

## Our Design and Technology Adventure



## Design and Technology End points

	End point:
Year 1	<ul> <li>I can use and develop design ideas through discussion, observation, drawing and modelling. I can tell you what 'stable' means and suggest ways to strengthen cardboard and paper structures.</li> <li>I can join materials and components successfully using a variety of temporary methods such as paper clips, selotape and manipulation of paper and card by creating slits. I can use technical vocabulary related to sliders and levers and describe their functions.</li> <li>I can evaluate my design by answering questions about what I have made and how I have gone about it.</li> <li>I can talk about how food and water give me energy to be active and stay healthy. I can give examples of food from plant and animal sources. I can talk about the importance of thorough hand washing.</li> </ul>
Year 2	<ul> <li>I can create initial ideas and modify as required.</li> <li>I can explore, assemble, join and combine materials based on real life products and begin to measure and cut these with adult support. I can use technical vocabulary related to levers, gears and pulleys and describe their functions. I can describe how materials such as cardboard use features such as flaps to make joins stronger and stiffer.</li> <li>I can discuss where I have been successful and what could be improved.</li> <li>I know that I need a variety and balance of food (and drinks) to stay healthy. I can talk about food that his grown, reared or caught. I can use simple kitchen equipment safely when preparing food using techniques such as the claw, The Bridge and Fork Secure.</li> </ul>

	End point:
Year 3	<ul> <li>I can identify a purpose and establish criteria for a successful product and communicate these through more technical drawings (cross-sectional, symbols)</li> <li>I can assemble, join and combine materials to make a functional product. I can use a simple 'series' electrical system in my product using a switch, battery and bulb and incorporate these into my design. I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures e.g. how to make a kite that is fit for purpose.</li> <li>I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work.</li> <li>I understand that the different proportions of the Eatwell Guide reflect the proportions of foods which should be eaten from each group. I can describe how people around the world (and historically) choose and combine different foods and drinks to make meals and snacks. I get myself ready to cook and remember what I need to do to work hygienically.</li> </ul>
Year 4	<ul> <li>I can use market research to inform my designs and develop my own opinions about a product.</li> <li>I can select from and use a wider range of ingredients, according to their functional and aesthetic aualities to create a chocolate bar for a target audience. I can use a wider range of tools to make my product.</li> <li>I can investigate and analyse a range of existing products to help develop my ideas. I can create a range of possible pillar structures and evaluate their effectiveness to hold weight.</li> <li>I can use the Eatwell Guide model and messages to help me make healthy choices. I can explain that foods not stored correctly can spoil and decay due to the action of micro-organisms, insects and other pests.</li> </ul>

	End point:
Year 5	<ul> <li>I can use my knowledge of electricity to develop a design specification considering the purpose to make a Suffragette alarm system as a final product making alterations in light of tests and feedback.</li> <li>I can cut and join materials with accuracy to create a wooden bridge to carry an intended weight.</li> <li>I can evaluate against the original criteria and suggest ways the product could be improved.</li> <li>I can apply the rules for basic food hygiene and other safe practices when designing and making my own food product (bread and dips) by weighing and measuring accurately.</li> </ul>
Year 6	<ul> <li>I can explore gears, levers and pulleys in everyday objects, looking at how they work and gather the knowledge needed to create my own mechanical objects.</li> <li>I can select from and use a wider range of materials and components according to their functional properties and aesthetic qualities.</li> <li>I can evaluate my work and the work of others, reflecting on how successful my product is according to its purpose.</li> </ul>