

**Chapel St Leonards Primary School**  
**Progression of Key Concepts in Design and Technology**

Year	Autumn	Spring	Summer
Y1	<b>History Detectives</b>	<b>The World came to my place today</b>	<b>A journey to... Australia</b>
Introduce Revisit	<p>DT4: Cut materials safely using tools provided.</p> <p>DT5: Measure and mark out to the nearest centimetre.</p> <p>DT6: Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</p> <p>DT7: Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>DT13: Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p> <p>DT15: Design products that have a clear purpose and an intended user.</p> <p>DT16: Make products, refining the design as work progresses.</p> <p>DT18: Explore objects and designs to identify likes and dislikes of the designs.</p> <p>DT19: Suggest improvements to existing designs.</p> <p>DT20: Explore how products have been created</p>	<p>DT1: Cut, peel or grate ingredients safely and hygienically.</p> <p>DT2: Measure or weigh using measuring cups or electronic scales.</p> <p>DT3: Assemble or cook ingredients.</p> <p>DT15: Design products that have a clear purpose and an intended user.</p> <p>DT16: Make products, refining the design as work progresses.</p> <p>DT18: Explore objects and designs to identify likes and dislikes of the designs.</p> <p>DT19: Suggest improvements to existing designs.</p> <p>DT20: Explore how products have been created.</p>	<p>DT4: Cut materials safely using tools provided.</p> <p>DT6: Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</p> <p>DT7: Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>DT15: Design products that have a clear purpose and an intended user.</p> <p>DT16: Make products, refining the design as work progresses.</p> <p>DT18: Explore objects and designs to identify likes and dislikes of the designs.</p> <p>DT19: Suggest improvements to existing designs.</p> <p>DT20: Explore how products have been created.</p>
Y2	<b>London</b>	<b>At the Seaside</b>	<b>A journey to... Kenya</b>
Introduce Revisit Embed	<p>DT4: Cut materials safely using tools provided.</p> <p>DT5: Measure and mark out to the nearest centimetre.</p> <p>DT6: Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</p> <p>DT7: Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>DT11: Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).</p> <p>DT12: Model designs using software.</p> <p>DT13: Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p> <p>DT14: Create products using levers, wheels and winding mechanisms.</p> <p>DT15: Design products that have a clear purpose and an intended user.</p> <p>DT16: Make products, refining the design as work progresses.</p> <p>DT18: Explore objects and designs to identify likes and dislikes of the designs.</p> <p>DT19: Suggest improvements to existing designs.</p> <p>DT20: Explore how products have been created.</p>	<p>DT4: Cut materials safely using tools provided.</p> <p>DT7: Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>DT8: Shape textiles using templates.</p> <p>DT9: Join textiles using running stitch.</p> <p>DT10: Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing).</p> <p>DT15: Design products that have a clear purpose and an intended user.</p> <p>DT16: Make products, refining the design as work progresses.</p> <p>DT17: Use software to design.</p> <p>DT18: Explore objects and designs to identify likes and dislikes of the designs.</p> <p>DT19: Suggest improvements to existing designs.</p> <p>DT20: Explore how products have been created.</p>	<p>DT1: Cut, peel or grate ingredients safely and hygienically.</p> <p>DT2: Measure or weigh using measuring cups or electronic scales.</p> <p>DT3: Assemble or cook ingredients.</p> <p>DT15: Design products that have a clear purpose and an intended user.</p> <p>DT16: Make products, refining the design as work progresses.</p> <p>DT18: Explore objects and designs to identify likes and dislikes of the designs.</p> <p>DT19: Suggest improvements to existing designs.</p> <p>DT20: Explore how products have been created.</p>

Y3	The Stone Age Stinks	River Deep, Mountain High	A journey to... Italy
Recap	<p>DT14: Create products using levers, wheels and winding mechanisms.</p> <p>DT17: Use software to design</p>	<p>DT7: Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).</p> <p>DT13: Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p> <p>DT15: Design products that have a clear purpose and an intended user.</p>	<p>DT1: Cut, peel or grate ingredients safely and hygienically.</p> <p>DT2: Measure or weigh using measuring cups or electronic scales.</p> <p>DT3: Assemble or cook ingredients.</p>
Introduce Revisit	<p>DT8: Select appropriate joining techniques.</p> <p>DT14: Choose suitable techniques to construct products or to repair items.</p> <p>DT15: Strengthen materials using suitable techniques.</p> <p>DT16: Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears)</p> <p>DT17: Design with purpose by identifying opportunities to design.</p> <p>DT18: Make products by working efficiently (such as by carefully selecting materials).</p> <p>DT19: Refine work and techniques as work progresses, continually evaluating the product design.</p> <p>DT23: Disassemble products to understand how they work</p>	<p>DT5: Cut materials accurately and safely by selecting appropriate tools.</p> <p>DT6: Measure and mark out to the nearest millimetre.</p> <p>DT7: Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</p> <p>DT8: Select appropriate joining techniques.</p> <p>DT14: Choose suitable techniques to construct products or to repair items.</p> <p>DT15: Strengthen materials using suitable techniques.</p> <p>DT17: Design with purpose by identifying opportunities to design.</p> <p>DT18: Make products by working efficiently (such as by carefully selecting materials).</p> <p>DT19: Refine work and techniques as work progresses, continually evaluating the product design.</p> <p>DT20: Use software to design and represent product designs.</p> <p>DT21: Identify some of the great designers in all of the areas of study (including pioneers in</p>	<p>DT1: Prepare ingredients hygienically using appropriate utensils.</p> <p>DT2: Measure ingredients to the nearest gram accurately.</p> <p>DT3: Follow a recipe.</p> <p>DT4: Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).</p> <p>DT5: Cut materials accurately and safely by selecting appropriate tools.</p> <p>DT17: Design with purpose by identifying opportunities to design.</p> <p>DT18: Make products by working efficiently (such as by carefully selecting materials).</p> <p>DT19: Refine work and techniques as work progresses, continually evaluating the product design.</p> <p>DT22: Improve upon existing designs, giving reasons for choices.</p>

		horticultural techniques) to generate ideas for designs. DT22: Improve upon existing designs, giving reasons for choices. DT23: Disassemble products to understand how they work.	
Y4	<b>Anglo Saxons and Vikings</b>	<b>Earthquakes and Volcanos</b>	<b>A journey to... Brazil</b>
Introduce Revisit Embed	DT12: Create series and parallel circuits DT13: Control and monitor models using software designed for this purpose. DT14: Choose suitable techniques to construct products or to repair items. DT15: Strengthen materials using suitable techniques. DT16: Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears) DT17: Design with purpose by identifying opportunities to design. DT18: Make products by working efficiently (such as by carefully selecting materials). DT19: Refine work and techniques as work progresses, continually evaluating the product design. DT20: Use software to design and represent product designs. DT22: Improve upon existing designs, giving reasons for choices. DT23: Disassemble products to understand how they work.	DT5: Cut materials accurately and safely by selecting appropriate tools. DT6: Measure and mark out to the nearest millimetre. DT7: Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs). DT8: Select appropriate joining techniques. DT9: Understand the need for a seam allowance. DT10: Join textiles with appropriate stitching. DT11: Select the most appropriate techniques to decorate textiles. DT17: Design with purpose by identifying opportunities to design. DT18: Make products by working efficiently (such as by carefully selecting materials). DT19: Refine work and techniques as work progresses, continually evaluating the product design.	DT1: Prepare ingredients hygienically using appropriate utensils. DT2: Measure ingredients to the nearest gram accurately. DT3: Follow a recipe. DT4: Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking). DT5: Cut materials accurately and safely by selecting appropriate tools. DT17: Design with purpose by identifying opportunities to design. DT18: Make products by working efficiently (such as by carefully selecting materials). DT19: Refine work and techniques as work progresses, continually evaluating the product design. DT22: Improve upon existing designs, giving reasons for choices.

Y5	<b>Phenomenal Pharaohs</b>	<b>Our Changing World (Coasts)</b>	<b>A journey to... Greece</b>
Recap	DT5: Cut materials accurately and safely by selecting appropriate tools.  DT6: Measure and mark out to the nearest millimetre.  DT7: Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).  DT8: Select appropriate joining techniques.  DT15: Strengthen materials using suitable techniques.	DT16: Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears)  DT17: Design with purpose by identifying opportunities to design.  DT18: Make products by working efficiently (such as by carefully selecting materials).  DT19: Refine work and techniques as work progresses, continually evaluating the product design.	DT1: Prepare ingredients hygienically using appropriate utensils. DT2: Measure ingredients to the nearest gram accurately. DT3: Follow a recipe. DT4: Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).
Introduce Revisit	DT5: Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).  DT6: Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).  DT11: Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).  DT13: Use innovative combinations of electronics (or computing) and mechanics in product designs.  DT14: Design with the user in mind, motivated by the service a product will offer (rather than simply for profit)  DT15: Make products through stages of prototypes, making continual refinements.  DT16: Ensure products have a high-quality finish, using art skills where appropriate.  DT18: Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.  DT19: Create innovative designs that improve upon existing products.	DT12: Convert rotary motion to linear using cams.  DT5: Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).  DT11: Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).  DT14: Design with the user in mind, motivated by the service a product will offer (rather than simply for profit)  DT15: Make products through stages of prototypes, making continual refinements.  DT17: Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.  DT18: Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.  DT19: Create innovative designs that improve upon existing products.	DT1: Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).  DT2: Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.  DT3: Demonstrate a range of baking and cooking techniques.  DT4: Create and refine recipes, including ingredients, methods, cooking times and temperatures.  DT20: Evaluate the design of products so as to suggest improvements to the user experience.

	DT20: Evaluate the design of products so as to suggest improvements to the user experience.		
Y6	<b>World War 2</b>	<b>Hola Mexico</b>	<b>A journey to... The Future!</b>
Introduce Revisit Embed	<p>DT5: Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</p> <p>DT6: Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</p> <p>DT7: Create objects (such as a cushion) that employ a seam allowance.</p> <p>DT8: Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).</p> <p>DT13: Use innovative combinations of electronics (or computing) and mechanics in product designs.</p> <p>DT14: Design with the user in mind, motivated by the service a product will offer (rather than simply for profit)</p> <p>DT15: Make products through stages of prototypes, making continual refinements.</p> <p>DT16: Ensure products have a high-quality finish, using art skills where appropriate.</p> <p>DT17: Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.</p> <p>DT19: Create innovative designs that improve upon existing products.</p> <p>DT20: Evaluate the design of products so as to suggest improvements to the user experience.</p>	<p>DT1: Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).</p> <p>DT2: Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.</p> <p>DT3: Demonstrate a range of baking and cooking techniques.</p> <p>DT4: Create and refine recipes, including ingredients, methods, cooking times and temperatures.</p>	<p>DT9: Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).</p> <p>DT10: Write code to control and monitor models or products.</p> <p>DT13: Use innovative combinations of electronics (or computing) and mechanics in product designs.</p> <p>DT14: Design with the user in mind, motivated by the service a product will offer (rather than simply for profit)</p> <p>DT15: Make products through stages of prototypes, making continual refinements.</p> <p>DT16: Ensure products have a high quality finish, using art skills where appropriate.</p> <p>DT17: Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.</p> <p>DT18: Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.</p> <p>DT19: Create innovative designs that improve upon existing products.</p> <p>DT20: Evaluate the design of products so as to suggest improvements to the user experience.</p>

Recap	recap previous phases concepts
Introduce	concept covered for the first time from hierarchy in this 'phase'
Revisit	concept revisited from hierarchy current year phase
Embed	concept covered for the at least the third time from the hierarchy in current 'phase'