

Curricular Goal

Provide opportunities to design, make, evaluate and use technical knowledge when learning about cooking and nutrition, textiles, mechanisms, structures and electrical systems. Ensure and develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

Autumn Term 2							
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
	Cooking and	Textiles - Sewing.	Cooking and	Cooking and	Cooking and	Textiles - Sewing.	
Reception	Year 1 Cooking and nutrition. N.C • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from. Teddy Bears Picnic - Sandwiches and fruit skewers. 1. To learn about different types of picnic food and where they have come from. 2. To explore and taste different picnic food. 3. How to design a food skewer to take on a picnic. 4. To make picnic food using their design sheet. 5. Evaluating our picnic food.	Year 2 Textiles - Sewing. N.C Design • 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 Make • 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 Evaluate • explore and evaluate a range	Year 3 Cooking and nutrition. N.C • 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. Pizzas Pupils explore what makes a balanced diet and taste test combinations of different food groups before designing and making a pizza. 1. Explore different parts of a pizza. Where did pizza originate 2 are there	Year 4 Cooking and nutrition. N.C • 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. Bread/Focaccia - Adapting a recipe Pupils adapt a recipe by adding or altering the ingredients and then work in groups to create a final design that falls within a set budget and design brief. Look at Paul Hollywood – bread chef	 Year 5 Cooking and nutrition. N.C 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. Savoury Pasties Pupils explore what makes a balanced diet and taste test combinations of different food groups before designing and making a pasty. Explore different pasties- savoury/sweet. Where did they originate? Ingredients 	 Year o Textiles - Sewing. N.C 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. generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Make select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to 	
		evaluate their ideas and products against design criteria	different ways to make pizza? What are the class's favourites?	1. To investigate and evaluate bread products	in the pastry. 2. To examine, describe and categorise a variety of	their functional properties and aesthetic qualities. Evaluate	
				according to their characteristics.	pastry based products.	 Investigate and analyse a range of existing products. evaluate their ideas and 	



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Christmas Stocking Decoration 1. Running stitch In their introduction to sewing, children explore different examples of textiles and learn a simple running stitch. 2. Explore and discuss templates. Children create a simple template and cut out their fabric 3. Sew their fabric together using a simple running stitch 4. Design/research what the front of the stocking will look like. 5. Using their design ideas from the previous lesson, children add decorations to their stockings. 6. Evaluate finished product.	 To examine, describe and categorise a variety of bread based products. To examine, describe and categorise a variety of pizza toppings. To design a balanced healthy pizza. To be able to make a food product (pizza) based on a design. To be able to evaluate their food product. 	 To learn how bread products are an important part of a balanced diet and can be eaten in different ways. To find out which different ingredients are needed to make bread and focaccia and how ingredients can be altered and mixed to create different effects. To be able to design a bread (focaccia) product for a particular person or event. To be able to make bread based on a plan and design. To be able to evaluate a finished product. 	 3. To explore where ingredients for pasties come from - explore healthy foods. 4. To design a savoury pasty. 5. To be able to make a food product (savoury pasty) based on a design. 6. To be able to evaluate their food product. 	 products against their own design criteria and consider the views of others to improve their work. understand how key events and individuals in design and technology have helped shape the world. Drawstring bags 1. To investigate and analyse items made using textiles: the materials used and how they are made. 2. To explore some ways in which textiles are joined and separated. 3. To design an item made using textiles, and draw pattern pieces. 4. To use pattern pieces to measure, mark and cut fabric: to sew design elements according to a design. 5. To join fabric pieces by hand sewing. 6. To sew hems on an item made using textiles: to add design details.



Reception Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Mechanisms Nc Design uppeading moduli, for thereaks and other uses and opportune there ideas of through lange driving, draving, template, model ups and, opportune there ideas of through lange draving, draving, template, mode ups and, where appropriate, information and use a propriate, information and use a value a sequence to their formation and use a value of their products (for example, series circuits indomating draving, proving, explored draving, draving, proving, explored draving draving, and of their products (for example, series circuits indomating draving, proving, explored draving, draving, incorporating, switches, pattern incorporation, switches, pattern incorporating, switches, and resplored draving, or material, testing, and insting, and insthes, indingeroducts. Explore and evalue restarts. Evaluate	Summer Term 2							
Reception Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Machanisms Structures Structures Structures Electrical Systems Textual specing products Textual specing products Design Electrical Systems in their products [for example, specing products] Textual specing products Machanical Systems in their products [for example, specing products] Textual specing products Nc Design Nc Design - design purposed, uppeak products Textual specing products Textu								
Mechanisms Structures Textiles - Sewing Electrical Systems Textiles - Sewing Computing - to program, monitor and control - series purposeful, for themselves and other uses based on design criteria and communicate therit is to inform their particular, develop, model and communicate therit indeviduals or propuse. Net Descriteria (More appenging) (More a	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
[for example, levers, sliders, wheels and axles], in their products.stable.range of existing products. • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.2. To explore different structures - how to create a stable base and structure for the lighthouse.improve.1. Research -exploringBridges• understand how key events2. To explore different structures - how to create a stable base and structure for the lighthouse.improve.	Reception N.C Designed • de funct for th base • generation and d throw temp when inform Common Make • se of to perfit example joinini • set of example comparison comparison and i their • ever prod TECH	Year 1 Echanisms ign esign purposeful, ttional, appealing products themselves and other users ed on design criteria merate, develop, model communicate their ideas bugh talking, drawing, plates, mock-ups and, rre appropriate, rmation and immunication technology. ce elect from and use a range bols and equipment to form practical tasks [for mple, cutting, shaping, ing and finishing lect from and use a vide ge of materials and uponents, including struction materials, textiles ingredients, according to r characteristics xplore and evaluate a range xisting products uate valuate their ideas and ducts against design criteria HNICAL KNOWLEDGE	Year 2 Structures N.C Design • 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. Make • 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. Evaluate • explore and evaluate a range of existing products TECHNICAL KNOWLEDGE • build structures, exploring how they can be made stronger, stiffer and more	Summer term 2 Year 3 Textiles - Sewing N.C 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. • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Make • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. • 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. Evaluate • investigate and analyse a	Year 4 Electrical Systems TECHNICAL KNOWLEDGE - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Structures TECHNICAL KNOWLEDGE -apply their understanding of how to strengthen, stiffen and reinforce more complex structures Lighthouses (with a light). 1. Research -exploring existing lighthouses. What are they used for/why are they important	Year 5 Computing - to program, monitor and control TECHNICAL KNOWLEDGE - apply their understanding of computing to program, monitor and control their products. Micro:bits BBC Micro:bits - https://microbit.org/ge t-started/getting-starte d/introduction/ Projects - https://microbit.org/pr ojects/make-it-code-it/	Year 6 Mechanical Systems TECHNICAL KNOWLEDGE - -understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Cams/levers - moving toy in a box - Automata animals? 1. Research -exploring existing products. Explore how they move and the impact of the mechanism. 2. To explore different ways cams move, using different cam shapes. Practising skills- prototypes? 3. Design a mechanical cam toy. 4. Make their cam toy. 5. Decorate their cam toy. 6. Evaluate their cam toy and look for ways to	
	• ex [for ex prod Car: 1. R	xplore and use mechanisms example, levers, sliders, sels and axles], in their ducts. rs with axles	stronger, stiffer and more stable.	 investigate and analyse a range of existing products. evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. understand how key events 	 they important 2. To explore different structures - how to create a stable base and structure for the lighthouse. 3. Design their lighthouse 4. Make the lighthouse structure 		and look for ways to improve.	

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how the impact of 2. To exp to make Practisin prototy 3. Desig 4. Make 5. Decon vehicle. 6. Evalue vehicle a to impro	ney move and the t of the mechanism. xplore different ways se wheels move. ing skills- ypes? gn a toy vehicle. se their toy vehicle. orate their toy 2. uate their toy 2. uate their toy 2. and look for ways rove.	technology have helped shape the world. Pencil cases 1. To investigate a range of pencil cases. 2. To practise and compare sewing stitches. 3. To be able to sew embellishments to a piece of fabric. 4. To investigate ways of opening and closing pencil cases. To be able to design a pencil case. 5. To be able to make a pencil case based on a design. 6. To be able to evaluate a	 5. Create the light part of the lighthouse with an electrical circuit. 6. Evaluate their lighthouse and look for ways to improve. 	Learn
		6. To be able to evaluate a design and look for ways to improve.		