









DT LONG TERM PLANNING


	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	Art		Food		Structures	
NURSERY			<p style="text-align: center;">Cutting Fruit</p> <p>Use ready-made ingredients to mix and handle hygienically</p> <p>Begin to develop a food vocabulary using taste, smell, texture and feel</p> <p>Include fruit that is less likely to be known to the children.</p> <p>Begin to think about the need for a variety of foods in a diet</p> <p style="text-align: center;">INSPIRATION: Stories or poems about fruit</p> 		<p style="text-align: center;">Can I design and make a chair that is strong enough for the troll to sit on?</p>	
RECEPTION	Food		Textiles		Structures	
	<p style="text-align: center;">Plan and make a healthy Fruit Kebab</p> <p>Use ready-made ingredients to mix and handle hygienically</p> <p>Develop further a food vocabulary using taste, smell, texture and feel</p> <p>Include fruit that is less likely to be known to the children.</p>		<p style="text-align: center;">Design and make an apron for Little Red Hen – Weaving</p> <p>Describe what their products are for</p> <p>Say how their products will work</p> <p>Say how they will make their product suitable for their intended user</p>		<p style="text-align: center;">Can I design and make a stable chair for a super hero?</p>	



	<p>Develop understanding of the need for a variety of foods in a diet</p> <p>Link Chef: Phil Howard</p> 	<p>Develop practical understanding of words and ideas like over, under, in, out, up and down</p> <p>Link Textiles Artist: Annie Albers https://www.tate.org.uk/kids/make/cut-paste/learn-weave</p> 	
YEAR 1	Structures	Textiles	Food
	<p>Design and make a sailing boat</p> <p>DESIGN Understand the function and purpose of a boat Look at real life examples, what they look like and what they might be made of Use simple design criteria to help develop their ideas</p> <p>MAKE Understand the characteristics of effective materials and components, e.g. that wood floats</p> <p>Link Designer: Owen Clarke Design Sailing design yacht designers and naval architects : Owen Clarke Design - Yacht Design and Naval Architects</p>	<p>Design and make a hand puppet using a running stitch</p> <p>DESIGN Describe what their products are for Say how their products will work Say how they will make their products suitable for their intended user Use simple design criteria to develop their ideas</p> <p>MAKE Understand that a 3D textiles product can be assembled from two identical fabric shapes Children should begin to be able to measure, mark out, cut and shape a range of materials including textiles. Use a running stitch to join materials</p>	<p>Plan and make an appealing Fruit Smoothie</p> <p>Begin to understand that all food comes from plants or animals</p> <p>DESIGN Communicate these ideas through talk and drawings</p> <p>MAKE Assemble ingredients to prepare a variety of foods using simple tools Begin to develop being able to cut, peel or grate safely and hygienically</p> <p>Link Chef: Jamie Oliver</p>

		<p>Link Puppet Artist: https://dreamtalepuppets.org/2021/10/03/how-to-build-a-simple-glove-puppet/</p> 	
YEAR 2	Structures	Food	Mechanisms
	<p>Design and make a bridge</p> <p>INSPIRATION</p> <p>Look at existing bridges and understand their uses and purpose</p> <p>DESIGN</p> <p>Use knowledge of bridges to help create ideas for their own</p> <p>Describe what their bridge might be used for</p> <p>Communicate design ideas through talk or drawings</p> <p>Explain how they will put their product together using 'now' and 'next'</p> <p>Understand the characteristics of effective materials and components, e.g. materials most appropriate to create a stable structure</p> <p>MAKE</p>	<p>Plan and make a super salad</p> <p>DESIGN</p> <p>Use annotated sketches to communicate ideas for a particular user</p> <p>MAKE</p> <p>Prepare food safely and hygienically, measuring and weighing ingredients using measuring cups and digital scales.</p> <p>Know that food has to be farmed, grown elsewhere (e.g. home) or caught.</p> <p>Understand how to name and sort foods into the five groups in the 'Eat well plate.'</p> <p>Begin to use techniques such as cutting, peeling and grating.</p> <p>(Salad – Super Salads unit from DT Association)</p> <p>INSPIRATION</p> <p>Link Chef: Akis Petretzikis https://greekcitytimes.com/2016/11/02/introducing-greeces-most-popular-chef-akis-petretzikis-2/</p>	<p>Design and make a small wheeled trolley that will carry tools to use in the school garden or for a character in a story</p> <p>INSPIRATION</p> <p>Look at existing trolleys or vehicles with moving wheels and axles through play and understand their uses and purpose</p> <p>DESIGN</p> <p>Use knowledge of trolleys with wheels to create ideas for their own</p> <p>Describe what their trolley might be used to transport</p> <p>Communicate design ideas through drawings or annotated diagrams e.g. Draw an example of a wheeled product, stating the user and purpose, and labelling the main parts e.g. body, chassis, wheels, axles and axle holders</p> <p>MAKE</p> <p>Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing</p>

	<p>Use the correct technical vocabulary for the projects they are undertaking</p> <p>Understand how free standing structures can be made stronger, stiffer and more stable</p> <p>Link Structural Engineer:</p> <p>https://www.easternengineeringgroup.com/the-art-of-bridging-analyzing-the-design-principles-behind-iconic-structures/</p>		<p>Make their wheel and axle product using their design ideas and criteria as an ongoing guide</p> <p>Link Engineer: Henry Ford</p>
YEAR 3	Mechanisms	Food	Structures
	<p>Design and make a pop-up book with levers, sliders and pop up mechanisms (Levers and linkages) See DT Association Unit</p> <p>INSPIRATION Children investigate, analyse and evaluate books and, where available, other products which have a range of lever and linkage mechanisms</p> <p>DESIGN Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user. Use annotated sketches and prototypes to develop, model and communicate ideas.</p> <p>MAKE Recap - basic cutting, joining and finishing techniques with paper and card.</p>	<p>Design and make healthy a Salad Sandwich</p> <p>INSPIRATION Gather information about existing products available relating to your product. Visit a local supermarket and/or use the internet</p> <p>DESIGN Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance, taste, texture and aroma for an appealing product for a particular user and purpose.</p> <p>Use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</p> <p>Follow a recipe or plan own – outlining main stages - using appropriate utensils and measuring skills to prepare a savoury food.</p>	<p>Design, make and evaluate packaging for a gift for a family member See DT Association Unit</p> <p>INSPIRATION Look at existing packaging and understand their uses and purpose</p> <p>DESIGN Use knowledge of packaging to help create ideas for their own</p> <p>Understand the characteristics of effective materials and components, e.g. materials most appropriate to create a stable structure</p> <p>Communicate their ideas through annotated diagrams and sketches</p> <p>MAKE Use the correct technical vocabulary for projects they are undertaking</p>

	<p>Understand lever and linkage mechanisms</p> <p>Order the main stages of making.</p> <p>Select from and use appropriate tools with some accuracy to cut, shape and join paper and card.</p> <p>Select from and use finishing techniques suitable for the product they are creating.</p>	<p>Begin to know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Be able to use a range of techniques such as peeling, chopping, slicing and grating</p> <p>See DT Association Unit: Food – Healthy and varied diet</p> 	<p>To make strong, stiff structures using nets of 3D shapes with accuracy</p> <p>Link Gift Wrapping Company: M&S</p>
Year 4	<p>Textiles</p>	<p>Food</p>	<p>Mechanisms</p>
	<p>Design and make a stuffed toy for a child</p> <p>Understand that a 3D textiles product can be assembled from two identical fabric shapes</p> <p>Children should be able to measure, mark out, cut and shape a range of materials including textiles.</p> <p>To be able to use a running stitch and a blanket stitch</p> 	<p>Follow a recipe and bake some bread</p> <p>Follow a recipe, using appropriate utensils and measuring ingredients to the nearest gram accurately in order to prepare food.</p> <p>Some may write own recipe numbering steps, including equipment and ingredients used.</p> <p>Understand that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically.</p> <p>Further develop skills including mixing, kneading and baking.</p>	<p>Design and make a moving toy for small children (Pneumatics)</p> <p>(see DT Association)</p> <p>DESIGN</p> <p>Generate realistic and appropriate ideas and their own design criteria through discussion, focusing on the needs of the user.</p> <p>Use annotated sketches or exploded diagrams and prototypes to develop, model and communicate ideas.</p> <p>MAKE</p> <p>Order the main stages of making.</p> <p>Recap on simple mechanisms, such as sliders and levers, and simple structures</p>

			<p>Select from and use appropriate tools with some accuracy to cut and join materials and components such as tubing, syringes and balloons. • Select from and use finishing techniques suitable for the product they are creating</p> <p>Link Engineer: Robert William Thomson</p> <p>https://www.instructables.com/Simple-Pneumatic-Machine/</p> <p>(SEN)</p> <p>https://littlebinsforlittlehands.com/lego-balloon-car-diy-lego-building-kit/</p>
Year 5	Mechanisms	Textiles	Food
	<p>Design and make a moving mechanism using a cams mechanism</p> <p>INSPIRATION</p> <p>Discuss different types of movement: rotary, oscillating and reciprocating. Make simple models of different types of cams or have toys in which the cam mechanisms can be seen. Watch videos or photos of products.</p> <p>DESIGN</p> <p>Generate innovative ideas by carrying out research using surveys, interviews, questionnaires</p> <p>Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.</p> <p>MAKE</p>	<p>Design and make a Viking tunic or purse</p> <p>INSPIRATION</p> <p>Children generate ideas by carrying out research using e.g. surveys, interviews, questionnaires and the web</p> <p>DESIGN</p> <p>Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design.</p> <p>MAKE</p> <p>Children should be able to measure, mark out, cut and shape a range of materials including textiles.</p> <p>Understand and join fabrics using a running stitch, blanket stitch and over sewing</p>	<p>Create some soup celebrating culture and diversity</p> <p>DESIGN</p> <p>As designers, scale up or down a recipe, having accurately calculated ratios of carefully measured ingredients.</p> <p>Write a step-by-step recipe, including a list of ingredients, equipment and utensils</p> <p>MAKE</p> <p>Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients</p> <p>Understand that seasons may affect the food available.</p>

	<p>Recap on prior learning of axles, axle holders and wheels that are fixed or free moving</p> <p>Produce detailed lists of tools and materials. Formulate step-by-step plans</p> <p>Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished</p>	<p>(Recap on using a running stitch and blanket stitch from year 4)</p> <p>Use seam allowance as the area between the edge of the fabric and the line of stitches</p> 	<p>Understand how food is processed into ingredients that can be eaten or used in cooking.</p> <p>Gain confidence in the skills of peeling, chopping, slicing, grating and mixing.</p> <p>Link Chef: Mark Hix</p> 
Year 6	Structures	Mechanisms	Food
	<p>Design and make a model of an Air Raid Shelter</p> <p>INSPIRATION</p> <p>Gather information about the needs and wants of particular individuals and groups – e.g. the purpose of an Air Raid Shelter Research facts about shelter structures and techniques and how to create a stable structure fit for purpose</p> <p>DESIGN</p> <p>Use annotated sketches and cross-sectional drawings to communicate their ideas Identify features that will appeal to intended users Explain step by step instructions for how a structure can be made</p> <p>MAKE</p> <p>Choose materials based on the suitability of their properties. Choose suitable tools for making whilst explaining why they should be used.</p>	<p>Design and make a new toy vehicle for children in a particular age range (Pulleys or Gears – DT Assoc)</p> <p>INSPIRATION</p> <p>Investigate, analyse and evaluate existing everyday products and existing or pre-made toys that incorporate gear or pulley systems. Use videos and photographs of products</p> <p>DESIGN</p> <p>Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.</p> <p>MAKE</p> <p>Produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. • Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished</p>	<p>Design and market a healthy pizza for children on a balanced diet</p> <p>As designers, create and refine recipes that demonstrate a range of baking and cooking techniques, applying previously learned skills.</p> <p>Using their knowledge and skills know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically.</p> <p>Become increasingly skilled at peeling, chopping, slicing, grating, mixing, kneading and baking.</p> <p>Link Pizza Company: Pizza Express</p> <p>https://www.pizzaexpress.com/kids/school-visits</p>

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