the lower the pitch of the sound. <input type="checkbox"/> The looser the string, the lower the pitch of the sound. <input type="checkbox"/> The harder the string is plucked or bowed, the louder the sound. <input type="checkbox"/> Structures can be reinforced to make the materials more suitable for a particular function. <input type="checkbox"/> Different joining techniques can be used dependent upon functionality and processes.		electrical high loud low mechanical pitch pluck quiet	reinforce sound stiffen strengthen vibrate vibration

D&T - KS2			
Key Vocabulary			
design decisions	authentic	research	user
functionality	design specification	evaluate	purpose
design brief	innovative		
Key Knowledge		Key Vocabulary	
Year 5			
Sewing - Recorder Case <ul style="list-style-type: none"> <input type="checkbox"/> There are a variety of stitches for embroidery including cross, chain, blanket, etc. <input type="checkbox"/> Stitches create different effects for their sewing, texture and overall effect. <input type="checkbox"/> The aesthetic qualities of a design improve the overall finished product. <input type="checkbox"/> When evaluating a product, identify its strengths and areas for development and improvement. <input type="checkbox"/> A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. <input type="checkbox"/> Fabrics can be strengthened, stiffened and reinforced where appropriate. 		embroidery running stitch cross stitch blanket stitch fabric thread motif working drawing right side wrong side,	
Food Technology - Pizza Making <ul style="list-style-type: none"> <input type="checkbox"/> There are basic rules of food hygiene and other safe practices - e.g. hazards relating to ovens, knives, washing of hands, handling of different foods, use of different chopping boards, etc. <input type="checkbox"/> The weighing of ingredients is important to the overall outcome of the product, as is the temperature and cooking timings. <input type="checkbox"/> The processes involved in making bread/dough products are kneading, rising, knocking back. <input type="checkbox"/> Yeast is a raising agent and there is a difference between dried/fresh yeast and other raising agent (soda). <input type="checkbox"/> A product's sensory characteristics entices the consumer. <input type="checkbox"/> Too many overpowering flavours can overload the taste buds. 		specifications ingredients costing mixing topping knead quantities modify adapt rising, knocking back dough yeast elasticity bacteria food hygiene food poisoning decay mould savoury	
Structures - Gears, Levers, Cogs and Cams (linked to Science Forces) <ul style="list-style-type: none"> <input type="checkbox"/> A pulley helps with the lifting process, making it easier to lift an object essentially changing the direction of the pull or force applied. E.g. you pull down to make a weigh lift. <input type="checkbox"/> A lever increases an input force to give a greater output force. <input type="checkbox"/> There are different levers and can identify that a nut- cracker a stapler, nail clippers a door handle are among levers in everyday use. <input type="checkbox"/> Sliders and levers have different uses. <input type="checkbox"/> Sliders move from side to side and up and down. <input type="checkbox"/> Different mechanisms produce different types of movement. <input type="checkbox"/> Different shaped cams produce different movements - adopting the correct shape for the desired movement. <input type="checkbox"/> The choice of the correct material (its weight and properties) is vital to the end product and the movement required. <input type="checkbox"/> Mechanical and electrical systems have an input, process and an output. 		cam lever cogs gears cam mechanism, cam follower oscillating Movement linear motion rotary motion off-centre crank handle axle frame structure balanced forces unbalanced forces exploded diagram prototype exert a large force	

D&T - KS2			
Key Vocabulary			
function	design brief	design brief	annotated sketch
innovative	user	design specification	purpose
design specification	purpose	prototype	
Key Knowledge		Key Vocabulary	
Year 6			
Sticky Knowledge: Sewing - Upcycling a garment <ul style="list-style-type: none"> <input type="checkbox"/> A cross stitch pattern must be done on squared paper as a guide. <input type="checkbox"/> Fabrics have different properties, making them good for different purposes. <input type="checkbox"/> Some materials are eco-friendly <input type="checkbox"/> Items need to be pinned before sewing together <input type="checkbox"/> There are 5 basic stitch types, some are functional and some for decoration <input type="checkbox"/> Sharp scissors are needed to cut fabric. <input type="checkbox"/> 		design process natural and synthetic textiles functional decorative sewing fabric stitches running stitch cross stitch back stitch basting stitch whip stitch double thread seam lines	needles thread pins scrap material buttons scissors needle needle threader synthetics linen wool cashmere eco friendly aesthetics
Sticky Knowledge: Fairground <ul style="list-style-type: none"> <input type="checkbox"/> Rotating products are used in fairgrounds. <input type="checkbox"/> Different mechanisms produce different types of movement. <input type="checkbox"/> Mechanical and electrical systems have an input, process and an output. <input type="checkbox"/> Gears and pulleys can be used to speed up, slow down or change the direction of move <input type="checkbox"/> Electrical motors can create rotating parts. <input type="checkbox"/> Products which incorporate a pulley and drive belt and are driven by a motor 		<i>electrical motors</i> <i>rotation</i> <i>pulley</i> <i>belt</i> <i>strengthening/ reinforcing</i> <i>structures</i> <i>materials</i> <i>components</i> <i>stable framework</i> <i>motor</i> <i>materials</i> <i>health and safety</i> <i>electrical component</i> <i>model</i> <i>mock-up</i> <i>improvements</i> <i>design proposal</i>	<i>criteria</i> <i>rotation</i> <i>spindle</i> <i>axle</i> <i>drive belt</i> <i>pulley</i> <i>electric motor</i> <i>speed</i> <i>framework</i> <i>horizontal</i> <i>vertical</i> <i>electric circuit</i> <i>switch</i> <i>gearing up or down</i> <i>computer control</i> <i>mechanism</i>
Sticky knowledge: Mesoamerican Cooking <ul style="list-style-type: none"> <input type="checkbox"/> Food can be produced locally and from all around the world <input type="checkbox"/> Where we source our food from another country, it is called importing. <input type="checkbox"/> Fresh produce can be bought locally. <input type="checkbox"/> It is important to consider global footprint when buying food. <input type="checkbox"/> Many countries have their own traditional dish. <input type="checkbox"/> It is important to consider allergies when cooking. <input type="checkbox"/> Food can change depending on whether it is cooled, heated, mixed, stirred or whisked. <input type="checkbox"/> Food can change when other ingredients are added to it e.g. egg and caster sugar. <input type="checkbox"/> A budget is a document that lists the money you earn and the money you spend over a particular length of time. <input type="checkbox"/> Different chopping boards should be used for raw meat. 		<i>Mesoamerica</i> <i>market research</i> <i>plan</i> <i>kilograms/grams</i> <i>litres/millilitres</i> <i>spice</i> <i>texture</i> <i>taste (including 5 senses)</i> <i>cultural differences</i> <i>undercooked/overcooked</i> <i>raw/not raw</i> <i>global footprint</i>	<i>storage</i> <i>sweet/savoury</i> <i>cultural</i> <i>inspired</i> <i>boiling</i> <i>serving</i> <i>frying</i> <i>import</i> <i>slicing</i> <i>measuring</i> <i>sell by</i> <i>use by</i>