



Nursery			
	<b>A Unique Child What a child might be doing:</b>	<b>Positive Relationships What adults might do</b>	<b>Enabling Environments What adults might provide</b>
<b>Birth to 5 Matters: Range 5</b>	<ul style="list-style-type: none"> <li>• Uses various construction materials, e.g. joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces</li> <li>• Uses tools for a purpose</li> </ul>	<ul style="list-style-type: none"> <li>• When children have a strong intention in mind, support them in thinking about what they want to create, the processes that may be involved and the materials and resources they might need.</li> <li>• Encourage children to notice changes in properties of media as they are transformed, e.g. through becoming wet, dry, flaky or fixed. Talk about what is happening, helping them to think about cause and effect.</li> <li>• Observe, analyse and document the processes involved in a child's creative and expressive processes, to support greater understanding, inform planning and share with families, carers, and other professionals.</li> <li>• Introduce new skills and techniques based on your observations and knowledge of children's interests and skills.</li> </ul>	<ul style="list-style-type: none"> <li>• Create a place where work in progress can be kept safely.</li> <li>• Share with children other designers' work that connects with their ideas, interests and experiences.</li> <li>• Introduce children to a wide range of sculpture.</li> <li>• Offer children opportunities to use their skills and explore concepts and ideas through their representations.</li> </ul>
<b>Birth to 5 Matters: Range 6</b>	<ul style="list-style-type: none"> <li>• Uses their increasing knowledge and understanding of tools and materials to explore their interests and enquiries and develop their thinking</li> <li>• Develops their own ideas through experimentation with diverse materials, e.g. light, projected image, loose parts, watercolours, powder paint, to express and communicate their discoveries and understanding.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw attention to children's choice and use of: materials, tools and techniques, experimentation with colour, design, texture, form and function.</li> <li>• Use individual, small group, and large group discussion to regularly engage children in explaining work in progress.</li> <li>• Recognise the importance of drawing in providing a bridge between imaginary play and writing, and that all are key forms of communication and tools for thinking.</li> </ul>	<ul style="list-style-type: none"> <li>• Offer opportunities to encounter and revisit key materials, e.g. drawing media, paper, paint, cardboard and clay in order to continue to develop expertise as tools for expression and communication.</li> <li>• Provide a range of joining materials (e.g. stapler, masking tape, glue, string, thread, split pins, treasury tags, card strips) to support children working in both 2D and 3D.</li> <li>• Supply open-ended props and materials that can easily be transformed in play.</li> </ul>
<b>Working toward Early Learning Goals (end of Reception)</b>	<p><b>Creating with materials</b></p> <ul style="list-style-type: none"> <li>• To begin to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> <li>• To begin to share their creations, explaining the process they have used.</li> <li>• To begin to make use of props and materials when role playing characters in narratives and stories.</li> </ul> <p><b>Fine motor skills</b></p> <ul style="list-style-type: none"> <li>• To begin to use a range of small tools, including scissors, paintbrushes and cutlery.</li> <li>• To begin to show accuracy and care when drawing.</li> </ul>		
<b>Continuous provision</b>	<ul style="list-style-type: none"> <li>• Scissors, glue, paintbrushes, different coloured card and paper</li> <li>• Cutlery in the home corner</li> <li>• Non fiction books about making and creating</li> <li>• A range of tools and materials</li> </ul>		



Reception			
Objectives			
ELG: Creating with Materials Children at the expected level of development will: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function			
ELG: Managing Self Manage their own basic hygiene and personal needs, including ... understanding the importance of healthy food choices.			
	Autumn - Junk modelling	Spring - Food	Summer - Textiles
Brief	<i>Junk modelling</i>	<i>Soup</i>	<i>Bookmarks</i>
Design	<ul style="list-style-type: none"> <li>• Making verbal plans and material choices.</li> <li>• Developing a junk model.</li> </ul>	<ul style="list-style-type: none"> <li>• Designing a soup recipe as a class.</li> <li>• Designing soup packaging.</li> </ul>	<ul style="list-style-type: none"> <li>• Discussing what a good design needs.</li> <li>• Designing a simple pattern with paper.</li> <li>• Designing a bookmark.</li> <li>• Choosing from available materials.</li> </ul>
Make	<ul style="list-style-type: none"> <li>• Improving fine motor/scissor skills with a variety of materials.</li> <li>• Joining materials in a variety of ways (temporary and permanent).</li> <li>• Joining different materials together.</li> <li>• Describing their junk model, and how they intend to put it together.</li> </ul>	<ul style="list-style-type: none"> <li>• Chopping plasticine safely.</li> <li>• Chopping vegetables with support.</li> </ul>	<ul style="list-style-type: none"> <li>• Developing fine motor/cutting skills with scissors.</li> <li>• Exploring fine motor/threading and weaving (under, over technique) with a variety of materials.</li> <li>• Using a prepared needle and wool to practise threading.</li> </ul>
Evaluate	<ul style="list-style-type: none"> <li>• Giving a verbal evaluation of their own and others' junk models with adult support.</li> <li>• Checking to see if their model matches their plan.</li> <li>• Considering what they would do differently if they were to do it again.</li> <li>• Describing their favourite and least favourite part of their model.</li> </ul>	<ul style="list-style-type: none"> <li>• Tasting the soup and giving opinions.</li> <li>• Describing some of the following when tasting food: look, feel, smell and taste.</li> <li>• Choosing their favourite packaging design and explaining why.</li> </ul>	<ul style="list-style-type: none"> <li>• Reflecting on a finished product and comparing to their design.</li> </ul>
Technical knowledge	<ul style="list-style-type: none"> <li>• To know there are a range to different materials that can be used to make a model and that they are all slightly different.</li> <li>• Making simple suggestions to fix their junk model.</li> </ul>	Cooking and nutrition <ul style="list-style-type: none"> <li>• To know that soup is ingredients (usually vegetables and liquid) blended together.</li> <li>• To know that vegetables are grown.</li> <li>• To recognise and name some common vegetables.</li> <li>• To know that different vegetables taste different.</li> <li>• To know that eating vegetables is good for us.</li> <li>• To discuss why different packages might be used for different foods.</li> </ul>	<ul style="list-style-type: none"> <li>• To know that a design is a way of planning our idea before we start.</li> <li>• To know that threading is putting one material through an object.</li> </ul>
Key Vocab	<i>Materials, cut, join, stick, plan, design, idea, choose</i>	<i>Vegetable, healthy, unhealthy, cut, peel,</i>	<i>Design, change, threading, pattern</i>



Year 1			
Objectives			
	Autumn - Mechanisms	Spring - Structures	Summer - Cooking
<b>Brief</b>	<i>To design and make a superhero vehicle</i>	<i>To design and make a skyscraper</i>	<i>To design and make a healthy snack</i>
<b>Explore</b>	<ul style="list-style-type: none"> <li>To explore a range of existing products with wheels and axles (what they are used for, how they work and materials used)</li> </ul> <p><i>Give opportunities in continuous provision to play with toys which have wheels and axles</i></p>	<ul style="list-style-type: none"> <li>To explore buildings in a range of contexts (e.g. home, school, skyscrapers, imaginary) and understand their design purpose</li> <li>To compare building design and discuss them using terms <b>strong, stiff, stable</b></li> </ul> <p><i>Trip idea: Shard Gherkin/Leadenhall Building</i></p>	<ul style="list-style-type: none"> <li>To identify whether foods come from an animal or a plant</li> <li>To identify fruits and vegetables that grow in the school garden</li> <li>To name and sort foods into the five food groups</li> </ul>
<b>Design</b>	<ul style="list-style-type: none"> <li>To design a purposeful and functional product based on given design criteria</li> <li>To discuss their ideas</li> </ul>	<ul style="list-style-type: none"> <li>To design a purposeful and functional building based on given design criteria</li> <li>To draw a labelled picture of their idea</li> </ul>	<ul style="list-style-type: none"> <li>To generate ideas by drawing on their own experiences</li> <li>To draw a labelled picture of their healthy snack</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>To select tools to cut and join and explain their choices</li> <li>To choose suitable materials and explain their choices</li> <li>To begin to use finishing techniques which make their product look good</li> </ul>	<ul style="list-style-type: none"> <li>To explore how to make a building stronger, stiffer and more stable</li> <li>To measure, mark out and cut materials</li> <li>To assembly, join and combine materials</li> </ul>	<ul style="list-style-type: none"> <li>To choose ingredients for my snack and explain their choices</li> <li>To peel and cut fruit and vegetables safely</li> <li>To prepare their snack hygienically</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>To talk about their product, linking it to what they were asked to do</li> <li>To begin to talk about what could make their product better</li> </ul>	<ul style="list-style-type: none"> <li>To make simple judgements about their product against the design criteria</li> </ul>	<ul style="list-style-type: none"> <li>To explain what they liked and disliked about their snack</li> </ul>
<b>Key Vocab</b>	<i>mechanism, wheel, axle, join, finish</i>	<i>strong, stiff, stable, cut, join, finish</i>	<i>healthy, unhealthy, varied, cut, peel, hygiene</i>



## Year 2

### Objectives

	Autumn - Mechanisms	Spring - Structures	Summer - Cooking
<b>Brief</b>	<i>To design and make a bus</i>	<i>To design and make a bridge</i>	<i>To design and make a Jamaican recipe</i>
<b>Explore</b>	<ul style="list-style-type: none"> <li>To explore and evaluate a range of existing products with wheels and axles.</li> <li>To identify the purpose of different types of vehicles and their features</li> </ul>	<ul style="list-style-type: none"> <li>To explore and evaluate a range of structures</li> <li>To discuss materials of uses of existing structures</li> </ul>	<ul style="list-style-type: none"> <li>To identify whether food has been farmed, reared or caught in the UK</li> <li>To identify some foods are home-grown</li> <li>To name and sort foods into the five food groups</li> <li>To identify foods commonly used in Jamaican cooking</li> </ul> <p><i>Trip idea: Vauxhall City Farm</i></p>
<b>Design</b>	<ul style="list-style-type: none"> <li>To design a purposeful and functional product based on given design criteria.</li> <li>To create mock-ups to help develop my own design ideas</li> <li>To explain how my product will be suitable for my intended user</li> </ul>	<ul style="list-style-type: none"> <li>To design a purposeful and functional structure based on given design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>To use the basic principles of a healthy and varied diet to plan their dishes</li> <li>To plan a dish based on the foods sensory characteristics</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>To make a purposeful and functional product based on given design criteria.</li> <li>To choose suitable materials and explain my choices depending on characteristics</li> <li>To select tools to cut and join materials</li> <li>To select tools to finish my product to make it look good</li> </ul>	<ul style="list-style-type: none"> <li>To make a purposeful and functional structure based on given design criteria.</li> <li>To measure, mark out, cut and shape materials and components</li> <li>To describe the tools they use and why</li> <li>To choose suitable materials based on their physical characteristics (focus on materials which are strong, stiff and stable)</li> </ul>	<ul style="list-style-type: none"> <li>To make a healthy and varied dish</li> <li>To peel, cut and grate foods with increasing confidence</li> <li>To explain hygiene and how to keep a hygienic kitchen</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>To make simple judgments about their products against the design criteria</li> </ul>	<ul style="list-style-type: none"> <li>To evaluate their ideas and products against the design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>To describe what went well, considering the design criteria</li> </ul>
<b>Key Vocab</b>	<i>Friction, mechanism, wheel, axle, chassis, capacity</i>	<i>strong, stiff, stable, cut, join, finish</i>	<i>carbohydrates, protein, dairy, recipe, fats and sugars, grate</i>



Year 3			
Objectives			
	Autumn - Structures (textiles)	Spring - Mechanisms	Summer - Cooking
<b>Brief</b>	<i>To design and sew a Stone Age bag</i>	<i>To design and make a machine to assemble the Pyramids</i>	<i>To design and cook an Indian meal</i>
<b>Explore</b>	<ul style="list-style-type: none"> <li>· To investigate and analyse a range of existing products and explore the structure of clothing</li> <li>· To evaluate textile products and examine why materials have been chosen</li> </ul> <p><i>Key events/individuals: Early clothing</i></p>	<ul style="list-style-type: none"> <li>· To investigate and analyse a range of existing products and explore the uses of pulleys through history</li> </ul> <p><i>Key events/individuals: Pyramids</i></p>	<ul style="list-style-type: none"> <li>· To begin to understand that food comes from the UK and the wider world</li> <li>· To describe how a healthy diet is about variety and balance</li> <li>· To identify whether food has been farmed, reared or caught</li> </ul>
<b>Design</b>	<ul style="list-style-type: none"> <li>· To develop the design criteria and design a functional product that is fit for purpose and aimed at particular individuals or groups.</li> <li>· To communicate ideas through discussion</li> <li>· To create a class pattern to plan final product</li> </ul>	<ul style="list-style-type: none"> <li>· To develop the design criteria and design a functional product that is fit for purpose and aimed at particular individuals or groups.</li> <li>· To generate an annotated sketch of their product</li> <li>· To create a class prototype</li> </ul>	<ul style="list-style-type: none"> <li>· To understand and apply the principles of a healthy and varied diet</li> <li>· To create a plan which shows order, equipment, ingredients needed</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>· To join textiles in different ways</li> <li>· To create a 3D textile product by assembling two identical fabric shapes</li> <li>· To choose textiles carefully considering functionality</li> <li>· To mark out, measure and cut materials</li> </ul>	<ul style="list-style-type: none"> <li>· To cut and shape materials</li> <li>· To assemble and join materials</li> <li>· To incorporate a fixed pulley system into their product</li> </ul>	<ul style="list-style-type: none"> <li>· To peel, chop, slice and grate foods with increasing precision</li> <li>· To cook a savoury dish using a heat source (stove top)</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>· To evaluate ideas and products against my own design criteria and consider the views of others to improve their work</li> </ul>	<ul style="list-style-type: none"> <li>· To evaluate ideas and products against my own design criteria and consider the views of others to improve their work</li> </ul>	<ul style="list-style-type: none"> <li>· To use the principles of a healthy and varied diet to evaluate their dishes</li> </ul>
<b>Key Vocab</b>	<i>woven, sew, textile, pattern, running stitch</i>	<i>pulley, axle, load, lift, force, prototype</i>	<i>five food groups, grown, reared, caught, savoury</i>



Year 4			
Objectives			
	Autumn - Mechanisms	Spring - Cooking	Summer - Structures
<b>Brief</b>	<i>To design and make a trap to contain the Iron Man</i>	<i>To design and make a healthy vegan meal</i>	<i>To design and make a volcano safe building</i>
<b>Explore</b>	<ul style="list-style-type: none"> <li>To investigate and analyse a range of existing products which use pulleys</li> <li>To examine materials chosen and explain why</li> </ul>	<ul style="list-style-type: none"> <li>To understand a recipe can be adapted by adding/substituting ingredients</li> <li>To research chefs who cook plant-based dishes</li> </ul> <p><b>Key individuals:</b> Meera Sodha &amp; Kirk Haworth</p>	<ul style="list-style-type: none"> <li>To investigate and analyse existing disaster proof designs</li> </ul>
<b>Design</b>	<ul style="list-style-type: none"> <li>To develop the design criteria and design a functional and appealing product that is fit for purpose and aimed at particular individuals or groups.</li> <li>To generate an annotated sketch of their product</li> <li>To create a class prototype</li> </ul>	<ul style="list-style-type: none"> <li>To design a menu considering the dietary requirements of their user</li> <li>To understand and apply the principles of a healthy and varied diet (five food groups)</li> <li>To develop a clear schedule of what has to be done and how to use equipment and processes</li> </ul>	<ul style="list-style-type: none"> <li>To develop the design criteria and design a functional and appealing product that is fit for purpose and aimed at particular individuals or groups.</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>To make a functional and aesthetically appealing product</li> <li>To use a system of pulleys to create movement</li> <li>To select suitable tools and equipment and explain their choices</li> <li>To cut and shape materials</li> <li>To assemble, join, and combine materials</li> </ul>	<ul style="list-style-type: none"> <li>To prepare and cook a variety of predominantly savoury dishes using a heat source</li> <li>To peel, chop, slice and mix</li> <li>To prepare and cook food safely and hygienically</li> </ul>	<ul style="list-style-type: none"> <li>To select materials carefully, considering intended use of product and appearance</li> <li>To measure accurately to ensure precision</li> <li>To reinforce and strengthen a 3D frame to ensure product is strong and fit for purpose</li> <li>To apply finishing techniques</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>To evaluate their ideas and products against their own design criteria to improve their work.</li> </ul>	<ul style="list-style-type: none"> <li>To use the principles of a healthy and varied diet to evaluate their dishes.</li> </ul>	<ul style="list-style-type: none"> <li>To evaluate their products against their own design criteria and consider the views of others to improve their work.</li> </ul>
<b>Key Vocab</b>	<i>pulley, axle, load, lift, force, aesthetics</i>	<i>vegan, dietary requirement, chop, slice, plant-based</i>	<i>architect, prototype, stiffen, strengthen, reinforce, aesthetics</i>



Year 5			
Objectives			
	Autumn - Cooking	Spring - Structures (textiles)	Summer - Structures
<b>Brief</b>	<i>To design and make an appetising menu using seasonal ingredients</i>	<i>To design and make a quilt</i>	<i>To design and make a watermill</i>
<b>Explore</b>	<ul style="list-style-type: none"> <li>To understand that seasons may affect food availability</li> <li>To understand how food is processed into ingredients that can be eaten or used in cooking</li> <li>To identify foods that are reared, caught, grown or processed in the UK and wider world</li> </ul>	<ul style="list-style-type: none"> <li>To investigate and analyse a range of existing products and explore the structure of textiles</li> <li>To consider the impact of key designers (Faith Ringgold)</li> </ul> <p><b>Key events/individuals:</b> Faith Ringgold</p>	<ul style="list-style-type: none"> <li>To investigate and analyse a range of existing Windmills with a focus on their purposes, materials and users</li> </ul> <p><b>Key events/individuals:</b> Invention of the windmill <b>Trip idea:</b> Brixton Windmill</p>
<b>Design</b>	<ul style="list-style-type: none"> <li>To understand and apply the principles of a healthy and varied diet</li> <li>To understand how recipes can be adapted to improve appearance, taste, texture and aroma</li> <li>To develop a clear schedule of what has to be done &amp; how to use equipment &amp; processes for efficiency</li> </ul>	<ul style="list-style-type: none"> <li>To consider the user's wants and needs and aesthetics when choosing textiles</li> <li>To create a pattern to plan design</li> <li>To make design decisions based on time and resources</li> </ul>	<ul style="list-style-type: none"> <li>To 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>To communicate their designs through exploded diagrams</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>To prepare and cook a variety of predominantly savoury dishes using a heat source.</li> <li>Use a range of techniques (e.g. peeling, chopping, slicing, grating, mixing, spreading, kneading and baking) accurately and safely</li> </ul>	<ul style="list-style-type: none"> <li>To choose textiles carefully considering appearance and functionality</li> <li>To mark out, measure and cut materials</li> <li>To use a range of stitches (running stitch, blanket stitch)</li> <li>To choose the appropriate stitch for the job (e.g. strengthening or decorative)</li> </ul>	<ul style="list-style-type: none"> <li>To make a functional product</li> <li>To select from a wider range of tools and equipment to perform a range of practical tasks (e.g. cutting, shaping, joining and finishing)</li> <li>To select from a wider range of materials and components according to both their functional properties and their aesthetic qualities</li> <li>To reinforce and strengthen a 3D frame</li> </ul>
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>To evaluate finished products against specifications, considering purpose and appearance</li> <li>To consider how they could improve the menu items</li> </ul>	<ul style="list-style-type: none"> <li>To identify the strengths and areas for development in their final product</li> </ul>	<ul style="list-style-type: none"> <li>To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</li> </ul>
<b>Key Vocab</b>	<i>seasonal, processed, efficient, availability, appetising</i>	<i>quilt, pattern, running stitch, blanket stitch, decorative</i>	<i>exploded diagram, function, innovation, aesthetics</i>



Year 6			
Objectives			
	Autumn - Structures (textiles)	Spring - Cooking	Summer - Electrical Systems
<b>Brief</b>	<i>To design and make a quilt with embellishments</i>	<i>To design and make an inclusive meal with a low food mile footprint on a budget</i>	<i>To design and make an electric car</i>
<b>Explore</b>	<ul style="list-style-type: none"> <li>To investigate and analyse a range of modern buildings and explore their structure, purpose, building materials and users</li> <li>To consider the impact of key designers</li> </ul> <p><i>Key individuals: Bisa Butler and Michael James</i></p>	<ul style="list-style-type: none"> <li>To know where and how a variety of ingredients are grown, reared, caught, processed</li> <li>To identify the distance some food travels to get to the UK</li> <li>To understand the importance of fair-trade ingredients</li> <li>To research chefs who focus on low-food mile recipes</li> </ul> <p><i>Key individuals: Siding Bakery (Norfolk) and Imad's Syrian Kitchen</i></p>	<ul style="list-style-type: none"> <li>To investigate and analyse a range of existing products and explore the uses of electrical systems.</li> </ul> <p><i>Key events/individuals: History of the car</i></p>
<b>Design</b>	<ul style="list-style-type: none"> <li>To create a pattern to plan design</li> <li>To make design decisions based on time and resources</li> </ul>	<ul style="list-style-type: none"> <li>To understand and apply the principles of a healthy and varied diet and consider affordability and budgets in cooking.</li> <li>To consider substitutions for those with dietary restrictions</li> <li>To produce lists of equipment and ingredients needed</li> <li>To formulate step by step plans as a guide and consider how to adapt these if something goes wrong</li> </ul>	<ul style="list-style-type: none"> <li>To 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>To communicate their ideas through cross-sectional diagrams</li> </ul>
<b>Make</b>	<ul style="list-style-type: none"> <li>To use a range of stitches (running stitch, backstitch, blanket stitch)</li> <li>To choose the appropriate stitch for the job (e.g. strengthening or decorative)</li> <li>To mark out, measure and cut materials</li> <li>To attach materials to the quilt to enhance design</li> </ul>	<ul style="list-style-type: none"> <li>To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques using a heat source (peeling, chopping, slicing, grating, mixing, spreading, kneading and baking)</li> <li>To independently select the appropriate tools to perform cooking techniques</li> </ul>	<ul style="list-style-type: none"> <li>To make a functional and aesthetically appealing product</li> <li>To incorporate an electrical system with a switch and a motor</li> <li>To select from a wide range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing)</li> <li>To select from a wide range of materials and components according to their functional properties and aesthetic qualities</li> </ul>
<b>Evaluate</b>		<ul style="list-style-type: none"> <li>To consider the views of others to improve their work</li> </ul>	<ul style="list-style-type: none"> <li>To identify the strengths and areas for development in their final product</li> </ul>
<b>Key Vocab</b>	<i>embellishment, strengthen, man-made fibre, natural fibre, patchwork</i>	<i>budget, affordability, chop, slice, dice, knead</i>	<i>pulley, axle, functionality, aesthetic- we need more vocab in here!!</i>