

## Molehill Primary Academy Design Technology Curriculum Map

Design and Technology - Designing and making **something**, for **someone**, for **some purpose**.

	Who we are	How we express ourselves	Where we are in place and time	Sharing the planet	How the world works	How we organise ourselves
KS1 Cycle B	Autumn 1	Spring 2	Spring 1	Summer 1	Summer 2	Autumn 2
Project	Cooking and Nutrition	Exploring textiles	Technical Knowledge	Design and Evaluate	Mechanisms	Mechanisms
	Understanding what makes a healthy plate: designing and making fruit kebabs/smooties	Design and make finger puppets for the story of Little Red Riding Hood. (link to English) Focus on designing the puppet - no sewing.	Designing and making model planes. with a propellar mechanism.	Sewing - Designing and making puppets of endangered animals.	Inventing a vehicle - linked to Stephenson's rocket.	Design, make and build toys with moving parts. Design, make and build a pop up card.
Knowledge (National Curriculum Element)	- Use the basic principles of a healthy and varied diet to prepare dishes - Understand where food comes from. - Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]	- Design purposeful, functional, appealing products for themselves and other users based on design criteria	- Build structures, exploring how they can be made stronger, stiffer and more stable - Explore and evaluate a range of existing products - Evaluate their ideas and products against design criteria	- 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	- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. - Explore and evaluate a range of existing products - Evaluate their ideas and products against design criteria	- Design purposeful, functional, appealing products for themselves and other users based on design criteria - Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology - Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products
Design (National Curriculum Element)	Planning of the smoothie / kebab (example: Look at the recipe and decide what equipment is needed).	Use templates to design 2 different finger puppets based on the story. Annotate the design ideas.	Designing a plan for the manufacture - teachers and students can work together to plan how they are going to make the model plane. Could link the designs to make the plane more aesthetic to another subject?	Focus on devloping children's technical sewing skills. Children to learn how to complete a running stitch and overstitch.	Design a vehicle to a success criteria / design a vehicle with a template as a uide. Label different parts of the vehicle with key terminology.	Design a page in a pop up book based on a book that you are reading, or an animal you are learning about? Decide what type of motion you want your pop up to be.
Make (National Curriculum Element)	preparing themselves for a practical - washing hands, wearing aprons ,safe use of knives to cut fruits, assembling the fruit on the skewer / putting them in the blender and using the blender safely, washing up equipment safely.	Practicing skills - development of fine motor/cutting skills to create details tehir finger puppets. Focus on designing element and aesthetics - exploring different shapes and materials..	Students could use resistant materials such as card and plastics to model their aircraft. They could use scissors, glue, tape and split pins to assemble the model.	Practicing skills (could practice a straight stitch and blanket stitch on paper beforehand for example). How to thread a needle and keep the needle threaded when sewing.	Use modelling materials to create an outcome - you could provide students with a net template which they cut around and then make into a 3D shape. You could use card, tape, glue, paper. You can buy pre cut MDF wheels also.	Testing different linkages with card and split pins.
Evaluate (National Curriculum Element)	sensory analysis of different seasonal fruits. Could rate them out of 5 for taste and texture. Discuss the process of making the smoothie / kebab, evaluate the overall taste	Students can evaluate the effectiveness of their designs. They could peer assess each others - does it look like the character description? Does it have the features the character should have (the wolf for example). They could reflect on the outcome at the end of the project.	Students can look at different planes over time - how have they developed and changed? Why have they changed? What are the uses of different planes? Could their model be displayed as a learning aid in a local library / museum?	Students can evaluate the effectiveness of their designs. They could peer assess each others - does it look like the animal they intended? Does it have the features the animal should have. They could reflect on the outcome at the end of the project.	Peer assessment / self assessment of the designed vehicle. Testing the effectiveness of the final made vehicle - does it move? Does it meet the success criteria?	Test different types of linkages through prototyping - reverse motion, parallel motion, crank and slider... use card and split pins to create prototypes of these.

<b>Technical Knowledge (National Curriculum Element)</b>	Seasonal fruits, safe use of equipment, importance of sensory analysis, how to work safely in a kitchen, identification of equipment, safety and hygiene in the kitchen.	Different types of joining methods (not just stitching, but joining different materials through tape, glue, sewing...), designing with a success criteria in mind, what is evaluating, different stitch types, different fabric types, material components.	What is a propeller? Why are they shaped the way they are (aerodynamics) - can link this to science. Testing - thinking of ways to test whether the final model was successful.	Different sewing techniques - running stitch and blanket stitch. Different types of joining methods (not just stitching, but joining different materials through tape, glue, sewing...), designing with a success criteria in mind, what is evaluating, different stitch types, different fabric types, material components.	Properties of the materials being used for the modelling - card - easy to bend, easy to cut etc. Types of motion - the wheels move in a rotary motion etc. What is the purpose of a template. Why would people use templates to make lots of the same item? Health and Safety rules around using different tools and equipment.	Fixed and moving pivots, linkages, motion, levers, types of motion.
<b>Suggested Sequence</b>	1. Research seasonal fruits. 2. sensory analysis of fruits 3. plan the kebab / smoothie 4. make kebab / smoothie	1. Discuss the characters in the book and model what they might look like. 2. Provide drawing templates to help them with their design ideas. 3. Model each step of the making and then students make their ideas 4. Evaluate their own outcomes as well as others.	1. Planning the sequence of making as a class 2. Following these steps to create model airplanes with functioning propellers 3. Testing the function of the planes and documenting findings.	1. Research endangered animals. 2. Discuss characteristics of different animals and what they look like. 2. Provide drawing templates to help them with their design ideas. 3. Model each step of the making and then students make their ideas 4. Evaluate their own outcomes as well as others.	1. Discuss what a vehicle is - what is considered a vehicle? (transporting goods, usually on land). 2. Design a vehicle within set parameters (maybe a 3 wheeled vehicle, or a vehicle that moves very quickly). 3. Model the vehicle using modelling tools. 4 Test the vehicles and whether they move.	1. Discuss what a lever / linkage is. Find examples within the classroom / school. 2. Prototype different linkages with card and split pins (parallel motion, reverse motion, crank and slider). Can students identify the difference between a fixed pivot and a moving pivot? 3. Students design their pop up book page and decide which linkage to use. How will it make the character move? 4. Students make the linkage and design their character. Add decoration for the background.
<b>Vocab</b>	Seasonal, Sensory, Taste, Texture, Flavour, Blender, Knife, Chopping	Cutting, sticking, textures, shapes, materials, glue, attach, layers.	Propeller, airplane, function, evaluate, test (could dip into aerodynamic forces like drag, thrust, lift and gravity)	Running stitch, blanket stitch, Fabric, Needle, Sewing, Straight Stitch, Thread,	motion, vehicle, evaluate, wheels, modelling, designing, template, testing	Fixed and moving pivots, linkages, motion, levers.
<b>Suggested ATL</b>	Research Skills - Researching seasonal fruits	Communication Skills - Giving feedback in a kind way. Being able to describe the process they undertook using technical vocab?	Thinking Skills - devising the plan of manufacture and the sequence they'll follow to make the model. Thinking about developments after testing their made item.	Communication Skills - Giving feedback in a kind way. Being able to describe the process they undertook using technical vocab?	Social Skills - Working with others to create an outcome.	Thinking Skills - Critical thinking about different applications of motion.
<b>Useful Links</b>	<a href="#">Food a fact of life</a>		<a href="#">NASA Aerodynamics</a>		<a href="#">Technology Student - Motion</a>	<a href="#">Technology Student - Linkages</a>
<b>Year 1 Skills</b>	Ongoing					
	<b>Design</b>		<b>Make</b>		<b>Evaluate</b>	
	Design a product for themselves following design criteria Beginning to explain the purpose of the products		Begin to plan the stages of making Beginning to select from a range of tools, equipment, materials and components With support assemble, join and combine materials and components together		Begin to make suggestions about how their products could be improved Talk about existing products	
<b>Year 2 Skills</b>	Ongoing					
	<b>Design</b>		<b>Make</b>		<b>Evaluate</b>	
	Design products for themselves and others using design criteria Explain the purpose of the product		Plan the stages of making by suggesting what to do next Select from a range of tools, equipment, materials and components, explaining their choices Assemble, join and combine materials and components together		Suggest how their products could be improved Beginning to evaluate how good existing products are	

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LKS2 Cycle B	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Project	<b>Cooking and Nutrition</b>	<b>Structure</b>	<b>Mechanical System</b>	<b>Stiff and Mouldable Sheet Materials</b>	<b>Electrical Mechanisms</b>	<b>Textiles</b>
	Understand and apply the principles of a healthy and varied diet.  Prepare a variety of dishes, using a range of cooking techniques.	Design and make a holiday lantern that is both functional and aesthetically pleasing.	Make an artefact relevant to historical study	Papyrus making with hieroglyphics	Make doorbell using a circuit (pressure switch and light)	Make a book mark out of fabric - applique with magnet
<b>Knowledge (National Curriculum Element)</b>	- Understand and apply the principles of a healthy and varied diet - Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] - Understand how key events and individuals in design and technology have helped shape the world.	- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	- Select from and use a wider range of materials according to their functional properties and aesthetic qualities
<b>Design (National Curriculum Element)</b>	Using knowledge of healthy eating, design a pizza with appropriate healthy toppings. Consider the traffic light system on packaging	Select appropriate materials to create a sturdy frame. Design 'sides' that will project light shapes.	To design a structure to pick up water from a river. Ensure the design is labelled with the mechanisms	Consider the purpose of the product and how we can make a product that could be written on	Create a technical drawing of the doorbell with key vocabulary labels. Consider what materials will be needed.	To design their own book mark in response to a theme or a brief. To make sure they label the design with technical language like stitches and applique.
<b>Make (National Curriculum Element)</b>	Using a written recipe, make a healthy pizza by measuring ingredients and rolling dough	Use materials chosen and tools to measure and cut wood. Attach the sides using an appropriate material that will hold.	Make a structure that can be used to pick up wood.	Make papyrus using papier mache techniques (Mouldable materials)	Work through plan to create the doorbell. Explain why they have used those materials.	Making a book mark in response to a set criteria, using different textile processes.
<b>Evaluate (National Curriculum Element)</b>	Calculate the traffic lights for the pizza, is it healthy? Do you need any more parts of the eatwell plate?	Check whether the lantern lights up, does the paper pattern project when lit?	Use a bucket of water to test the shaduf's to see which collected the most water.	When the paper has dried, use a pencil / pen to write on top. Is it a suitable medium for writing?	Test the doorbell to see whether it is fit for purpose compared to existing products.	Research - Find 2 book marks and analyse them using ACCESSFM. Write into a diary of manufacture (either individually or as a class) to reflect on manufacture at the end of each session.

<b>Technical Knowledge (National Curriculum Element)</b>	Analyse existing pizza products, understand the traffic light system on packaging. Measure and mix ingredients to create a base and cut toppings	Analyse existing lanterns, understand how they are made and which structures are more effective. How to measure and saw wood and sttach the pieces together	Analyse existing structures (Shaduf's). understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	Analyse existing products that they can write on. Which are best for that purpose? How were they created? How to make stiff, shell products, Materials can be mixed to cerate more desirbale characteristics	Use simple electrical circuits and componements to create a functional product.	Analysing existing products with ACCESSFM, learning different textile processes such as stitches, applique and reverse applique. Keeping a diary of the different sessions students participated in. Demonstrating high quality manufacturing techniques through the making of the bookmark.
<b>Suggested Sequence</b>	1. Study packaging of existing pizzas, what do the traffic light colours mean? Which is healthiest? Why? 2. Consider which toppings would make a healthier pizza. Write a recipe to make a pizza including a labelled diagram. 3. Make the pizza using the recipe. 4. Calculate the traffic lioghts for the pizzas, which was healthiest? How could it be healthier?	1. Research existing lanterns, what are they used for? How are they made? 2. Design a pattern for the sides of the lantern. Consider what products could be used to make the frame? 3. Use tools to cut and measure the wood 4. Use a light to check whether the lantern lights up and projects.	1. Research existing water collection techniques (Shaduf's, Well) 2. Design a way of collecting water using the strengths and weaknesses of the research, 3.Make the water collection, 4. Test the water collection device.	1. Research/explore current products that we use to write on. How were they made? How successful/unsuccessful are they? 2. Consider how you could create paper, what materials would you use? 3. Make the paper 4. Use the paper to write heiroglyphics (could be linked to some English writing)	1. Explore existing doorbells and lights, take them apart. How were they made? 2. Draw and label a circuit using technical vocabulary 3. Make the circuit, 4. Test the circuit compared to t he existing product, is it better?	1. Research 2 existing bookmarks and analyse with ACCESSFM. 2. Design a book mark based on a success criteria / design brief. 3. To manufacture the book mark using a variety of processes such as applique, reverse applique and different stitches. 4. Keep a diary / journal of the different sessions. Could be done individually or as a class.
<b>Vocab</b>	Measure, Roll, Mix, nutrition, eatwell plate, healthy, protein, carbohydrate	Measure, saw, shadow, light, measure, model, fold, joining, cut, stable, strong, product, strengthen, reinforce, appearance, qualities, accurate, accuracy	Lever, mechanism, linkage, pivot, pulley, assembling, body, rotary, strengthen, reinforce, stable, stiffen, cams, structure	Absorb, stiffen, bond, strong, join, strenght, weakness, flexible, medium	Light, Wire, Positive, Negative, Pressure, Switch, Connect, series circuit, connection, innovative, appealing, output, fault, insulator, battery, conductor	Applique, reverse applique, straight stitch, back stitch, cross stitch, blanket stitch, fabric, material properties
<b>Suggested ATL</b>	Thinking Skills - How can the product be imporved?	Self-management Skills - resilience when cutting as it is a new skill.	Research Skills - Finding existing ways of collecting water	Thinking Skills - consider the problems with current problems, how can they be solved?	Social Skills - working in groups to create a circuit	Research -Skills Finding good examples of book marks and analysing them
<b>Useful Links</b>					<a href="#">Diary of Manufacture (documenting each session)</a>	<a href="#">Diary of Manufacture (documenting each session)</a>
<b>Year 3 Skills</b>	Ongoing					
	<b>Design</b>	<b>Make</b>		<b>Evaluate</b>		
	Generate realistic ideas considering its purpose Design products beginning to take into account the needs of others	Order the main stages of making with some support Select suitable and appropriate tools, equipment, materials and components, beginning to think about their purpose Perform practical tasks, beginning to develop some accuracy		Begin to use their design criteria to evaluate their completed product Begin to evaluate existing products		
<b>Year 4 Skills</b>	Ongoing					
	<b>Design</b>	<b>Make</b>		<b>Evaluate</b>		
	Design products that take into account the needs and wants of particular individuals and groups Develop their own design criteria and use these to inform their ideas	Order the main stages of making Select suitable and appropriate tools, equipment, materials and components, thinking about their purpose Perform practical tasks with some accuracy		Use design criteria to evaluate their completed product Evaluate existing products		

	How the world works	Sharing the planet	Who we are	Where we are in place and time	How we express ourselves	How we organise ourselves
UKS2 Cycle B	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Project	Mechanical Mechanisms	Electrical Mechanisms	Cooking and Nutrition	Textiles	Textiles	Structural mechanisms
		Entertainment Media Box	Wire Loop Game	Making pizza at Pizza Express	Design a fair trade product	Create a fair trade product.
Knowledge (National Curriculum Element)	<ul style="list-style-type: none"> <li>- Understand that mechanical systems have an input, process and output.</li> <li>- Select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities</li> <li>- Select from a wide range of tools, equipment, materials and components, thinking about their purpose and functionality</li> </ul>	<ul style="list-style-type: none"> <li>- Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams</li> <li>- Apply their understanding of computing to program, monitor and control their product</li> </ul>	<ul style="list-style-type: none"> <li>- Understand and apply the principles of a healthy and varied diet</li> <li>- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>- Select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities</li> </ul>	<ul style="list-style-type: none"> <li>- 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</li> <li>- Select from and use a wider range of materials, including textiles, according to their functional properties and aesthetic qualities</li> <li>- Understand how key events and individuals in design and technology have helped shape the world.</li> </ul>	<ul style="list-style-type: none"> <li>- Select from and use a wider range of materials, including textiles, according to their functional properties and aesthetic qualities</li> <li>- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</li> </ul>	<ul style="list-style-type: none"> <li>- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and prototypes</li> <li>- Investigate and analyse a range of existing products</li> <li>- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> </ul>
Design (National Curriculum Element)	Design an innovative, functional and appealing media box that use cams and pulleys. Children will learn and draw on their knowledge of how cams and pulleys work and generate a design specification to enable them to clearly explain how their product will work using annotated sketches and diagrams, highlighting the materials they will use and why.	To design their own game in response to a theme or brief. To label their design using appropriate technical language like circuit, insulator and conductor.	Understand and design a pizza that applies the principles of a healthy and varied diet.	Use market research to inform their design, ensuring children understand what fair trade means. Identify features that will appeal to the intended audience and set a design criteria. Select materials carefully with the product's intended use in mind.	Use knowledge of key designers and their products to influence and enhance their designs from the previous term. make design decisions considering the resources available, using their market research to influence this. Think about the features of their design that will appeal to the intended user and use annotated sketches to articulate and justify this.	Understand engineering principles and research a variety of bridges, their designs and their inventors and how these have developed over time.
Make (National Curriculum Element)	Children will select from a wide range of tools, materials and components precisely to create a media box inclusive of cams and pulleys for the entertainment of younger children. They will produce a suitable list of tools and use them safely. Children will need to be resourceful with problems that arise and make adaptations as they go.	Children use appropriate materials to create a wire loop game in response to a design criteria.	Children understand and apply the necessary health and safety rules when working with food. Children make an appealing product for their intended audience, meeting a food design brief.	Revision and practise of basic stitches and evaluate their use before learning new and a variety of techniques that could be applied to their design idea.	Create a product/fashion garment using only recycled materials, using the techniques revised and learned in the previous term.	Through support from the Rochester Bridge Trust, follow and adapt detailed step-by-step plans, being resourceful with practical problems children may face and explaining their choices when selecting tools and equipment precisely.
Evaluate (National Curriculum Element)	Children will refer to their design criteria and specifications to evaluate their completed products through peer assessment.	Analyse the effectiveness of the game and identify strengths and areas for development - does it meet the success criteria? Does the product work? What did/did not work? Can the children suggest why? What would they do differently? Why were the materials used selected?	Sensory analysis of product to check it meets the design criteria. Consider what changes may be required to be made to improve the product and its overall taste and appearance.	Evaluate existing products and consider how well they have been made, the materials that have been used, how well they work, how they have been made and how they are fit for purpose.	Complete an evaluation to consider how well the children's products have been made, how well they fit, evaluate the materials used and how they fit.	Test and evaluate their bridge against the design specifications - is it safe? Can it withstand a person walking across it? Can it withstand more than one person on the bridge at one time? Why is it stable? What design features enable this?

<b>Technical Knowledge (National Curriculum Element)</b>	Understand how pulleys, gears and CAMs can be used to produce different types of movement and change the direction of the movement. Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).	Properties of materials. How electrical systems can be integrated into basic design concepts. Identify features of a design that will appeal to the intended user. Select materials carefully, considering the intended use of the product and its functionality. Clearly explain how parts of their design will work and how they are fit for purpose.	Draw on research to influence design. Explore how different ingredients may affect the overall product. Research key chefs. Importance of working safely. How to work in a kitchen. Equipment identification and use. Application of food safety and hygiene requirements. Food can be fresh, pre-cooked and packaged.	Draw on research to influence design. Use this research to identify features of a design that will appeal to the intended user. Make design decisions, considering the resources available. Select materials carefully, ensuring they are fit for purpose and considering the aesthetic qualities of the intended product. Create own design specifications. Explain choices and make modifications as they go (where necessary).	Use individual needs, wants and requirements for design. Make design choices regarding resources and select these materials carefully. Children make modifications as they go, ensuring they have selected appropriate materials that are fit for purpose. Children consider the aesthetics of their product, explaining their choices fully. Identify strengths and areas of development when evaluating, suggesting ways their product could be improved. Children will consider how different resources may have affected the product.	Children will understand how key events and individuals in design and technology have shaped the world. Children will apply their understanding of how to strengthen, stiffen and reinforce more complex structures to build a bridge. They will select from a range of materials and components, including construction materials, according to their functional properties. They will adhere to health and safety rules and regulations, ensuring they have the appropriate PPE to work safely.
<b>Suggested Sequence</b>	<ol style="list-style-type: none"> <li>1) Create an annotated design of game.</li> <li>2) Select tools and materials appropriate to fulfil the design brief.</li> <li>3) Make the entertainment box.</li> <li>4) Evaluate, considering the design brief and whether the product is fit for purpose.</li> </ol>	<ol style="list-style-type: none"> <li>1) Use research to understand what a wire loop game is and how it works.</li> <li>2) Design a wire loop game, suggesting what materials may be used and why.</li> <li>3) Create a wire loop game.</li> <li>4) Evaluate the effectiveness of the wire loop game.</li> </ol>	<ol style="list-style-type: none"> <li>1) Identify foods available and research common recipes to set own design criteria and recipe.</li> <li>2) Create a pizza.</li> <li>3) Analyse the product against design criteria, making suggestions of improvement and considering what worked well.</li> </ol>	<ol style="list-style-type: none"> <li>1) Research fair trade products that could be made and identify materials to be used.</li> <li>2) Revise stitching techniques.</li> <li>3) Evaluate own product against existing products and suggest how their design fits with those identified through market research.</li> </ol>	<ol style="list-style-type: none"> <li>1) Research key fashion designers and identify products they have created to influence and finalise their design.</li> <li>2) Identify the recyclable materials that will be used to form the products and the types of stitches that will be applied.</li> <li>3) In groups, agree on design and begin to make product.</li> <li>4) Evaluate product using a fashion show and peer assessment/feedback.</li> </ol>	<ol style="list-style-type: none"> <li>1) Research bridges, the different types of bridge structures, key inventors and the principles of bridge design.</li> <li>2) Build a bridge with external company.</li> <li>3) Test and evaluate bridge using class-designed criteria.</li> </ol>
<b>Vocab</b>	Assembly diagram, axle, bench hook, cam, clamp, component, dowel, drill bit, follower, frame, mechanism, set square, linkage, mark out, function	Insulator, circuit, conductor, electricity, flow, electrons	Seasonal, texture, flavour	Texture, material, stitch, fabric, sewing	Fasten, fabric, design, knot, properties, running-stitch, sew, seam, target audience, target customer, thread, unique	Stiffen, strengthen, reinforce, triangulation, stability, structure, apparatus, design brief, innovation, prototype, drawings, diagrams, functionality
<b>Suggested ATL</b>	Social Skills - working through collaboration and managing setbacks in the various stages of development Thinking Skills - creative thinking and reflection required to design, create and evaluate projects	Research Skills - interaction with various medias to support the design phase Thinking Skills - critical thinking skills to evaluate and overcome any issues that may be faced	Self-Management Skills - managing time and task effectively to ensure that ingredients do not become spoiled	Communication Skills - use literacy skills to gather and communicate information and listening, interpreting and speaking skills to ensure information can be exchanged with peers effectively	Research Skills - evaluate a series of designers and designs to inform own products Thinking Skills - critical thinking skills to evaluate product and creative thinking skills to generate novel ideas considering perspectives and feedback Social Skills - develop positive interpersonal relationships by supporting peers, providing feedback and managing setbacks	Thinking Skills - critical thinking skills to analyse and evaluate construction
<b>Useful Links</b>						
<b>Year 5 Skills</b>	<b>Design</b>		<b>Make</b>		<b>Evaluate</b>	
	Begin to use research to support the design of products Make design decisions considering time and resources		Create and follow a detailed step by step plan Select from and use a wider range of tools, equipment, materials and components, thinking about their purpose and functionality Perform practical tasks with mainly accuracy		Test and evaluate the final product Evaluate and discuss existing products	
<b>Year 6 Skills</b>	<b>Design</b>		<b>Make</b>		<b>Evaluate</b>	
	Design innovative, functional and appealing products when an intended audience in mind Develop simple design specifications to guide their thinking		Create, follow and adapt detailed step by step plans Select from and use a wider range of tools, equipment, materials and components, thinking about their purpose, functionality and aesthetic qualities Perform practical tasks accurately, using techniques that involves a number a steps		Test and evaluate their ideas and products against their original design specifications Complete thorough evaluations of existing products	

**Extra Curricular** LAT Bake Off  
Primary Engineer Competition