

# DT Medium Term Planner: Year 2



- Design**
- design purposeful, functional, appealing products for themselves and other users based on design criteria
  - generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
- Make**
- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
  - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

- Evaluate**
- explore and evaluate a range of existing products
  - evaluate their ideas and products against design criteria

- Technical knowledge**
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
  - Build structures, exploring how they can be made stronger, stiffer and more stable

	Context	Intent: Objectives		Implementation: Sequence of teaching
<b>Autumn 2 Micro project</b>	Create a Christmas Card with a sliding mechanism	<b>Design</b> -Have own ideas and plan what to do next -Explain what to do and describe how I may do it -Describe design using pictures. -Design products for others using design criteria	<b>Make</b> -Explain what I am making and why it fits the purpose -Make suggestions as to what I need to do next -Choose suitable materials and explain choices with reference to material's characteristics -Work safely	-Explore Christmas books with pop up mechanisms -Evaluate how well these mechanisms work and if they add interest/fun -Explore how pop up mechanisms work through teacher modelling -Talking partners discussions of ideas for how to use pop up mechanism in own product -Children make pop up cards selecting from tools and materials
		<b>Evaluate</b> -Talk confidently about their ideas, talking about likes and dislikes	<b>Technical Knowledge</b> -Use a sliding mechanism (year 1 skill revisited)	
<b>Spring 1 Subject Focus</b>	Make a pull along toy for 'Baby Sergei' using wheels and axles	<b>Design</b> -Have own ideas and plan what to do next -Explain what to do and describe how I may do it -Explain purpose of a product, how it will work and how it will be suitable for the user -Describe design using pictures, words and mock ups -Design products for others using design criteria -Use knowledge of existing products to produce ideas	<b>Make</b> -Explain what I am making and why it fits the purpose -Make suggestions as to what I need to do next -Join materials/components together in different ways -Choose suitable materials and explain choices with reference to material's characteristics -Work safely	-Explore different types of cardboard attachments -Evaluate existing pull along toys using real examples and internet research -Design a pull along toy for a toddler using design criteria -Explore fixed and rotating axles and make some prototype mechanisms using lego, Knex, dowel and a variety of wheels and chassis. -Make a pull along toy that incorporates wheels and axles and use cardboard attachments to build a structure on the chassis -Evaluate toy against design criteria
		<b>Evaluate</b> -Evaluate existing products -Evaluate their product in relation to the design criteria	<b>Technical Knowledge</b> -Select from and use different joining techniques to make structures stronger and more stable -Explore and use wheels and axles in their products.	

		<ul style="list-style-type: none"> <li>-Identify strengths and weaknesses and possible changes</li> <li>-Talk confidently about their ideas, talking about likes and dislikes</li> </ul>		
<b>Summer Micro Project</b>	Use tools and materials from the woodwork bench to make a robot model	<b>Design</b> <ul style="list-style-type: none"> <li>-Have own ideas and plan what to do next</li> <li>-Explain what to do and describe how I may do it</li> <li>-Describe design using pictures and words</li> <li>-Design products for myself using design criteria</li> </ul>	<b>Make</b> <ul style="list-style-type: none"> <li>-Explain what I am making and why it fits the purpose</li> <li>-Make suggestions as to what I need to do next</li> <li>-Join materials/components together in different ways</li> <li>-Choose suitable materials and explain choices with reference to material's characteristics</li> <li>-Work safely</li> </ul>	<ul style="list-style-type: none"> <li>-Revisit how to use hammers, hacksaws and palm drills safely.</li> <li>-Make safety posters to display around the woodwork benches in Year 1 and Reception.</li> <li>-Learn how to use bench hooks and clamps to position work when sawing.</li> <li>-Design a Robot using a selection of materials set out by the teacher. Draw and label the design.</li> </ul>
		<b>Evaluate</b> <ul style="list-style-type: none"> <li>-Evaluate their product in relation to the design criteria</li> <li>-Identify strengths and weaknesses and possible changes</li> <li>-Talk confidently about their ideas, talking about likes and dislikes</li> </ul>	<b>Technical Knowledge</b> N/A	<ul style="list-style-type: none"> <li>- Select from tools and materials at the woodwork bench to make a robot.</li> <li>-Complete self and peer evaluation, recording their ideas for improving their product.</li> </ul>
<b>Summer 2 Subject Focus</b>	Design and make healthy wraps for parent event.  Design and make a cheesecake for self.	<b>Design</b> <ul style="list-style-type: none"> <li>-Have own ideas</li> <li>-Describe design using pictures, words, models, mock-ups and templates and, where appropriate, ICT.</li> <li>-Design products for myself using design criteria</li> <li>-Use knowledge of existing products to produce ideas</li> </ul>	<b>Make</b> <ul style="list-style-type: none"> <li>-Choose suitable ingredients and explain choices with reference to ingredients' characteristics</li> <li>-Work safely and hygienically</li> </ul>	<ul style="list-style-type: none"> <li>-Explore farm to fork journey of butter and cheese, work collaboratively to make butter</li> <li>-Try a variety of cheesecakes and evaluate on a scale of 1-5.</li> <li>-Design own cheesecake, selecting base and cheese mixture.</li> <li>-Make own mini cheesecake.</li> <li>-Evaluate the cheesecakes flavour and texture, identifying how it could be improved.</li> </ul>
		<b>Evaluate</b> <ul style="list-style-type: none"> <li>-Evaluate existing products</li> <li>-Evaluate their product in relation to the design criteria</li> <li>-Identify strengths and weaknesses and possible changes</li> <li>-Talk confidently about their ideas, talking about likes and dislikes</li> </ul>	<b>Cooking and Nutrition</b> <ul style="list-style-type: none"> <li>-Use the basic principles of a healthy and varied diet to prepare dishes;</li> <li>-Describe how food is sourced (farmed, home-grown, caught)</li> <li>-Cut, peel and grate with increasing confidence</li> </ul>	<ul style="list-style-type: none"> <li>-Revisit principles of a healthy diet</li> <li>-Learn how different sources of protein, including vegetarian and plant based are farmed, grown and caught.</li> <li>-Work in small groups to design wraps to be served at a parent event that reflect a balanced diet.</li> </ul>