

## Design and Technology

Throughout the year the children will cover a variety of aspects of the design and technology curriculum to ensure all children:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

<b>Autumn 2</b>	<p><b>Electrical systems- Simple circuits and switches</b>  <b>Design, make and evaluate an electrical product</b>  <b>Linked to science</b></p> <ul style="list-style-type: none"> <li>• Investigate and evaluate battery- powered products/ switches and simple circuits</li> <li>• To make simple circuits with batteries, switches, bulbs and buzzers</li> <li>• Develop a design brief within a context that is meaningful and authentic</li> <li>• Use annotated sketches, cross-sectional and exploded diagrams to develop, model and communicate ideas</li> <li>• Evaluate throughout and the final products against the intended purpose, user and criteria</li> </ul>
<b>Spring 2</b>	<p><b>Food – Healthy and varied diet</b>  <b>Making wraps, pitta, rolls etc</b></p> <ul style="list-style-type: none"> <li>• To investigate a range of food products.</li> <li>• Finding out about; the eatwell plate, food groups and nutrients</li> <li>• Carry out a sensory evaluation of a variety of foods</li> <li>• To select and use a range of utensils and techniques</li> <li>• Prepare ingredients hygienically and safely including cutting, grating, peeling, chopping, slicing, mixing</li> <li>• Basic food hygiene practices</li> <li>• Develop a design criteria within context that is authentic and meaningful</li> <li>• Sketch, annotate and communicate ideas</li> <li>• Make their product and evaluate against original design</li> </ul>
<b>Summer 2</b>	<p><b>Mechanisms – Levers and linkages, pneumatic system</b>  <b>Design, make and evaluate a catapult</b></p> <ul style="list-style-type: none"> <li>• Start to understand that mechanical systems such as levers and linkages or pneumatic systems create movement</li> <li>• Know how mechanical systems such as levers, linkages and pneumatics create movement</li> <li>• Investigate, analyse and evaluate products</li> <li>• Use questioning to develop understanding</li> <li>• Develop a design brief that is authentic and meaningful</li> </ul>

	<ul style="list-style-type: none"><li>• Use annotated sketches and prototypes to develop, model and communicate their ideas</li><li>• Make high quality products drawing on the knowledge, understanding and skills that have been learnt</li><li>• Evaluate the final product</li></ul>