



Chalton Lower School - Design Technology Progression Map



	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4
SKILLS	<p>Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</p> <p>Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.</p>	<p>Begin to select tools and materials; use correct vocabulary to name and describe them.</p> <p>Begin to use a variety of simple tools and equipment safely and appropriately.</p> <p>Build structures.</p> <p>Start to assemble, join and combine materials in order to make a product.</p> <p>Demonstrate how to cut, shape and join materials such as paper to make a simple product.</p> <p>Start to choose and use appropriate finishing techniques based on own ideas.</p> <p>Start to understand mechanical systems such as levers and pivots.</p> <p>Basic food handling, hygienic practices and personal hygiene, including how to control risk by following simple instructions.</p> <p>Know that fruit and vegetables have nutritional value and are an important part of our</p>	<p>Select tools and materials; use correct vocabulary to name and describe them.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>With help measure, cut and score with some accuracy.</p> <p>Use hand tools safely and appropriately.</p> <p>Start to assemble, join and combine materials in order to make a product.</p> <p>Start to choose and use appropriate finishing techniques based on own ideas.</p> <p>Start to understand that mechanical systems such as levers and axles create movement.</p> <p>Basic food handling, hygienic practices and personal hygiene, including how to control risk by following simple instructions.</p> <p>Know that fruit and vegetables have nutritional value and are an important part of our diet.</p>	<p>Start to know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Understand how to prepare and cook a variety of dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing and spreading.</p> <p>Start to understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'.</p> <p>Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.</p> <p>Confidently make labelled drawings from different views showing specific</p>	<p>Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.</p> <p>Understand how to prepare and cook a variety of dishes safely and hygienically including, where appropriate, the use of a heat source.</p> <p>Be able to use a range of techniques such as peeling, chopping, slicing, grating, mixing and spreading.</p> <p>Show an understanding that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'.</p> <p>To design a product to fit a brief.</p> <p>Understand how to form and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and Motors)</p>

		<p>diet.</p> <p>Use key vocabulary to demonstrate knowledge and understanding in a strand of work.</p>	<p>Use key vocabulary to demonstrate knowledge and understanding in a strand of work.</p>	<p>features.</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Identify the strengths and areas for development in their ideas and products.</p> <p>When planning consider the views of others, including intended users, to improve their work.</p> <p>When planning explain their choice of materials and components including function and aesthetics.</p> <p>With growing confidence, generate ideas for an item, considering its purpose and the user/s.</p> <p>Start to order the main stages of making a product.</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Understand how well products have been designed, made, what materials have been used and the construction technique.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Start to measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Now sew using a range of different stitches.</p> <p>Learn how to colour fabric using tie dying techniques.</p> <p>Use key vocabulary to demonstrate knowledge and understanding in a strand of work.</p>
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	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4
DEVELOPING, PLANNING AND COMMUNICATING IDEAS	<p>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p>	<p>Begin to draw on their own experience to help generate ideas and research conducted on criteria.</p> <p>Begin to understand the development of existing products: What they are for, their history, how they work, and the materials used.</p> <p>Understand the importance of following a design criteria.</p> <p>Start to suggest ideas and explain what they are going to do.</p> <p>Begin to develop their ideas through talk and drawings.</p> <p>Make templates and mock ups of their ideas in card and paper.</p>	<p>Start to generate ideas by drawing on their own and other people's experiences.</p> <p>Begin to develop their design ideas through discussion, observation, drawing and modelling.</p> <p>Identify a purpose for what they intend to design and make.</p> <p>Make templates and mock ups of their ideas in card and paper or using ICT.</p>	<p>With growing confidence generate ideas for an item, considering its purpose and the user/s.</p> <p>Start to order the main stages of making a product.</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Understand how well products have been designed, made, what materials have been used and the construction technique.</p> <p>Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.</p> <p>Start to understand whether products can be recycled or reused.</p> <p>Know to make drawings with labels when designing.</p>	<p>Start to generate ideas, considering the purposes for which they are designing- link with Mathematics and Science.</p> <p>Confidently make labelled drawings from different views showing specific features.</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Identify the strengths and areas for development in their ideas and products.</p> <p>When planning consider the views of others, including intended users, to improve their work.</p> <p>Learn about inventors, designers, engineers, chefs and manufacturers who have developed</p>

				When planning explain their choice of materials and components including function and aesthetics	ground-breaking products. When planning explain their choice of materials and components according to function and aesthetic.
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	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4
WORKING WITH TOOLS, EQUIPMENT, MATERIALS AND COMPONENTS TO MAKE QUALITY PRODUCTS	<p>Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</p> <p>Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.</p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <p>Use a range of small tools, including scissors, paint brushes and cutlery.</p>	<p>Begin to make their design using appropriate techniques.</p> <p>Begin to build structure exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms (for example, levers, sliders, wheels and pivots), in their products.</p> <p>With help measure, mark out, cut and shape arrange of materials.</p> <p>Explore using tools e.g. scissors and a hole punch safely.</p> <p>Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.</p> <p>Begin to use simple Finishing techniques to improve the appearance of their project.</p>	<p>Begin to select tools and materials; use correct vocabulary to name and describe them.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>With help measure, cut and score with some accuracy.</p> <p>Learn to use hand tools safely and appropriately.</p> <p>Start to assemble, join and combine materials in order to make a product.</p> <p>Demonstrate how to cut, shape and join fabric to make a simple product. Use basic sewing techniques such as running and over stitch.</p> <p>Start to choose and use appropriate finishing techniques based on own ideas.</p>	<p>Select a wider range of tools and techniques for making their product i.e. construction materials and kits, textiles and food ingredients.</p> <p>Explain their choice of tools and equipment in relation to the skills and techniques they will be using.</p> <p>Start to understand that Mechanical systems such Pneumatic systems create movement.</p> <p>Measure, mark out, cut, score and assemble components with more accuracy.</p> <p>Start to work safely and accurately with a range of simple tools.</p> <p>Start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.</p> <p>Understand how to</p>	<p>Select a wider range of tools and techniques for making their product safely.</p> <p>Know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.</p> <p>Start to join and combine materials and components accurately in temporary and permanent ways.</p> <p>Understand how more complex electrical circuits and components can be used to create functional products.</p> <p>Learn how to use computer aided design when designing their products. Understand how to reinforce and strengthen a 3D framework.</p> <p>Start to measure, tape</p>

				reinforce and strengthen a 3D framework.	or pin, cut and join fabric with some accuracy Now sew using a range of different stitches.
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TEXTILES		<p>Cut shapes with some accuracy.</p> <p>Mix materials and consider pattern.</p> <p>Use a range of materials creatively to design and make products.</p> <p>Use a type of stitch.</p> <p>Explain how to thread a needle and have a go.</p> <p>Look at and talk about what they have produced.</p> <p>Understand the importance of safety when using scissors and needles.</p> <p>Learn how to sew a button onto a piece of fabric.</p> <p>Look at and talk about what they have produced.</p>	<p>Cut shapes with some accuracy.</p> <p>Mix materials and consider pattern.</p> <p>Use a range of materials creatively to design and make products.</p> <p>Gain confidence in stitching two pieces of fabric together using running and over stitch.</p> <p>Understand how to thread a needle and try it themselves.</p> <p>Understand the importance of safety when using scissors and needles.</p> <p>Learn how to sew a button onto a piece of fabric.</p> <p>Look at and talk about what they have produced.</p>	<p>Name a range of different fabrics.</p> <p>Use a variety of techniques, e.g. dyeing and stitching to create textured effects.</p> <p>Apply decoration using additional materials, beads and buttons.</p> <p>Look at fabrics from other countries.</p> <p>Discuss their own and others' work, expressing thoughts and feelings.</p> <p>Apply decorations using a needle and thread, e.g. beads, sequins and buttons.</p> <p>Discuss and review own and others' work expressing thoughts and feelings.</p>	<p>Name a range of different fabrics.</p> <p>Use a variety of techniques, e.g. dyeing and stitching to create textured effects.</p> <p>Apply decoration using additional materials, beads and buttons.</p> <p>Look at fabrics from other countries.</p> <p>Discuss their own and others' work, expressing thoughts and feelings.</p> <p>Apply decorations using a needle and thread, e.g. beads, sequins and buttons.</p> <p>Discuss and review own and others' work expressing thoughts and feelings.</p> <p>Identify changes and see how they can be developed further.</p>

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EVALUATING PROCESSES AND PRODUCTS	<p>Review their progress as they try to achieve a goal.</p> <p>Check how well they are doing.</p> <p>Share their creations, explaining the process they have used.</p>	<p>Start to evaluate their products and existing products by discussing how well they work in relation to the purpose (design criteria).</p> <p>When looking at existing Products explain what they like and dislike about products and why.</p> <p>Begin to evaluate their products as they are developed identifying strengths and possible changes they might make.</p> <p>Begin to evaluate their processes as they are developed identifying strengths and possible changes they might make</p>	<p>Evaluate their work against their design criteria.</p> <p>Look at a range of existing products explain what they like and dislike about products and why.</p> <p>Start to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>With confidence talk about their ideas, saying what they like and dislike about them.</p>	<p>Start to evaluate their product against original design criteria e.g. how well it meets its intended purpose.</p> <p>Begin to disassemble and evaluate familiar products and consider the views of others to improve them.</p> <p>Evaluate the key designs of individuals in design and technology has helped shape the world.</p>	<p>Evaluate their products carrying out appropriate tests.</p> <p>Start to their evaluate work both during and at the end of the assignment.</p> <p>Be able to disassemble and evaluate familiar products and consider the views of others to improve them.</p> <p>Evaluate the key designs of individuals in design and technology has helped shape the world.</p>