

<u>EYFS Links to Design Technology</u>	
We ensure that the curriculum in the EYFS covers the Early Learning Goals, set out in the Early Years Framework, paying particular attention to Physical Development and Expressive Arts & Design. Although we do have topics through the academic year, we are also steered by the children's interests and fascinations, ensuring that our curriculum is designed to meet the needs of the children.	
Development Matters What the children learn in Reception	<p>Speaking Use new vocabulary through the day Articulate their ideas and thoughts in well-formed sentences</p> <p>Listening and Attention Use new vocabulary in different contexts Connect one idea or action to another using a range of connectives</p> <p>Physical Development – Fine Motor Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.</p> <p>Expressive Arts & Design – Creating with Materials Explore, use and refine a variety of artistic effects to express their ideas and feelings. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills.</p> <p>PSED – Managing Self Know about and talk about the different factors that support their overall health and well-being, regular physical activity, healthy eating, toothbrushing</p>
Early Learning Goals	<p>Speaking Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</p> <p>Listening and Attention Make comments about what they have heard and ask questions to clarify their understanding.</p> <p>Physical Development – Fine Motor Use a range of small tools, including scissors, paintbrushes and cutlery. Begin to show accuracy and care when drawing</p> <p>Expressive Arts & Design – Creating with Materials</p>

		<p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.</p> <p>PSED - Managing Self Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices</p>				
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Me and My World	Dark Nights, Bright Lights:	Our Wonderful World	How does your garden grow?	Marvelous Minibeasts	Under the Sea
Design and Technology Skills, Knowledge and Questions	<p>Malleable resources – rolling pins, cutters -opportunities to make playdough</p> <p>Structures/ Box modelling</p> <p>Introduction to the Workshop. Modelling joining, connecting, attaching Fairytale lands and houses</p> <p>Food</p> <p>Can you pack a healthy lunch box? Healthy and Unhealthy Food</p>	<p>Malleable resources – rolling pins, cutters -opportunities to make playdough -Crayola Magic Mendhi hands</p> <p>Structures</p> <p>Box modelling</p> <p>Food</p> <p>Harvesting Potatoes 'What can we make? Where do they come from?</p> <p>Diwali Food for Diwali party</p> <p>Bonfire Cakes</p> <p>Textiles</p> <p>Can I make a shadow puppet to re-tell the story of</p>	<p>Malleable resources – rolling pins, cutters - opportunities to make playdough</p> <p>Structures</p> <p>Chinese lanterns and box modelling dragons</p> <p>Design, Plan, Evaluate</p> <p>Junk modelling – using a range of materials to create. How will I connect the materials together?</p> <p>Food</p> <p>Food for Chinese New Year</p>	<p>Malleable resources – rolling pins, cutters -opportunities to make playdough -</p> <p>Food</p> <p>Making Easter Cakes</p> <p>Design, Plan, Evaluate</p> <p>Design and make a plant pot/ bird feeders</p> <p>Papier mâché the pot and then decorate in line with</p>	<p>Malleable resources – rolling pins, cutters -opportunities to make playdough</p> <p>Design, Plan, Evaluate</p> <p>Junk modelling – using a range of materials to create Minibeasts.</p> <p>How will I connect the materials together?</p> <p>Structures – Forest School Links</p> <p>Can you design and make a bug hotel?</p>	<p>Malleable resources – rolling pins, cutters - opportunities to make playdough</p> <p>Design, Plan, Evaluate</p> <p>Can I make a boat that floats?</p> <p>What material will make the best boat?</p>

		<p>Rama and Sita?</p> <p>Forest School Links</p> <p>Woodland animals – hammers and nails</p> <p>Wooden Christmas decorations</p>	<p>Design, Plan, Evaluate</p> <p>Rockets and Spaceships – Using a range of equipment and resources to create.</p> <p>How can we create a solar system?</p>			
	Children are encouraged to access the Workshop area of the provision independently. The children can design and make what they choose using a wide range of materials and skills, including junk modelling.					
Vocabulary	<p>Build</p> <p>Construct</p> <p>Join</p> <p>Share</p> <p>Ideas</p>	<p>Construct</p> <p>Connect</p> <p>Mix</p> <p>Measure</p> <p>Ingredients</p>	<p>Build</p> <p>Plan</p> <p>Explain</p>	<p>Mix</p> <p>Pour</p> <p>Stir</p> <p>Melt</p> <p>Heat</p>	<p>Modelling</p> <p>Tools</p> <p>Design</p> <p>Make</p> <p>Evaluate</p>	<p>Float</p> <p>Sink</p> <p>Strong</p> <p>Boat</p> <p>Shell</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Class 3 (Y1)			<p>Food -</p> <p>How can I create a dish fit for the Queen?</p> <p>What is an afternoon tea and how can I make it healthy?</p> <p>Who has it?</p> <p>When do we eat it?</p> <p>Why do we have it?</p> <p>What is in it?</p> <p>Can you make a set of instructions? (How to make a sandwich/cake)</p> <p>Can you work together to make afternoon tea for your class and classroom helpers?</p>	<p>Structures -</p> <p>How can I create a chair for baby bear?</p> <p>Can you research different chairs?</p> <p>Can you research different materials?</p> <p>How do we know that chairs are structures?</p> <p>Why do they need to be strong, stiff and stable?</p> <p>How can I create joints and structures from paper/card and tape?</p>		<p>Textiles</p> <p>What coat would Joseph like to wear? (Links to Art)</p> <p>What material would be most suitable to make the coat out of?</p> <p>Can you design a coat for Joseph?</p> <p>Is it appealing?</p> <p>Is it functional?</p> <p>What pattern will you put onto your coat?</p> <p>Will it all be the same texture?</p> <p>Can you make your swatch of fabric by stitching and decorating it with the materials that you selected in their design brief?</p> <p>Can I suggest any improvements with my design and final swatch?</p>

Class 4 (Y1/2)		<p><u>Mechanisms</u></p> <p>How can I make a vehicle that can move on snow?</p> <p>How do vehicles move?</p> <p>What do I already know?</p> <p>How will the snow slow the vehicle down?</p> <p>What will be the best material to make the axle out of?</p> <p>Can you research different types of materials?</p> <p>Can you test different types of material?</p> <p>What everyday items have wheels?</p> <p>How do wheels and axles work?</p> <p>Can I use a computer program to create a car?</p> <p>Can I build an axle using a kit?</p>	<p><u>Structures</u></p> <p>What kind of house would the Wolf live in?</p> <p>Can you design a house for the Wolf?</p> <p>Can you investigate the different materials?</p> <p>Can you test the strength of the materials?</p> <p>What is your house made from?</p> <p>Are all houses made out of bricks?</p> <p>Can you research houses from around the world?</p>			<p><u>Food</u> – All Around the World: India</p> <p>Can you prepare and make a Naan bread and condiment or a fruit Lassi - hold a class vote to which you will make.</p> <p>What is a healthy diet?</p> <p>What is a balanced diet?</p> <p>What are the different food groups?</p> <p>What other foods could we make for our party?</p> <p>What ingredients will we need?</p> <p>Where do the ingredients come from?</p> <p>How will they get to our plate?</p>
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		Can I suggest improvements for my design?				
Class 5 (Y2)	<p>Textiles – Beach Hut Flags</p> <p><u>Topic</u> Textiles (beach hut flag) – stitches, buttons Buttons, running stitch</p> <p><u>Question</u> Can I make a beach flag to stand out from the crowd?</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>Select from and use a wide range of materials and components, including</p>			<p>Food – Linked to Rainforest topic – Preparing a fruit salad sticks or smoothies with fruits from the rainforest</p> <p><u>Question</u> Can I explore where our food comes from?</p> <p>- Can I explore where our food comes from?</p> <p>Is it farmed or grown at home?</p> <p>Can I prepare the food safely and hygienically?</p> <p>Can I describe the properties of food ingredients? (eg, taste, smell, consistency, etc)</p> <p>Where does the food from the rainforest go to?</p>	<p>Mechanisms (Sliders and Levers)</p> <p>How can I create movement without using electricity?</p> <p>How can I use levers and linkages to create movement in my poster?</p> <p>How can I design my poster?</p> <p>Can I create my own poster with moving parts which meets my specification?</p>	

	<p>construction materials, textiles and ingredients, according to their characteristics</p> <p>Evaluate their ideas and products against design criteria</p> <p>Key Vocabulary Names of fabrics (e.g. felt) Names of components (e.g. buttons, sequins, wool, thread) Names of tools used Names of stitches learned Pattern Finish</p> <p>Can I make a beach hut flag to stand out from a crowd?</p> <p>Can I design my own beach hut flag?</p> <p>Can I research different flags and their purposes?</p> <p>Can I select suitable materials to decorate my flag?</p>			<p>Can you name and label foods from the rainforest?</p> <p>How does the food from the rainforest compare to the food in Chorley?</p> <p>What is your favourite food?</p> <p>How can you describe the food?</p> <p>How far does it travel to reach our plates?_</p> <p>Measure and weigh food items, non-statutory measures e.g. spoons, cups.</p> <p>Use the basic principles of a healthy and varied diet to prepare dishes</p> <p>Can I explore where our food comes from? (with a focus on fruits from the rainforest)</p>		
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	<p>How can I decorate my flag?</p> <p>Can I stitch?</p> <p>Can I make cords and plaits for decoration?</p> <p>What do we need to think about when making a beach hut flag?</p>			<p>Is it farmed or grown at home?</p> <p>Can I prepare the food safely and hygienically?</p> <p>Can I describe the properties of food ingredients? (eg, taste, smell, consistency, etc)</p> <p>Where does the food from the rainforest go to?</p> <p>Can you name and label foods from the rainforest?</p> <p>How does the food from the rainforest compare to the food in Chorley?</p> <p>What is your favourite food?</p> <p>How can you describe the food?</p> <p>How far does it travel to reach our plates?</p>		
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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
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Class 6 (Y3)				<p><u>Mechanisms</u></p> <p>How can I create a Moving Monsters?</p> <p><u>Moving Monsters</u> <u>(Character from English?)</u></p> <p>How can a box that carried eggs take over the world?</p> <p>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</p> <p>Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>Refer to their design criteria as they design and make</p> <p>Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages)</p>	<p><u>Food</u></p> <p>What would I pack for a picnic in Europe?</p> <p><u>Food – link to Europe</u> What would I pack for a picnic in Europe?</p> <p>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 Refer to their design criteria as they design and make</p> <p>Evaluate a range of bread, meat and cheese products from European countries.</p> <p>Design a sandwich and evaluate their product.</p> <p>What is your favourite meal?</p> <p>Where were you when you had it?</p>	
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				<p>Can I describe techniques for making simple pneumatic systems using appropriate vocabulary?</p> <p>What does the air do?</p> <p>How has it been used in the design of these products?</p> <p>Can I design a moving monster toy with at least one moving part using appropriate materials?</p> <p>What happens to the air when you squeeze the syringe?</p> <p>What happens when you let go?</p> <p>Can I use an exploded diagram to show the components of a design?</p> <p>Am I able to build a monster with a moving part and</p>		
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				incorporate a pneumatic system? Can I evaluate the model against the original design?		
Class 7 (Y3/4)			<p>Mechanisms (Links to Science topic of Humans and Skeletons)</p> <p>What makes my arms and fingers bend and move?</p> <p>What am I made of? How does that help me move?</p> <p>Can I examine how different joints in my arm work?</p> <p>How could I make something move?</p> <p>Can I design my own prosthetic?</p> <p>Can I make my own working prosthetic arm?</p> <p>Can I make and evaluate my own</p>	<p>Year 4 Crumble Lighthouse project (linked to Computing</p>	<p>Textiles Design and make a flag for a newly discovered country. (Incorporating Textile skills from Art and Design (using paste resist and joining with a loop and button)- see subject area)</p> <p>Why do countries have a national flag?</p> <p>What is a national flag and what do they represent?</p> <p>How are fabrics joined together?</p> <p>How are fabrics joined together? Would blue tac work? Why not? What about sellotape?</p> <p>Can you name any types of stitch?</p>	

			<p>working prosthetic arm?</p> <p>Skills Use mechanical systems such as cams, pulleys and gears.</p> <p>Design Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Use computer aided design to develop and communicate ideas.</p> <p>Make Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. Explain choice of materials according to properties.</p> <p>Evaluate</p>		<p>Do I understand how to pattern fabric using paste and resist?</p> <p>Can I design a national flag for a new country?</p> <p>Can I follow a design to make a flag?</p> <p>How well did my flag design work?</p> <p>Which flags have followed the design carefully? Did anyone change their design during the making? Why?</p> <p>What could you do to stop this from happening next time?</p> <p>Skills Running stitch, over sewing, blanket stitch. Sew on buttons and make loops. Understand seam allowance. Use prototype to make pattern.</p>	
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			<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Technical knowledge Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p> <p>Vocabulary: Mechanism, lever, linkage pivot, slot, guide, linear, rotary, oscillating, reciprocating, names of tools used, names of materials.</p>		<p>Design Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>Make Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <p>Evaluate Understand how key events and individuals in design and technology have helped shape the world (research a fashion designer) Evaluate their ideas and products against their own design criteria.</p> <p>Vocabulary: Names of fabrics (e.g. hessian, binca), names of components (e.g. zip, velcro), names of tools used, names of stitches learned, template, pattern, seam, seam allowance, finish,</p>	
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					<p>applique, decorative, functional.</p> <p>Food (done within Eurovision Day)</p> <p>Can I develop my culinary skills to prepare and cook healthy, nutritious food?</p> <p>Self control Achieving and persevering</p> <p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Vocabulary</p> <p>Related to food – more advanced vocab related to texture, taste and appearance</p> <p>Names of equipment, utensils</p> <p>Verbs for preparation techniques</p> <p>Names of food products met in project</p>	
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					Language related to food sourcing and production – process, seasonal, reared, harvested, grown, caught, hygiene, variety	
Class 8 (Y4)		Structures How were Anglo-Saxon houses built? What is a shell and frame structure? How were Anglo-Saxon houses built? Can I design a frame structure? Can I follow a design to produce a frame structure? How well did my design work?		Food Can I eat a burger every day? How healthy are burgers? Where does my burger come from? What will be in my burger? Why is packaging important? Can I develop my packaging? Can I prepare and cook using different techniques? Can I suggest improvements for my finished product?		Computer Programming How do lights flash? Can I design and create a circuit that turns a light on? Do I know what an input and an output is? Can I design and create a program to flash a light on or off, including a repetition loop? Can I design and create a program that incorporates a switch? Can I design and create a program that includes variables?

				<p>How will you make sure your burger is cooked correctly?</p> <p>What will you do if something doesn't go to plan?</p> <p>How will you know if you have completed all the steps?</p> <p>How will you present/ layer your burger?</p> <p>Where do your ingredients come from?</p> <p>Ask children what makes a burger?</p> <p>What different ingredients could we have?</p>		<p>Can I design and create a program that uses variables, repetition, sequence and selection?</p> <p>Can I evaluate my design and highlight areas where I corrected errors in my algorithms?</p> <p>Can you make the lights countdown so you know when the game is going to start each time?</p> <p>Do they think they have achieved the objectives?</p> <p>Where have they excelled?</p> <p>Where can we improve next time?</p>
Class 9 & 10 (Y5)			<p>Textiles – Viking Pouches</p> <p><u>How are Viking pouches made?</u></p> <p><u>Textiles: Making a Viking Pouch</u></p> <p><u>Understand seam allowance.</u></p> <p><u>Use prototype to make pattern.</u></p>		<p>Structures</p> <p><u>Could I build a bridge on the Great Wall of China?</u></p> <p>Structures</p> <p>How can I make my bridge stable enough to stand alone?</p>	

			<p>Do I know what a Viking pouch looks like?</p> <p>Can I research and evaluate existing products?</p> <p>How are the Viking pouches different to bags and purses today?</p> <p>Can I design a prototype?</p> <p>Can I investigate the materials and tools needed to create my prototype?</p> <p>Can I create my prototype?</p> <p>Can I evaluate my work?</p> <p>Can I name fabrics used or investigated?</p> <p>Can I name components used?</p>		<p>Can I research and evaluate existing products?</p> <p>What do different bridges look like and why?</p> <p>What are bridges made from?</p> <p>What material would make the most effective bridge?</p> <p>Can I design a prototype?</p> <p>Can I investigate materials and tools needed to create my prototype?</p> <p>Which ways will I join the materials together?</p> <p>Can I create my prototype?</p> <p>Can I evaluate my work?</p> <p>How will I test my bridge?</p>	
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			<p>Can I name tools I have used?</p> <p>Can I name the stitches learned?</p> <p>Vocabulary: Names of fabrics used or investigated Names of components used Names of tools used Names of stitches learned Selvage Raw edge Woven Felted Knitted Bonded Gusset Seam allowance Hem</p> <p>Could I swap my design for a Viking pouch in a museum without being noticed?</p> <p>Do I know what a Viking pouch looks like?</p>		<p>How could I make my designs better?</p> <p>Vocabulary: Stiffen Reinforce Stabilise Frame structure Shape vocabulary (maths) Apex, base, face, edge, Vertices Vertical Perpendicular Right angles Triangular Names of materials Names of tools used</p>	
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			<p>Can I research and evaluate existing products?</p> <p>How are the Viking pouches different to bags and purses today?</p> <p>Can I design a prototype?</p> <p>Can I investigate the materials and tools needed to create my prototype?</p> <p>Can I create my prototype?</p> <p>Can I evaluate my work?</p> <p>Can I name fabrics used or investigated?</p> <p>Can I name components used?</p> <p>Can I name tools I have used?</p> <p>Can I name the stitches learned?</p>			
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Class 11 & 12 (Y6)		<p>Computer Programming – MicroBit</p> <p>How has technology shaped gaming?</p> <p>Can I design and create a circuit that turns a light on?</p> <p>Do I know what an input and an output is?</p> <p>Can I design and create a program to flash a light on or off, including a repetition loop?</p> <p>Can I design and create a program that incorporates a switch?</p> <p>Can I design and create a program that includes variables?</p> <p>Can I design and create a program that uses variables, repetition, sequence and selection?</p> <p>Can I evaluate my design and highlight areas where I corrected errors in my algorithms?</p>			<p>3D Printing</p> <p>Can you design and print your own masterpiece?</p> <p>What is 3D printing?</p> <p>What is 3D printing used for?</p> <p>Who might use 3D printers?</p> <p>How does the 3D printer work?</p>	<p>Enterprise Task</p> <p>How can we make money for school using our DT knowledge?</p> <p>Summer Fair games; What games are popular at Summer Fairs?</p> <p>What resources will we need?</p> <p>What will be the cost of the resources? How much will we charge to make our money back?</p> <p>What DT skills will we need to use to support creating the games?</p> <p>How will we test the games?</p> <p>Ideas for games:</p> <p>Hook a duck –</p> <p>Can you plan and design how you will create the game and the materials that are needed?</p>
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						<p>How do we attach the hooks to the ducks?</p> <p>Can you make a fishing rod to hook the ducks with?</p> <p>Whack-a-mole – What techniques and materials/resources will we need to make the game?</p> <p>What materials will we need to make the mole?</p> <p>Boat Races - How will we cut the guttering/pipes to create the same sized tracks?</p> <p>How will the boats make it from one end of the track to the end and into the river/pond?</p> <p>Buzz Wire - Can you design the buzz wire track?</p> <p>What materials and tools will you need to make the track?</p>
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						How will you create an electrical system
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	Class 3 (Year 1)	Class 4 (Year 1 / 2)	Class 5 (Year 2)	Class 6 (Year 3)	Class 7 (Year 3/4)	Class 8 Year 4	Class 9 & 10 Year 5	Class 11 Year 6
Design KLIPS/NC	Key Stage 1 <ul style="list-style-type: none"> Use pictures and words to convey what they want to design/make. Propose more than one idea for their product. Use kits/reclaimed materials to develop more than one idea. Model ideas with kits, reclaimed materials. Select appropriate technique explaining: First... Next... Last.... Explore ideas by rearranging materials. Select pictures to help develop ideas. Use drawings to record ideas as they are developed. Add notes to drawings to help explanations. Describe their models and drawings of ideas and intentions. 			Key Stage 2 – Years 3 and 4 <ul style="list-style-type: none"> Develop more than one design or adaptation of an initial design. Plan a sequence of actions to make a product. Record the plan by drawing using annotated sketches. Begin to use cross-sectional and exploded diagrams. Use prototypes to develop and share ideas. Think ahead about the order of their work and decide upon tools and materials. Propose realistic suggestions as to how they can achieve their design ideas. Consider aesthetic qualities of materials chosen. Use CAD where appropriate. 			Key Stage 2 - Year 5 and 6 <ul style="list-style-type: none"> List tools needed before starting the activity. Plan the sequence of work e.g. using a storyboard. Record ideas using annotated diagrams. Use models, kits and drawings to help formulate design ideas. Combine modelling and drawing to refine ideas. Devise step by step plans which can be read / followed by someone else. Use exploded diagrams and cross-sectional diagrams to communicate ideas. Sketch and model alternative ideas. Decide which design idea to develop. 	
Make KLIPS	Key Stage 1 <ul style="list-style-type: none"> Discuss their work as it progresses. Select materials from a limited range that will meet the design criteria. Select and name the tools needed to work the materials. Explain what they are making. Explain which materials they are using and why. Name the tools they are using. Describe what they need to do next. 			Key Stage 2 – Years 3 and 4 <ul style="list-style-type: none"> Prepare pattern pieces as templates for their design. Cut slots. Cut internal shapes. Select from a range of tools for cutting shaping joining and finishing. Use tools with accuracy. Select from techniques for different parts of the process. Select from materials according to their functional properties. Plan the stages of the making process. Use appropriate finishing techniques. 			Key Stage 2 - Year 5 and 6 <ul style="list-style-type: none"> Make prototypes. Develop one idea in depth. Use researched information to inform decisions. Produce detailed lists of ingredients / components / materials and tools. Use a computer to model ideas. Select from and use a wide range of tools. Cut accurately and safely to a marked line. Select from and use a wide range of materials. Use appropriate finishing techniques for the project. Refine their product – review and rework/improve. 	
Evaluate	Key Stage 1			Key Stage 2 – Years 3 and 4			Key Stage 2 - Year 5 and 6	

Design and Technology Whole School Overview 2026-2027

KLIPS	<ul style="list-style-type: none"> Explore existing products and investigate how they have been made. Decide how existing products do/do not achieve their purpose. Talk about their design as they develop and identify good and bad points. Note changes made during the making process as annotation to plans/drawings. Say what they like and do not like about items they have made and attempt to say why. Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user. 			<ul style="list-style-type: none"> Investigate similar products to the one to be made to give starting points for a design. Draw/sketch products to help analyse and understand how products are made. Research needs of user. Identify the strengths and weaknesses of their design ideas in relation to purpose/user. Decide which design idea to develop. Consider and explain how the finished product could be improved. Discuss how well the finished product meets the design criteria of the user. Investigate key events and individuals in Design and Technology 			<ul style="list-style-type: none"> Research and evaluate existing products (including book and web based research). Consider user and purpose. Identify the strengths and weaknesses of their design ideas. Give a report using correct technical vocabulary. Consider and explain how the finished product could be improved related to design criteria. Discuss how well the finished product meets the design criteria of the user. Test on the user! Understand how key people have influenced design. 	
Vocabulary	Class 3 Structures Function, man-made, mould, natural, stable, stiff, strong, structure, test, weak Textiles Fabric felt buttons, sequins, wool, thread stitch Pattern Finish Food spread slicing, peeling, cutting,	Class 4 Mechanisms Vehicle, Axle Wheel Chassis Forwards/backwards Push/Pull Up/down Structures Strong/weak Stable Structure Shape Base, top, Edge, side, surface, face, Corner, point, Straight, curved Food Taste smell, texture Feel	Class 5 Textiles Fabric thread stitches Pattern Food Fruit grown Texture Ingredients Produce Farmed Prepare Mechanisms Vehicle Axle/ Wheel Chassis/ Dowel Direction Lever / slider / pivot	Class 6 Mechanism Mechanism, lever, linkage Pivot, slot, guide Linear, rotary, oscillating, reciprocating Food texture, taste process, seasonal, reared, harvested, grown, caught, hygiene, variety	Class 7 Mechanisms Mechanism, lever, linkage Pivot, slot, guide Linear, rotary, oscillating, reciprocating Textiles Fabrics hessian binca stitch technique pattern Seam	Class 8 Structures join, strut, rafter, girder, structure, material, research, design, plan, evaluate Food Texture taste appearance utensils food sourcing production process, seasonal, reared, harvested,	Class 9 & 10 Textiles Selvage Raw edge Woven Felted Knitted Bonded Gusset Seam allowance Hem Structures Stiffen Reinforce Stabilise Frame structure	Class 11&12 Mechanical systems/ICT sequence, selection, repetition, algorithm, variable, input, Output

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	squeezing, healthy ingredients,	Peel Chop Healthy Squeeze				grown, caught, hygiene, variety ICT Circuit, battery, series Connection Insulation, conductor Crocodile Clip Control, program System Input, output	Shape base, face, edge, Vertices Vertical	
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<p>Mechanisms/Mechanical Systems and ICT KLIPS</p>	<p>Key Stage 1 – Years 1 and 2</p> <ul style="list-style-type: none"> Join appropriately for different materials and situations e.g. glue, tape. Try out different axle fixings and their strengths and weaknesses. Make vehicles with construction kits which contain free running wheels. Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels. Roll paper to create tubes. Cut dowel using hacksaw and bench hook. Attach wheels to a chassis using an axle. Mark out materials to be cut using a template. Fold, tear and cut paper and card. Cut along lines, straight and curved. Use a hole punch. Insert paper fasteners for card. Experiment with levers and sliders to find different ways of making things move in a 2D plane. 	<p>Key Stage 2 – Years 3 and 4</p> <ul style="list-style-type: none"> Develop vocabulary related to the project. Use mechanical systems such as gears, pulleys, levers and linkages. Incorporate a circuit into a model. Use electrical systems such as switches bulbs and buzzers. Use ICT to control products. Use lolly sticks/card to make levers and linkages. Use linkages to make movement larger or more varied. 	<p>Key Stage 2 – Years 5 and 6</p> <ul style="list-style-type: none"> Develop a technical vocabulary appropriate to the project. Use mechanical systems such as cams, pulleys and gears. Use electrical systems such as motors. Program, monitor and control using ICT.
<p>Structures KLIPS</p>	<p>Key Stage 1 – Years 1 and 2</p> <ul style="list-style-type: none"> Explore how to make structures stronger. Investigate different techniques for stiffening a variety of materials. Test different methods of enabling structures to remain stable. Join appropriately for different materials and situations e.g. glue, tape. Mark out materials to be cut using a template. Use a glue gun with close supervision. 	<p>Key Stage 2 – Years 3 and 4</p> <ul style="list-style-type: none"> Develop vocabulary related to the project. Create shell or frame structures. Strengthen frames with diagonal struts. Make structures more stable by giving them a wide base. Measure and mark square section, strip and dowel accurately to 1cm. 	<p>Key Stage 2 – Years 5 and 6</p> <ul style="list-style-type: none"> Use the correct terminology for tools materials and processes. Use bradawl to mark hole positions. Use hand drill to drill tight and loose fit holes. Cut strip wood, dowel, square section wood accurately to 1mm. Join materials using appropriate methods. Build frameworks to support mechanisms. Stiffen and reinforce complex structures.

<p>Textiles KLIPS</p>	<p>Key Stage 1 – Years 1 and 2</p> <ul style="list-style-type: none"> ▪ Cut out shapes which have been created by drawing round a template onto the fabric. ▪ Join fabrics by using e.g. running stitch, glue, staples, over sewing, tape. ▪ Decorate fabrics with attached items e.g. buttons, beads, sequins, braids, ribbons. ▪ Colour fabrics using a range of techniques e.g. fabric paints, printing, painting. 	<p>Key Stage 2 – Years 3 and 4</p> <ul style="list-style-type: none"> ▪ Develop vocabulary for tools materials and their properties. ▪ Understand seam allowance. ▪ Join fabrics using running stitch, over sewing, blanket stitch. ▪ Prototype a product using J cloths. ▪ Use prototype to make pattern. ▪ Explore strengthening and stiffening of fabrics. ▪ Explore fastenings (inventors?) and recreate some. ▪ Sew on buttons and make loops. ▪ Use appropriate decoration techniques. 	<p>Key Stage 2 – Years 5 and 6</p> <ul style="list-style-type: none"> ▪ Use the correct vocabulary appropriate to the project. ▪ Create 3D products using patterns pieces and seam allowance. ▪ Understand pattern layout. ▪ Decorate textiles appropriately (often before joining components). ▪ Pin and tack fabric pieces together. ▪ Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision). ▪ Combine fabrics to create more useful properties. ▪ Make quality products.
<p>Food KLIPS</p>	<p>Key Stage 1– Years 1 and 2</p> <ul style="list-style-type: none"> ▪ Develop a food vocabulary using taste, smell, texture and feel. ▪ Group familiar food products e.g. fruit and vegetables. ▪ Explain where food comes from. ▪ Cut, peel, grate, chop a range of ingredients ▪ Work safely and hygienically. ▪ Understand the need for a variety of foods in a diet. ▪ Measure and weigh food items, non-statutory measures e.g. spoons, cups. 	<p>Key Stage 2 – Years 3 and 4</p> <ul style="list-style-type: none"> ▪ Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. ▪ Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury). ▪ Follow instructions/recipes. ▪ Make healthy eating choices – use the <i>Eatwell plate</i>. ▪ Join and combine a range of ingredients. ▪ Explore seasonality of vegetables and fruit. ▪ Find out which fruit and vegetables are grown in countries/continents studied in Geography. ▪ Develop understanding of how meat/fish are reared/caught. 	<p>Key Stage 2 – Years 5 and 6</p> <ul style="list-style-type: none"> ▪ Prepare food products taking into account the properties of ingredients and sensory characteristics. ▪ Weigh and measure using scales. ▪ Select and prepare foods for a particular purpose. ▪ Work safely and hygienically. ▪ Show awareness of a healthy diet (using the eatwell plate). ▪ Use a range of cooking techniques. ▪ Know where and how ingredients are grown and processed. ▪ Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable fishing etc.

<p>How has the Design and Technology curriculum taken into account the needs of our children?</p>	<p>The curriculum was designed to meet the requirements of the National Curriculum in a way that inspires and motivates the pupils at St George's. We aim for children to be determined and confident in all that they do. Therefore, the Design Technology units all start with a problem (in the form of a question) for children to explore using their own ideas and research into existing products. Through exploring questions, we encourage children at St George's to be determined, confident, resilient and creative in their approach to researching, designing, making and evaluating their products.</p> <p>When the curriculum was designed, St George's had 317 pupils on roll with 284 pupils of White-British ethnicity. We therefore designed a curriculum that gives children a wealth of experiences of other cultures. These include:</p> <ul style="list-style-type: none"> • Class 1 & 2 make traditional puppets to tell stories from other cultures. • Class 4 learn about India and make Indian meals and snacks. • Class 5 research and make smoothies with fruits of the rainforests. • Class 8 research and make food from North America <p>As a school our Overall Multiple Deprivation Index is B and our Employment Deprivation Index is C. We therefore aim to give purpose to our design technology teaching by showing the children at St George's how the skills they learn can be used in future employment in a range of industries. These include:</p> <ul style="list-style-type: none"> • Class 1 & 2 make a range of different food products across the year e.g. make and sell cakes at the Christmas Fair. • Class 3 explore real life technology from around the world at Imagine That! • As part of our 3D Printer project, we are planning to deliver 3D printer training to the staff team and plan in workshops for classes throughout the year. The Create Education/ 3DGBIRE team will be able to discuss career prospects with classes and the growth of careers in 3D printing. • During Forest School sessions, children will be given the opportunities to use tools to create Christmas decorations to sell at the school Christmas Fair. <p>As a school, we have successfully completed a 3D Printer Programme funded by BAE, in collaboration with local Chorley-based business 3DGBIRE and Create Education. Throughout each year of the project, a member of staff has been trained to operate the 3D printer and deliver engaging sessions to pupils. Our children have embraced this exciting technology, using the printers to design and create their own impressive pieces. The 3D printer has held a prominent position within the school, sparking curiosity and conversation, and helping pupils develop an early understanding of its growing importance in the worlds of manufacturing and production.</p> <p>We are proud to now have our very own 3D printer in school—an incredible asset that opens up a world of opportunity for our pupils. With this technology at their fingertips, children will have the chance to explore creative design, problem-solving, and innovation in hands-on ways. It not only enhances their learning across subjects but also inspires them to think about future careers in STEM and the technologies that are shaping tomorrow's world.</p> <p><u>Design and Technology and Forest School</u> Forest School has strong cross- curricular links with design and technology. Within forest school we use our creativity and imagination to design and solve real and relevant problems.</p>
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1. **Problem Solving and Making** - Children learn to design and construct simple structures in the forest (dens, bridges, shelters). Encourages iterative design—they test, adapt, and improve using natural materials.
2. **Materials and Their Properties** - Forest School provides real-world contexts for exploring natural materials: wood, bark, leaves, twine, mud. Learners understand durability, flexibility, and suitability of materials through first-hand experience.
3. **Tools and Techniques** - Safe use of tools such as peelers, hammers, saws, and hand drills is taught in Forest School. Directly supports the practical skills strand of the D&T curriculum.
4. **Structures and Mechanisms** - Children explore balance and strength when building shelters or creating simple pulleys with ropes and sticks. Linked to KS1/KS2 topics such as levers, pulleys, structures, and joining techniques.
5. **Sustainability and Ethical Design** - Forest School naturally fosters an awareness of the environment. Promotes eco-conscious design thinking—using sustainable, recyclable, or biodegradable materials.

Forest School and D&T work in harmony to provide a holistic, engaging, and practical curriculum. Forest School enriches D&T by:
 Providing meaningful contexts for making and designing.
 Encouraging risk-taking and resilience.
 Deepening understanding through sensory, outdoor experiences.

The Early Years curriculum for Design Technology is taken from Development Matters but steered by the children's interests. 'All About Me' booklets completed by parents before children start school allow us to design a curriculum that meets the needs and interests of the children. Early Years staff continually discuss ideas with the children and change planning accordingly. The curriculum is designed to be taught using group work, individual work and through carefully designed continuous provision that encourages children to revisit and remember previously taught skills. Children are given choice in the design process in each topic. For example, in their space topic the children choose what they would like to make e.g. rocket, spaceship, alien, planet. They then design their product and choose the tools, technique and materials they would like to use. Children are then encouraged to evaluate their product through carefully questioning from the adults in their class. This prepares our children to be determined and confident in the design process from the earliest opportunity.

How has pupil voice impacted our curriculum?

The pupils' views have also inspired the way our Design and Technology curriculum has been designed. In pupil voice questionnaires, children across school recognise the importance of Design and Technology. This is also indicative of the question based inquisitive curriculum we have designed for our children in which they link their learning in the classroom to the world around them. Children questioned in Year 6 explained 'we like to come up with our own ideas and to go through the processes in relation to our own interests.' This indicates that an approach where children are given an open-ended problem to explore and use their own ideas to solve, would appeal to children at St George's. We have therefore designed our curriculum with a question to start each unit. The children use their own ideas along with research of existing products to solve the problem using the design, make, evaluate process.

The younger children in school preferred the 'make' element of the Design and Technology process, as they can see their designs come to life.

	<p>Our curriculum therefore has a clear practical outcome for each unit and provides many opportunities to practise the skills needed to make the final product throughout the units. We also aim to show children the importance of the whole design process and help them to understand why the design and evaluate aspects are equally important</p> <p>We also discussed with children the professions that link to Design and Technology, with engineer, architect, computer programmer, fashion designer and mechanic being some of the suggestions. Our curriculum aims to wider the professions that children at St George’s aspire to through the opportunities we offer for children to see design technology used in real life contexts.</p>
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