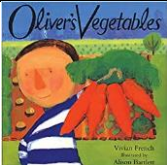

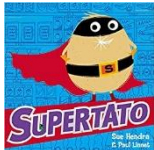


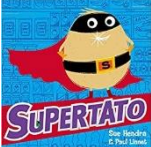
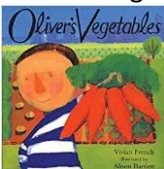
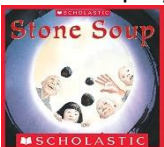

# Curriculum Map

## Design Technology

YEAR A			
EYFS	Autumn: Soup	Spring: Puppets	Summer: Plant Homes
	<b>Links to previous learning</b>	<b>Links to previous learning</b>	<b>Links to previous learning</b>
	Explore vegetables e.g. touch, smell and taste	Explore puppets Listen to stories told with puppets	Experience of using construction kits to build towers and frameworks.
	<b>Knowledge</b>	<b>Knowledge</b>	<b>Knowledge</b>
	I know the names of some vegetables I know that vegetables are a part of plants that grow	I know puppets can be used to tell stories	I know a plant needs a home
	<b>Key Skills</b>	<b>Key Skills</b>	<b>Key Skills</b>
	I can use a range of tools competently, safely and confidently I can use core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. I can use a range of small tools, including scissors and cutlery I can use one-handed tools and equipment	I can use puppets to tell stories I can use a preprepared templated puppets to join two pieces together by lacing the two pieces together	I can use some recycled materials to use as a plant home I can use Duplo to build a plant home I can draw my plant home and talk about how it 'holds' my plant
	<b>Vocabulary</b>	<b>Vocabulary</b>	<b>Vocabulary</b>
	Fork, knife, spoon, fruit, banana, strawberry, blueberry, cucumber, watermelon, mango, orange	puppets, stick puppets, shadow puppets, hand puppets	Plant, plant pot, yoghurt pot, recycle, reuse,
	<b>Cultural opportunities</b>	<b>Cultural opportunities</b>	<b>Cultural opportunities</b>
	Diwali	Share puppets with another class Use puppets in continuous provision	Visit Leighton Moss
	<b>Key values</b>	<b>Key values</b>	<b>Key values</b>
	<b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork. <b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy. <b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.	<b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork. <b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy. <b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.	<b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork. <b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy. <b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.
	<b>Book list &amp; Resources</b>	<b>Book list &amp; Resources</b>	<b>Book list &amp; Resources</b>
	 <p>Oliver's Vegetables by Vivian French Vegetable Soup Recipe (teacher made) - Twinkl Vegetable Soup Recipe Cards (teacher made) - Twinkl Fruit and Vegetable Shopping List Cards (teacher made) (twinkl.co.uk)</p>	1,418 Top "Puppets" Teaching Resources curated for you (twinkl.co.uk) Classroom puppets in continuous provision	
Year A			
1	Autumn: Food, vegetable soup 'Preparing fruit and vegetables'	Spring: Textiles, felt finger puppets 'Templates and joining'	Summer: Structures, Plant Homes 'Freestanding structures'
	<b>Links to previous Learning</b>	<b>Links to previous Learning</b>	<b>Links to previous Learning</b>
	Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance, taste and smell. Experience of cutting soft fruit and vegetables using appropriate utensils. Experience growing plants	Explored and used different fabrics. Cut and joined fabrics with simple techniques (felt Christmas ornaments) Thought about the user and purpose of products	Experience of using construction kits to build walls, towers and frameworks. Experience of using of basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card. Experience of different methods of joining card and paper.
	<b>Knowledge</b>	<b>Knowledge</b>	<b>Knowledge</b>
	I know where a range of fruit and vegetables come from e.g. farmed or grown at home.	I know and understand how simple 3-D textile products are made, using a template to create two identical shapes.	I know how to make freestanding structures stronger, stiffer and more stable.

	<p>I know some characteristics of a range of vegetables, e.g. colour, texture and taste.</p> <p>I know some simple utensils and equipment used in food preparation, e.g. knife, bowl, peeler, grater, blender etc</p> <p>I know and understand the basic principles of a healthy and varied diet to prepare dishes, including how vegetables are part of <i>The Eatwell Plate</i>.</p> <p>I know technical and sensory vocabulary relevant to the project.</p> <p>I know the basic hygiene for food preparation, e.g. wash my hands, tie hair back, a clean bench etc</p> <p>I know to use equipment safely, e.g. knives, graters, peelers etc</p>	<p>I know and understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling.</p> <p>I know different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons.</p> <p>I know and use technical vocabulary relevant to the project.</p>	<p>I know the order in which a structure is made.</p> <p>I know and use technical vocabulary relevant to the project.</p>
	<b>Key Skills</b>	<b>Key Skills</b>	<b>Key Skills</b>
	<p><b>Designing</b></p> <p>Design appealing products for a particular user based on simple design criteria.</p> <p>I can generate initial ideas through investigating a variety of vegetables.</p> <p>I can communicate these ideas through talk and drawings.</p> <p><b>Making</b></p> <p>I can begin to use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely.</p> <p>I can select from a range of vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product.</p> <p><b>Evaluating</b></p> <p>I can taste and evaluate a range of fruit and vegetables to begin to determine the intended user’s preferences.</p> <p>I can begin to evaluate ideas and finished products against design criteria, including intended user and purpose.</p> <p>I can begin to demonstrate how to work safely and hygienically, using tools, equipment, techniques and ingredients appropriate to the task.</p>	<p><b>Designing</b></p> <p>I can design a functional and appealing product for a chosen user and purpose based on simple design criteria.</p> <p>I can generate, develop, model and communicate my ideas as appropriate through talking, drawing, templates and information and communication technology.</p> <p><b>Making</b></p> <p>I can begin to select from and use a range of tools and equipment to begin to perform practical tasks such as marking out, cutting, joining and finishing.</p> <p>I can begin to select from and use textiles according to their characteristics.</p> <p><b>Evaluating</b></p> <p>I can explore and evaluate a range of existing textile products relevant to the project being undertaken.</p> <p>I can begin to evaluate my ideas throughout and my final products against original design criteria.</p>	<p><b>Designing</b></p> <p>I can generate ideas based on simple design criteria and my own experiences, explaining what they could make.</p> <p>I can develop, model and communicate their ideas through talking, mock-ups and drawings.</p> <p><b>Making</b></p> <p>I can plan by suggesting what to do next.</p> <p>I can begin to select and use tools, skills and techniques, explaining my choices.</p> <p>I can begin to make choices of new and reclaimed materials and construction kits to build my structures.</p> <p>I can begin to use simple finishing techniques suitable for the structure I am creating.</p> <p><b>Evaluating</b></p> <p>I can explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings.</p> <p>I can evaluate my product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria</p>
	<b>Vocabulary</b>	<b>Vocabulary</b>	<b>Vocabulary</b>
	<p><b>design, evaluate, criteria</b></p> <p>planning, investigating, tasting, vegetables including; onion, spring onion, parsnip, brussels sprouts, mushroom, aubergine, courgette, healthy, healthy diet, allergy, intolerance, vitamins and minerals, knife - sharp, blunt, slicing, cutting, peeler, peeling, grater, grating, squeezing, blender, pan, simmer, boil, fry pan, fry, soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core,</p>	<p><b>suitable, design brief, design criteria, ideas, make, evaluate, user, purpose</b></p> <p>puppets, needle, thread, eye of the needle, pins, fabric glue, knot, stitch, running stitch, trim, cut, fabric, textiles, felt, fabric, template, pattern pieces, mark out, join, decorate, finish, features, buttons, wool, sequins, fabric paint, suitable, quality mock-up,</p>	<p><b>suitable, design brief, design criteria, ideas, make, evaluate, user, purpose, product, function, recycled, reclaimed, repurpose</b></p> <p>cut, fold, join, fix, structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, circle, triangle, square, rectangle, cuboid, cube, cylinder,</p> <p>workbench, vice, safety goggles, hammer, saw, nails</p>
	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>
	Diwali	Book Day/Week	Visit Leighton Moss
	<b>Key values</b>	<b>Key values</b>	<b>Key values</b>
	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p>	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p>	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p>
	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>

	<p>The Eatwell Plate Supertato By Sue Hedra</p>  <p>Oliver’s Vegetables by Vivian French</p>  <p>Stone Soup by Jon J Muth</p>  <p>Vegetable Soup Recipe (teacher made) - Twinkl Vegetable Soup Recipe Cards (teacher made) - Twinkl FAQs - Chilled Food Association</p>	<p>Pinocchio Joining and fastening fabrics - PowerPoints YR1/2 - D&amp;T Association (designtechnology.org.uk) <a href="https://kids.kiddle.co/Puppet">https://kids.kiddle.co/Puppet</a> (puppet facts) <a href="https://kids.kiddle.co/Felt">https://kids.kiddle.co/Felt</a> (felt facts) Running stitch - <a href="https://www.youtube.com/watch?v=i9aaG89s0bo">https://www.youtube.com/watch?v=i9aaG89s0bo</a> <a href="https://www.twinkl.co.uk/resource/how-to-cut-felt-accurately-craft-instructions-t-tc-1638810032">https://www.twinkl.co.uk/resource/how-to-cut-felt-accurately-craft-instructions-t-tc-1638810032</a></p>	 <a href="https://www.sunhatsandwellieboots.com/2020/03/10-simple-recycled-plant-pots-for-kids.html">https://www.sunhatsandwellieboots.com/2020/03/10-simple-recycled-plant-pots-for-kids.html</a>
YEAR A			
2	<p><b>Autumn: Food, vegetable soup ‘Preparing fruit and vegetables’</b></p>	<p><b>Spring: Textiles, felt finger puppets ‘Templates and joining’</b></p>	<p><b>Summer: Structures, Plant Homes ‘Freestanding structures’</b></p>
	<p><b>Links to previous Learning</b></p> <p>Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance, taste and smell. Experience of cutting soft fruit and vegetables using appropriate utensils. Experience growing plants</p> <p><b>(layered fruit plate)</b></p>	<p><b>Links to previous Learning</b></p> <p>Explored and used different fabrics. Cut and joined fabrics with simple techniques (felt Christmas ornaments) Thought about the user and purpose of products</p>	<p><b>Links to previous Learning</b></p> <p>Wheels and axels</p>
	<p><b>Knowledge</b></p> <p>I know where a range of fruit and vegetables come from e.g. farmed or grown at home. I know some characteristics of a range of vegetables, e.g. colour, texture and taste. I know some simple utensils and equipment used in food preparation, e.g. knife, bowl, peeler, grater, blender etc I know and understand the basic principles of a healthy and varied diet to prepare dishes, including how vegetables are part of <i>The Eatwell Plate</i>. I know technical and sensory vocabulary relevant to the project. I know the basic hygiene for food preparation, e.g. wash my hands, tie hair back, a clean bench etc I know to use equipment safely, e.g. knives, graters, peelers etc</p>	<p><b>Knowledge</b></p> <p>I know and understand how simple 3-D textile products are made, using a template to create two identical shapes. I know and understand how to join fabrics using different techniques e.g. running stitch, glue, over stitch, stapling. I know different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons. I know and use technical vocabulary relevant to the project.</p>	<p><b>Knowledge</b></p> <p>I know how to make freestanding structures stronger, stiffer and more stable. I know the order in which a structure is made. I know and use technical vocabulary relevant to the project.</p>
	<p><b>Key Skills</b></p> <p><b>Designing</b> Design appealing products for a particular user based on simple design criteria. I can generate initial ideas and design criteria through investigating a variety of vegetables. I can communicate these ideas through talk and drawings.</p> <p><b>Making</b> I can use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely.</p>	<p><b>Key Skills</b></p> <p><b>Designing</b> I can design a functional and appealing product for a chosen user and purpose based on simple design criteria. I can generate, develop, model and communicate their ideas as appropriate through talking, drawing, templates, mock-ups and information and communication technology.</p> <p><b>Making</b> I can select from and use a range of tools and equipment to perform practical tasks such as marking out, cutting, joining and finishing. I can select from and use textiles according to their characteristics.</p>	<p><b>Key Skills</b></p> <p><b>Designing</b> I can generate ideas based on simple design criteria and my own experiences, explaining what they could make. I can develop, model and communicate their ideas through talking, mock-ups and drawings.</p> <p><b>Making</b> I can plan by suggesting what to do next. I can select and use tools, skills and techniques, explaining my choices.</p>

	<p>I can select from a range of vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product.</p> <p><b>Evaluating</b></p> <p>I can taste and evaluate a range of fruit and vegetables to determine the intended user's preferences.</p> <p>I can evaluate ideas and finished products against design criteria, including intended user and purpose.</p> <p>I can demonstrate how to work safely and hygienically, using tools, equipment, techniques and ingredients appropriate to the task</p> <p><b>Vocabulary</b></p> <p><b>design, evaluate, criteria</b></p> <p>planning, investigating, tasting, vegetables including; onion, spring onion, parsnip, brussels sprouts, mushroom, aubergine, courgette, healthy, healthy diet, allergy, intolerance, vitamins and minerals, knife - sharp, blunt, slicing, cutting, peeler, peeling, grater, grating, squeezing, blender, pan, simmer, boil, fry pan, fry, soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard, flesh, skin, seed, pip, core,</p> <p><b>Cultural Opportunities</b></p> <p>Diwali</p> <p><b>Key values</b></p> <p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p> <p><b>Book List &amp; Resources</b></p> <p>The Eatwell Plate</p> <p>Supertato By Sue Hedra</p>  <p>Oliver's Vegetables by Vivian French</p>  <p>Stone Soup by Jon J Muth</p>  <p>Vegetable Soup Recipe (teacher made) - Twinkl</p> <p>Vegetable Soup Recipe Cards (teacher made) - Twinkl</p> <p>FAQs - Chilled Food Association</p>	<p><b>Evaluating</b></p> <p>I can explore and evaluate a range of existing textile products relevant to the project being undertaken.</p> <p>I can evaluate their ideas throughout and their final products against original design criteria.</p> <p><b>Vocabulary</b></p> <p><b>suitable, design brief, design criteria, ideas, make, evaluate, user, purpose</b></p> <p>puppets, needle, thread, eye of the needle, pins, fabric glue, knot, stitch, running stitch, trim, cut, fabric, textiles, felt, fabric, template, pattern pieces, mark out, join, decorate, finish, features, buttons, wool, sequins, fabric paint, suitable, quality mock-up,</p> <p><b>Cultural Opportunities</b></p> <p>Book Day/Week</p> <p><b>Key values</b></p> <p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p> <p><b>Book List &amp; Resources</b></p> <p>Pinocchio</p> <p><a href="https://kids.kiddle.co/Puppet">https://kids.kiddle.co/Puppet</a> (puppet facts)</p> <p><a href="https://kids.kiddle.co/Felt">https://kids.kiddle.co/Felt</a> (felt facts)</p> <p>Running stitch - <a href="https://www.youtube.com/watch?v=i9aaG89s0bo">https://www.youtube.com/watch?v=i9aaG89s0bo</a></p> <p>Overstitch - <a href="https://www.youtube.com/watch?v=gmD9vpo5Fso">https://www.youtube.com/watch?v=gmD9vpo5Fso</a></p>	<p>I can select new and reclaimed materials and construction kits to build my structures.</p> <p>I can use simple finishing techniques suitable for the structure I am creating.</p> <p><b>Evaluating</b></p> <p>I can explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings.</p> <p>I can evaluate my product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria</p> <p><b>Vocabulary</b></p> <p><b>suitable, design brief, design criteria, ideas, make, evaluate, user, purpose, product, function, recycled, reclaimed, repurpose</b></p> <p>cut, fold, join, fix, structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, circle, triangle, square, rectangle, cuboid, cube, cylinder,</p> <p>workbench, vice, safety goggles, hammer, saw, nails,</p> <p><b>Cultural Opportunities</b></p> <p>Visit Leighton Moss (link to science)</p> <p><b>Key values</b></p> <p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p> <p><b>Book List &amp; Resources</b></p>  <p><a href="https://www.sunhatsandwellieboots.com/2020/03/10-simple-recycled-plant-pots-for-kids.html">https://www.sunhatsandwellieboots.com/2020/03/10-simple-recycled-plant-pots-for-kids.html</a></p>
	YEAR A		
	<p><b>Autumn: Textiles</b></p> <p><b>'Combining different fabric shapes'</b></p> <p><b>Links to previous Learning</b></p>	<p><b>Spring: Electrical Systems, 'Simple Circuits and Switches'</b></p> <p><b>Spring: Food, 'A healthy and varied diet'</b></p> <p><b>Links to previous Learning</b></p>	<p><b>Summer: Mechanical Systems</b></p> <p><b>'Levers and linkages'</b></p> <p><b>Links to previous Learning</b></p>
	3		



	Experience of basic stitching, joining textiles and finishing techniques. Experience of making and using simple pattern pieces.	<b>Electrical Systems, ‘Simple Circuits and Switches’</b> Constructed a simple series electrical circuit in science, using bulbs, switches and buzzers. Cut and joined a variety of construction materials, such as wood, card, plastic, reclaimed materials and glue.	Explored and used mechanisms such as flaps, sliders and levers. Gained experience of basic cutting, joining and finishing techniques with paper and card.
	<b>Knowledge</b>	<b>Knowledge</b>	<b>Knowledge</b>
	I know that fabrics can be strengthened, stiffened and reinforced where appropriate. I know how to strengthen, stiffen and reinforce existing fabrics. I know and understand how to securely join two pieces of fabric together. I know and understand the need for patterns and seam allowances. I know and use technical vocabulary relevant to the project. I know and understand how a key event/individual has influenced the development of the chosen product and/or fabric, e.g. Ruth Benerito (wrinkle free cotton) I know that a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.	<b>Electrical Systems, ‘Simple Circuits and Switches’</b> I know and understand how to use electrical systems in my products, such as series circuits incorporating switches, bulbs and buzzers. I know I can apply my understanding of computing to program and control my products. I know and use technical vocabulary relevant to the project.	I know and understand how to use lever and linkage mechanisms. I know how to distinguish between fixed and loose pivots. I know and use technical vocabulary relevant to the project.
	<b>Key Skills</b> <b>Designing</b> I can generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. I can produce annotated sketches, prototypes, final product sketches and pattern pieces. <b>Making</b> I can make lists of equipment and fabrics relevant to my project I can plan the main stages of making I can select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. I can select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern. <b>Evaluating</b> I can investigate and analyse textile products linked to their final product. I can investigate a range of 3-D textile products relevant to the project. I can test my product against the original design criteria and with the intended user. I can consider others’ views.	<b>Key Skills</b> <b>Electrical Systems, ‘Simple Circuits and Switches’</b> <b>Designing</b> I can gather information about needs and wants and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. I can generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams. <b>Making</b> I can order the main stages of making. I can select from and use tools and equipment to cut, shape, join and finish with some accuracy. I can select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities. <b>Evaluating</b> I can investigate and analyse a range of existing battery-powered products. I can evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	<b>Key Skills</b> <b>Designing</b> I can generate realistic ideas and my own design criteria through discussion, focusing on the needs of the user. I can use annotated sketches and prototypes to develop, model and communicate ideas. <b>Making</b> I can order the main stages of making. I can select from and use appropriate tools with some accuracy to cut, shape and join paper and card. I can select from and use finishing techniques suitable for the product I am creating. <b>Evaluating</b> I can investigate and analyse books and, where available, other products with lever and linkage mechanisms. I can evaluate my products and ideas against criteria and user needs, as they design and make

**Food, ‘A healthy and varied diet’**

**Designing**

I can 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>I can use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</p> <p><b>Making</b>  I can plan the main stages of a recipe, listing ingredients, utensils and equipment.  I can select and use appropriate utensils and equipment to prepare and combine ingredients.  I can select from a range of ingredients to make appropriate food products, thinking about sensory characteristics.</p> <p><b>Evaluating</b>  I can carry out sensory evaluations of a variety of ingredients and products.  I can record the evaluations using e.g. tables and simple graphs.  I can evaluate the ongoing work and the final product with reference to the design criteria and the views of others.</p>	
	<b>Vocabulary</b>	<b>Vocabulary</b>	<b>Vocabulary</b>
	<p>fabric, fastening, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance, pattern pieces</p> <p><b>user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function,</b></p>	<p><b>Electrical Systems, ‘Simple Circuits and Switches’</b>  series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device  <b>user, purpose, function, prototype, design criteria, innovative, appealing, design brief</b></p> <p><b>Food, ‘A healthy and varied diet’</b>  name of products, names of equipment, utensils, techniques and ingredients, texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet  <b>planning, design criteria, purpose, user, annotated sketch, sensory evaluations</b></p>	<p>mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating</p> <p><b>user, purpose, function, prototype, design criteria, innovative, appealing, design brief</b></p>
	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>
	<b>TBC</b>	<b>TBC</b>	<b>TBC</b>
	<b>Key values</b>	<b>Key values</b>	<b>Key values</b>
	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. <b>Respectful and Caring.</b> Inspired and Excited to Learn. Teamwork.  <b>British Values:</b> The rule of law. <b>Individual liberty.</b> Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.  <b>Christian Star Qualities:</b> Love, Joy, Peace, <b>Patience,</b> Kindness, <b>Gentleness, Self-Control,</b> Faithfulness, Goodness.</p>	<p><b>School Values:</b> <b>Happy, Healthy and Secure.</b> Confident and Independent. Respectful and Caring. <b>Inspired and Excited to Learn.</b> <b>Teamwork.</b>  <b>British Values:</b> <b>The rule of law.</b> <b>Individual liberty.</b> Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. <b>Democracy.</b>  <b>Christian Star Qualities:</b> <b>Love, Joy,</b> Peace, Patience, Kindness, <b>Gentleness, Self-Control,</b> <b>Faithfulness, Goodness.</b></p>	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. <b>Respectful and Caring.</b> Inspired and Excited to Learn. <b>Teamwork.</b>  <b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. <b>Democracy.</b>  <b>Christian Star Qualities:</b> Love, Joy, Peace, <b>Patience,</b> Kindness, Gentleness, Self-Control, Faithfulness, <b>Goodness.</b></p>
	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>
	Designing with textiles - D&T Association (designtechnology.org.uk)	<p>Free education resources for teaching young people aged 3-16 years about where food comes from, cooking and healthy eating, and teacher training. - Food A Fact Of Life</p> <p>The Eatwell Guide - NHS (www.nhs.uk)  5 A Day: what counts? - NHS (www.nhs.uk)</p>	<p>Mechanisms with a message - D&amp;T Association (designtechnology.org.uk)</p> <p>Moving history book - levers and linkages - D&amp;T Association (designtechnology.org.uk)</p>
<b>YEAR A</b>			
<b>4</b>	<b>Autumn: Textiles</b> <b>‘Combining different fabric shapes’</b>	<b>Spring: Electrical Systems, ‘Simple Circuits and Switches’</b> <b>Spring: Food, ‘A healthy and varied diet’</b>	<b>Summer: Mechanical Systems</b> <b>‘Levers and linkages’</b>
	<b>Links to previous Learning</b>	<b>Links to previous Learning</b>	<b>Links to previous Learning</b>

	Experience of basic stitching, joining textiles and finishing techniques. Experience of making and using simple pattern pieces.	<b>Electrical Systems, ‘Simple Circuits and Switches’</b> Constructed a simple series electrical circuit in science, using bulbs, switches and buzzers. Cut and joined a variety of construction materials, such as wood, card, plastic, reclaimed materials and glue.	Explored and used mechanisms such as flaps, sliders and levers. Gained experience of basic cutting, joining and finishing techniques with paper and card.
	<b>Knowledge</b>	<b>Knowledge</b>	<b>Knowledge</b>
	I know that fabrics can be strengthened, stiffened and reinforced where appropriate. I know how to strengthen, stiffen and reinforce existing fabrics. I know and understand how to securely join two pieces of fabric together. I know and understand the need for patterns and seam allowances. I know and use technical vocabulary relevant to the project. I know and understand how a key event/individual has influenced the development of the chosen product and/or fabric, e.g. Ruth Benerito (wrinkle free cotton) I know that a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.	<b>Electrical Systems, ‘Simple Circuits and Switches’</b> I know and understand how to use electrical systems in my products, such as series circuits incorporating switches, bulbs and buzzers. I know I can apply my understanding of computing to program and control my products. I know and use technical vocabulary relevant to the project.	I know and understand how to use lever and linkage mechanisms. I know how to distinguish between fixed and loose pivots. I know and use technical vocabulary relevant to the project.
	<b>Key Skills</b>	<b>Key Skills</b>	<b>Key Skills</b>
	<b>Designing</b> I can begin to generate innovative ideas by carrying out research including surveys, interviews and questionnaires. I can begin to develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design. I can design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.	<b>Electrical Systems, ‘Simple Circuits and Switches’</b> <b>Designing</b> I can gather information about needs and wants, and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. I can generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.	<b>Designing</b> I can generate realistic ideas and my own design criteria through discussion, focusing on the needs of the user. I can use annotated sketches and prototypes to develop, model and communicate ideas.
	<b>Making</b> I can produce lists of equipment and fabrics relevant to my tasks. I can formulate plans and, if appropriate, allocate tasks within a team. I can select from and use a range of tools and equipment to make products that are accurately assembled and well finished.	<b>Making</b> I can order the main stages of making. I can select from and use tools and equipment to cut, shape, join and finish with some accuracy. I can select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities.	<b>Making</b> I can order the main stages of making. I can select from and use appropriate tools with some accuracy to cut, shape and join paper and card. I can select from and use finishing techniques suitable for the product I am creating.
	<b>Evaluating</b> I can investigate and analyse textile products linked to my final product. I can compare my and others final product to the original design specification. I can begin to test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. I can consider the views of others to improve my work.	<b>Evaluating</b> I can investigate and analyse a range of existing battery-powered products. I can evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.	<b>Evaluating</b> I can investigate and analyse books and, where available, other products with lever and linkage mechanisms. I can evaluate my products and ideas against criteria and user needs, as they design and make
		<b>Food, ‘A healthy and varied diet’</b> <b>Designing</b> I can 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>I can use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</p> <p><b>Making</b> I can plan the main stages of a recipe, listing ingredients, utensils and equipment. I can select and use appropriate utensils and equipment to prepare and combine ingredients. I can select from a range of ingredients to make appropriate food products, thinking about sensory characteristics.</p> <p><b>Evaluating</b> I can carry out sensory evaluations of a variety of ingredients and products. I can record the evaluations using e.g. tables and simple graphs. I can evaluate the ongoing work and the final product with reference to the design criteria and the views of others.</p>	
	<b>Vocabulary</b>	<b>Vocabulary</b>	<b>Vocabulary</b>
	Fabrics, e.g. calico, hessian, viscose, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, fastenings, pins, needles, thread, pinking shears, iron transfer paper,  <b>design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype design, model, annotated sketch, functional, innovative, investigate, label, aesthetics, function,</b>	<b>Electrical Systems, ‘Simple Circuits and Switches’</b> series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device <b>user, purpose, function, prototype, design criteria, innovative, appealing, design brief</b>  <b>Food, ‘A healthy and varied diet’</b> name of products, names of equipment, utensils, techniques and ingredients, texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet  <b>planning, design criteria, purpose, user, annotated sketch, sensory evaluations</b>	mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating  <b>user, purpose, function, prototype, design criteria, innovative, appealing, design brief</b>
	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>
	<b>TBC</b>	<b>TBC</b>	<b>TBC</b>
	<b>Key values</b>	<b>Key values</b>	<b>Key values</b>
	<b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. <b>Respectful and Caring.</b> Inspired and Excited to Learn. Teamwork. <b>British Values:</b> The rule of law. <b>Individual liberty.</b> Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy. <b>Christian Star Qualities:</b> Love, Joy, Peace, <b>Patience,</b> Kindness, <b>Gentleness, Self-Control,</b> Faithfulness, Goodness.	<b>School Values:</b> <b>Happy, Healthy and Secure.</b> Confident and Independent. Respectful and Caring. <b>Inspired and Excited to Learn.</b> <b>Teamwork.</b> <b>British Values:</b> <b>The rule of law.</b> <b>Individual liberty.</b> Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. <b>Democracy.</b> <b>Christian Star Qualities:</b> <b>Love, Joy,</b> Peace, Patience, Kindness, <b>Gentleness, Self-Control,</b> <b>Faithfulness, Goodness.</b>	<b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. <b>Respectful and Caring.</b> Inspired and Excited to Learn. <b>Teamwork.</b> <b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. <b>Democracy.</b> <b>Christian Star Qualities:</b> Love, Joy, Peace, <b>Patience,</b> Kindness, Gentleness, Self-Control, Faithfulness, <b>Goodness.</b>
	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>
	Designing with textiles - D&T Association (designtechnology.org.uk)	Free education resources for teaching young people aged 3-16 years about where food comes from, cooking and healthy eating, and teacher training. - Food A Fact Of Life  The Eatwell Guide - NHS (www.nhs.uk) 5 A Day: what counts? - NHS (www.nhs.uk)	Mechanisms with a message - D&T Association (designtechnology.org.uk)  Moving history book - levers and linkages - D&T Association (designtechnology.org.uk)
YEAR A			



5	Autumn: Textiles 'Combining different fabric shapes'	Spring: Electrical Systems, 'Simple Circuits and Switches' Spring: Food, 'A healthy and varied diet'	Summer: Mechanical Systems 'Levers and linkages'
	Links to previous Learning	Links to previous Learning	Links to previous Learning
	Experience of basic stitching, joining textiles and finishing techniques. Experience of making and using simple pattern pieces.	<b>Electrical Systems, 'Simple Circuits and Switches'</b> Constructed a simple series electrical circuit in science, using bulbs, switches and buzzers. Cut and joined a variety of construction materials, such as wood, card, plastic, reclaimed materials and glue.  <b>Food, 'A healthy and varied diet'</b> Know some ways to prepare ingredients safely and hygienically. Have some basic knowledge and understanding about healthy eating and <i>The eatwell plate</i> . Have used some equipment and utensils and prepared and combined ingredients to make a product.	Explored and used mechanisms such as flaps, sliders and levers. Gained experience of basic cutting, joining and finishing techniques with paper and card.
	Knowledge	Knowledge	Knowledge
	I know that fabrics can be strengthened, stiffened and reinforced where appropriate. I know how to strengthen, stiffen and reinforce existing fabrics. I know and understand how to securely join two pieces of fabric together. I know and understand the need for patterns and seam allowances. I know and use technical vocabulary relevant to the project. I know and understand how a key event/individual has influenced the development of the chosen product and/or fabric, e.g. Ruth Benerito (wrinkle free cotton) I know that a 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.	<b>Electrical Systems, 'Simple Circuits and Switches'</b> I know and understand how to use electrical systems in my products, such as series circuits incorporating switches, bulbs and buzzers. I know I can apply my understanding of computing to program and control my products. I know and use technical vocabulary relevant to the project.  <b>Food, 'A healthy and varied diet'</b> I know how to use appropriate equipment and utensils to prepare and combine food. I know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. I know and use relevant technical and sensory vocabulary appropriately.	I know and understand how to use lever and linkage mechanisms. I know how to distinguish between fixed and loose pivots. I know and use technical vocabulary relevant to the project.
	Skills	Skills	
	<b>Designing</b> I can generate innovative ideas by carrying out research including surveys, interviews and questionnaires. I can develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design. I can design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.  <b>Making</b> I can produce detailed lists of equipment and fabrics relevant to my tasks. I can formulate step-by-step plans and, if appropriate, allocate tasks within a team. I can select from and use a range of tools and equipment to make products that are accurately assembled and well finished. I can work within the constraints of time, resources and cost.  <b>Evaluating</b> I can investigate and analyse textile products linked to my final product. I can compare my and others final product to the original design specification. I can test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. I can consider the views of others to improve my work.	<b>Electrical Systems, 'Simple Circuits and Switches'</b> <b>Designing</b> I can gather information about needs and wants, and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups. I can generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams.  <b>Making</b> I can order the main stages of making. I can select from and use tools and equipment to cut, shape, join and finish with some accuracy. I can select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities.  <b>Evaluating</b> I can investigate and analyse a range of existing battery-powered products. I can evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.  <b>Food, 'A healthy and varied diet'</b> <b>Designing</b> I can 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.	<b>Designing</b> I can generate realistic ideas and my own design criteria through discussion, focusing on the needs of the user. I can use annotated sketches and prototypes to develop, model and communicate ideas.  <b>Making</b> I can order the main stages of making. I can select from and use appropriate tools with some accuracy to cut, shape and join paper and card. I can select from and use finishing techniques suitable for the product I am creating.  <b>Evaluating</b> I can investigate and analyse books and, where available, other products with lever and linkage mechanisms. I can evaluate my products and ideas against criteria and user needs, as they design and make

		<p>I can use annotated sketches and appropriate information and communication technology, such as web-based recipes, to develop and communicate ideas.</p> <p><b>Making</b>  I can plan the main stages of a recipe, listing ingredients, utensils and equipment.  I can select and use appropriate utensils and equipment to prepare and combine ingredients.  I can select from a range of ingredients to make appropriate food products, thinking about sensory characteristics.</p> <p><b>Evaluating</b>  I can carry out sensory evaluations of a variety of ingredients and products.  I can record the evaluations using e.g. tables and simple graphs.  I can evaluate the ongoing work and the final product with reference to the design criteria and the views of others.</p>	
	<b>Vocabulary</b>	<p>Fabrics, e.g. calico, hessian, viscose, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, fastenings, pins, needles, thread, pinking shears, iron transfer paper,</p> <p><b>design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype design, model, annotated sketch, functional, innovative, investigate, label, aesthetics, function,</b></p>	<b>Vocabulary</b>
	<b>Cultural Opportunities</b>	<b>Electrical Systems, ‘Simple Circuits and Switches’</b> series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device <b>user, purpose, function, prototype, design criteria, innovative, appealing, design brief</b>	mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating
	<b>Key values</b>	<b>Food, ‘A healthy and varied diet’</b> name of products, names of equipment, utensils, techniques and ingredients, texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	<b>user, purpose, function, prototype, design criteria, innovative, appealing, design brief</b>
	<b>Book List &amp; Resources</b>	<b>planning, design criteria, purpose, user, annotated sketch, sensory evaluations</b>	
<b>YEAR A</b>			
6	Autumn: Textiles, ‘combing different fabrics shapes in textiles’ and Electrical systems, ‘more complex switches and circuits’	Spring: Food (bread), ‘celebrating culture and seasonality (Senegal)’ and Mechanical systems, ‘Cams’	Summer: Structures (bridges), ‘frame structures’ and Electrical systems, ‘monitoring and control’ (taught in computing)

	<b>Links to previous Learning</b> <b><u>Textiles - Combining different fabrics shapes</u></b> Experience of basic stitching, joining textiles and finishing techniques. Experience of making and using simple pattern pieces.  <b><u>Electrical Systems – More complex switches and circuits</u></b> Understanding of the essential characteristics of a series circuit and experience of creating a battery-powered, functional, electrical product. Initial experience of using computer control software and an interface box or a standalone box, e.g. writing and modifying a program to make a light flash on and off.	<b>Links to previous Learning</b> <b><u>Food – Celebrating Cultural and Seasonality (Senegal)</u></b> Have knowledge and understanding about food hygiene, nutrition, healthy eating and a varied diet. Be able to use appropriate equipment and utensils, and apply a range of techniques for measuring out, preparing and combining ingredients.  <b><u>Mechanical Systems – Cams</u></b> Experience of axles, axle holders and wheels that are fixed or free moving. Basic understanding of different types of movement. Experience of cutting and joining techniques with a range of materials including card, plastic and wood. An understanding of how to strengthen and stiffen structures.	<b>Links to previous Learning</b> Experience of using measuring, marking out, cutting, joining, shaping and finishing techniques with construction materials. Basic understanding of what structures are and how they can be made stronger, stiffer and more stable.  Initial experience of using computer control software and an interface box, a standalone box or microcontroller, e.g. Crumble. Some experience of writing and modifying a program to make a light turn on or flash on and off. Understanding of the essential characteristics of a series circuit and experience of creating a battery-powered, functional, electrical product.
	<b>Knowledge</b> <b><u>Textiles - Combining different fabrics shapes</u></b> A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Fabrics can be strengthened, stiffened and reinforced where appropriate.  <b><u>Electrical Systems – More complex switches and circuits</u></b> Understand and use electrical systems in their products. Apply their understanding of computing to program, monitor and control their products. Know and use technical vocabulary relevant to the project.	<b>Knowledge</b> <b><u>Food – Celebrating Cultural and Seasonality (Senegal)</u></b> I know how to use utensils and equipment including heat sources to prepare and cook food. I know and understand about seasonality in relation to food products and the source of different food products. I know and use relevant technical and sensory vocabulary.  <b><u>Mechanical Systems – Cams</u></b> I know and understand that mechanical systems have an input, process and an output. I know and understand how cams can be used to produce different types of movement and change the direction of movement. I know and use technical vocabulary relevant to the project	<b>Knowledge</b> I know and understand how to strengthen, stiffen and reinforce 3-D frameworks. I know and use technical vocabulary relevant to the project.  I know, understand and use electrical systems in my products. I know and understand the use of computer control systems in products. I know how to apply my understanding of computing to program, monitor and control my products. I know and use technical vocabulary relevant to the project.
	<b>Key Skills</b> <b><u>Textiles - Combining different fabrics shapes</u></b> <b><u>Designing</u></b> I can generate innovative ideas by carrying out research including surveys, interviews and questionnaires. I can develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design. I can design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.  <b><u>Making</u></b> I can produce detailed lists of equipment and fabrics relevant to their tasks. I can formulate step-by-step plans and, if appropriate, allocate tasks within a team. I can select from and use a range of tools and equipment to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.  <b><u>Evaluating</u></b> I can investigate and analyse textile products linked to their final product. I can compare the final product to the original design specification. I can test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. I can consider the views of others to improve their work	<b>Key Skills</b> <b><u>Food – Celebrating Cultural and Seasonality (Senegal)</u></b> <b><u>Designing</u></b> I can generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. I can explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. I can use words, annotated sketches and information and communication technology as appropriate to develop and communicate ideas.  <b><u>Making</u></b> I can write a step-by-step recipe, including a list of ingredients, equipment and utensils I can select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients. I can make, decorate and present the food product appropriately for the intended user and purpose.  <b><u>Evaluating</u></b> I can carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams. I can evaluate the final product with reference back to the design brief and design specification, taking into account the views of others when identifying improvements. I can understand how key chefs have influenced eating habits to promote varied and healthy diets.	<b>Key Skills</b> <b><u>Designing</u></b> I can carry out research into user needs and existing products, using surveys, interviews, questionnaires and web-based resources. I can develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. I can generate, develop and model innovative ideas, through discussion, prototypes and annotated sketches.  <b><u>Making</u></b> I can formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used. I can competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks. I can use finishing and decorative techniques suitable for the product they are designing and making.  <b><u>Evaluating</u></b> I can investigate and evaluate a range of existing frame structures. I can critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. I can research key events and individuals relevant to frame structures (Brunel, Emily Warren Roebling and Archie Alexander)  <b><u>Designing</u></b>
	<b><u>Electrical Systems – More complex switches and circuits</u></b>	<b><u>Mechanical Systems – Cams</u></b>	

	<p><b>Designing</b></p> <p>I can use research to develop a design specification for a functional product that responds automatically to changes in the environment. Take account of constraints including time, resources and cost.</p> <p>I can generate and develop innovative ideas and share and clarify these through discussion.</p> <p>I can communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.</p> <p><b>Making</b></p> <p>I can formulate a step-by-step plan to guide making, listing tools, equipment, materials and components.</p> <p>I can competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product.</p> <p>I can create and modify a computer control program to enable an electrical product to work automatically in response to changes in the environment.</p> <p><b>Evaluating</b></p> <p>I can continually evaluate and modify the working features of the product to match the initial design specification.</p> <p>I can test the system to demonstrate its effectiveness for the intended user and purpose.</p> <p>I can investigate famous inventors who developed ground-breaking electrical systems and components.</p>	<p><b>Designing</b></p> <p>I can generate innovative ideas by carrying out research using surveys, interviews, questionnaires and web-based resources.</p> <p>I can develop a simple design specification to guide their thinking.</p> <p>I can develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.</p> <p><b>Making</b></p> <p>I can produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team.</p> <p>I can select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost.</p> <p><b>Evaluating</b></p> <p>I can compare the final product to the original design specification.</p> <p>I can test products with the intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.</p> <p>I can consider the views of others to improve their work.</p> <p>I can investigate famous manufacturing and engineering companies relevant to the project.</p>	<p>I can develop a design specification for a functional product that responds automatically to changes in the environment.</p> <p>I can generate, develop and communicate ideas through discussion, annotated sketches and pictorial representations of electrical circuits or circuit diagrams.</p> <p><b>Making</b></p> <p>I can formulate a step-by-step plan to guide making, listing tools, equipment, materials and components.</p> <p>I can competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product.</p> <p>I can create and modify a computer control program to enable their electrical product to respond to changes in the environment.</p> <p><b>Evaluating</b></p> <p>I can continually evaluate and modify the working features of the product to match the initial design specification.</p> <p>I can test the system to demonstrate its effectiveness for the intended user and purpose.</p>
	<b>Vocabulary</b>	<b>Vocabulary</b>	<b>Vocabulary</b>
	<p><b>Textiles - Combining different fabrics shapes</b></p> <p>seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper, design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype, series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, control, program, flowchart</p> <p><b>function, innovative, design specification, design brief, user, purpose</b></p> <p><b>Electrical Systems – More complex switches and circuits</b></p> <p>series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, control, program, flowchart</p> <p><b>function, innovative, design specification, design brief, user, purpose</b></p>	<p><b>Food – Celebrating Cultural and Seasonality (Senegal)</b></p> <p>ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs, fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality, utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble</p> <p><b>design specification, innovative, research, evaluate, design brief</b></p> <p><b>Mechanical Systems – Cams</b></p> <p>cam, snail cam, off-centre cam, peg cam, pear-shaped cam, follower, axle, shaft, crank, handle, housing, framework, rotation, rotary motion, oscillating motion, reciprocating motion, annotated sketches, exploded diagrams, mechanical system, input movement, process, output movement</p> <p><b>design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief</b></p>	<p>frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent</p> <p><b>design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional</b></p> <p>reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device, series circuit, parallel circuit</p> <p><b>function, innovative, design specification, design brief, user, purpose</b></p>
	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>	<b>Cultural Opportunities</b>
	Links to our local area and shops	Links to our twin school, Senegal	Links to the London Residential
	<b>Key values</b>	<b>Key values</b>	<b>Key values</b>
	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p>	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p>	<p><b>School Values:</b> Happy, Healthy and Secure. Confident and Independent. Respectful and Caring. Inspired and Excited to Learn. Teamwork.</p> <p><b>British Values:</b> The rule of law. Individual liberty. Mutual respect for and tolerance of those with different faiths and beliefs and for those without faith. Democracy.</p> <p><b>Christian Star Qualities:</b> Love, Joy, Peace, Patience, Kindness, Gentleness, Self-Control, Faithfulness, Goodness.</p>



	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>	<b>Book List &amp; Resources</b>
	<b>Textiles - Combining different fabrics shapes</b> Designing with textiles - D&T Association (designtechnology.org.uk)  <b><u>Electrical Systems – More complex switches and circuits</u></b> Torches, Lamps and Lanterns - D&T Association (designtechnology.org.uk) Alarming vehicles YR 4/5/6 - D&T Association (designtechnology.org.uk)	<b>Food – Celebrating Cultural and Seasonality (Senegal)</b> Making Bread using the Six Essentials - D&T Association (designtechnology.org.uk)  <b><u>Mechanical Systems – Cams</u></b> Art and Design / DT KS2: How to design a moving shop window display - BBC Teach KS2-Mechanical systems   STEM	<a href="https://transportationhistory.org/2023/02/01/african-american-transportation-history-archie-alexander-engineer/">https://transportationhistory.org/2023/02/01/african-american-transportation-history-archie-alexander-engineer/</a> <a href="https://www.amightygirl.com/blog?p=25975#:~:text=Emily%20Warren%20Roebling%20became%20the,construction%20of%20the%20Brooklyn%20Bridge.">https://www.amightygirl.com/blog?p=25975#:~:text=Emily%20Warren%20Roebling%20became%20the,construction%20of%20the%20Brooklyn%20Bridge.</a>