



# Thames Ditton Infant School

## D&T Curriculum Overview

We are designers - we innovate, create and evaluate

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Reception</b>		<p><b>Structures: Boats</b> Exploring what is meant by 'waterproof', 'floating' and 'sinking', pupils experiment and make predictions with various materials to carry out a series of tests. They learn about the different features of boats and ships before investigating their shape and structures to build their own.</p>	<p><b>Structures: Junk modelling</b> Exploring materials through junk modelling, children develop their scissor skills and awareness of different materials and joining techniques. Children begin to make verbal plans and material choices before starting and problem solve while making their model.</p>	<p><b>Cooking and nutrition: Soup</b> Learning about vegetables and where they come from while preparing to make a soup. Children describe the taste of a range of vegetables and design a soup recipe as a class. They practice cutting skills and prepare the vegetables for their class soup before testing the final product.</p>		<p><b>Textiles: Bookmarks</b> Developing fine motor skills through a range of threading activities before moving on to use binka and a needle. Children design a bookmark, considering what to include and why and then follow their designs to complete their bookmarks.</p>
<b>Year 1</b>	<p><b>Structures: Constructing a windmill</b> Construct a windmill to complete a request from a user. Develop an understanding of different types of windmill, how they work and their key features. Begin to use technical skills such as making evenly spaced cuts and adding weight to ensure a successful structure.</p>		<p><b>Cooking and nutrition: Smoothies</b> Handle and explore fruits and vegetables and learn how to identify fruit, before undertaking taste testing to establish chosen ingredients for a smoothie they will make, with accompanying packaging.</p>		<p><b>Textiles: Puppets</b> Explore different ways of joining fabrics before creating hand puppets based upon characters from a well-known fairytale.  Develop technical skills of cutting, gluing, stapling and pinning.</p>	<p><b>Mechanisms: Making a moving storybook</b> Plan/sketching mechanical elements in a moving story book, assembling mechanisms to create movements, reflecting by expressing likes, dislikes and improvements. Exploring how levers and sliders work in a card format to create different movements.</p>
<b>Year 2</b>		<p><b>Cooking and nutrition: Balanced diet</b> Explore and learn what forms a balanced diet, pupils will taste test ingredient combinations from different food groups that will inform a wrap design of their choice which will include a healthy mix of protein, vegetables and dairy.</p>		<p><b>Mechanisms: Making a moving monster</b> After learning the terms: pivot, lever and linkage, pupils design a monster that will move using a linkage mechanism. Pupils practice making linkages and experiment with various materials to bring their monsters to life.</p>		<p><b>Mechanisms: Fairground wheel</b> Design and create a functional fairground wheel, consider how the different components fit together so that the wheel rotates and the structure stands freely. Select appropriate material properties and develop their cutting and joining skills. Research existing structures and survey to further inform the design.</p>