

D&T Learning Sequence Document – Year 1/2 2023 2024



Term	Autumn 2	Spring 2	Summer	
Topic	Memory Box	Towers, Turrets and Bridges	Enchanted Forest	
DT NC Focus:	In each sequence of lessons children will be taught: <b>Design    Make (Tools/Equipment/Materials/Components)    Technical Knowledge    Evaluate    Cooking and Nutrition</b>			
National Curriculum KS2	<p><b>Design</b></p> <ul style="list-style-type: none"> <li>use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</li> <li>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul>	<p><b>Make</b></p> <ul style="list-style-type: none"> <li>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</li> <li>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</li> </ul>	<p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>investigate and analyse a range of existing products</li> <li>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>understand how key events and individuals in design and technology have helped shape the world</li> </ul>	<p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>apply their understanding of computing to program, monitor and control their products.</li> </ul>
	Each term children will work through the design process as follows: Analyse existing products    Agree design criteria    Make using technical knowledge and skills    Evaluate product			
Design Task	Structures: Design a baby bear's chair	Mechanical systems: Making a moving monster	Textiles Making a pouch for a woodland fairy	
Prior learning:	Identify man-made and natural structures. Identify stable and unstable structural shapes.  <a href="https://www.bbc.co.uk/bitesize/articles/z2bdjxs">https://www.bbc.co.uk/bitesize/articles/z2bdjxs</a>	To know that mechanisms are a collection of moving parts that work together to produce movement.  To know that input is energy that is used to make something work.  To know that output is the resulting movement that results from the input.	To know that 'joining technique' means connecting two pieces of material together.  To know that there are various temporary methods of joining fabric by using staples, glue or pins.	
Sequence of learning:	<p><b>Research</b></p> <p>Lesson 1: Exploring stability To explore the concept and features of structures and the stability of different shapes.</p> <p><b>Design Criteria</b></p> <p><b>Design</b></p> <p>Lesson 2: Strengthening materials To understand that the shape of the structure affects its strength</p> <p><b>Make</b></p> <p><b>Tool</b></p> <p><b>Equipment</b></p> <p><b>Materials</b></p> <p><b>Components</b></p> <p>Lesson 3: Making baby bear's chair To make a structure according to design criteria</p> <p><b>Technical Knowledge</b></p> <p><b>Evaluate</b></p> <p>Lesson 4: Fixing and testing baby bear's chair To produce a finished structure and evaluate its strength, stiffness and stability</p>	<p>Lesson 1: Pivots, levers and linkages To look at objects and understand how they move</p> <p>Lesson 2: Making linkages To look at objects and understand how they move</p> <p>Lesson 3: Designing my monster To explore different design options</p> <p>Lesson 4: Making my monster To make a moving monster</p>	<p>Lesson 1: Joining fabrics To join fabrics together using different methods</p> <p>Lesson 2: Designing my puppet To use a template to create my design</p> <p>Lesson 3: Making and joining my puppet To join two fabrics together accurately</p> <p>Lesson 4: Decorating my puppet To embellish my design using joining methods</p>	
Vocabulary	design criteria    shape    model    test man-made    natural    properties    structure    stable	Axle    design criteria    input    linkage    mechanical    output pivot    wheel	decorate    design    fabric    glue    model    hand puppet    safety pin    staple    stencil template	



Term	Autumn 2	Spring 2	Summer 2
Topic	Memory Box	Towers, turrets and bridges	Enchanted Woodland
<b>DT NC Focus</b>	<b>Cooking and Nutrition</b>		
<b>Cooking and nutrition</b>	<p>Each term the children will have opportunities to:</p> <ul style="list-style-type: none"> <li>understand and apply the principles of a healthy and varied diet</li> <li>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul> <p style="text-align: center;">These aspects will be interleaved throughout the 2 year rolling programme.</p>		
<b>Cooking and nutrition task</b>	Fruit and vegetables	Plan and prepare a sandwich for a king	Design a woodland picnic.
<b>Prior Learning</b>	<p style="text-align: center;">Research</p> <p>.To understand the difference between fruit and vegetables  <a href="https://www.youtube.com/watch?v=DTK-uWx_VQo">https://www.youtube.com/watch?v=DTK-uWx_VQo</a></p>	<p style="text-align: center;">Research</p> <p><a href="https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zppvv4j">https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zppvv4j</a>            To understand the principles of a healthy diet.</p> <p><a href="https://www.bbcgoodfood.com/howto/guide/sandwich-fillings-kids">https://www.bbcgoodfood.com/howto/guide/sandwich-fillings-kids</a></p>	<p style="text-align: center;">Research</p> <p><a href="https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zppvv4j">https://www.bbc.co.uk/bitesize/topics/z7x78xs/articles/zppvv4j</a>            To understand the principles of a healthy diet.</p>
<b>Cooking and nutrition</b> understand and apply the principles of a healthy and varied diet  prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques  understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	<p>Lesson 1: Fruit or vegetable? To identify if a food is a fruit or a vegetable</p> <p>Lesson 2: Where fruit and vegetables grow To identify where plants grow and which parts we eat</p> <p>Lesson 3: Smoothie ingredients tasting To taste and compare fruit and vegetables</p> <p>Lesson 4: Making smoothies To make a fruit and vegetable smoothie</p>	<p>Lesson 1 Plan a sandwich including vegetable ingredients selecting ingredients based on research on healthy diet. Understand and explain where ingredients come from.</p> <p>Lesson 2 Prepare the sandwich and evaluate in terms of taste, appearance, weight and nutrition.</p>	<p>Lesson 1 Plan a picnic salad bowl ingredients based on research on healthy diet. Understand and explain where ingredients come from.</p> <p>Lesson 2 Prepare the picnic bowl and evaluate in terms of taste, appearance, weight and nutrition</p>
<b>Vocabulary:</b>	Fruit vegetable seed leaf root stem smoothie healthy carton design flavour peel slice	Fruit vegetable seed leaf root stem healthy carton design flavour peel slice grate spread whole meal fibre	Fruit vegetable seed leaf root stem healthy carton design flavour peel slice grate dip houmous beans pulses whole meal fibre