

## Key Learning in Design and Technology: Years 5 and 6

Design		Make	Evaluate
<ul style="list-style-type: none"> <li>List tools needed before starting the activity.</li> <li>Plan the sequence of work e.g. using a storyboard.</li> <li>Record ideas using annotated diagrams.</li> <li>Use models, kits and drawings to help formulate design ideas.</li> <li>Combine modelling and drawing to refine ideas.</li> <li>Devise step by step plans which can be read / followed by someone else.</li> <li>Use exploded diagrams and cross-sectional diagrams to communicate ideas.</li> <li>Sketch and model alternative ideas.</li> <li>Decide which design idea to develop.</li> </ul>		<ul style="list-style-type: none"> <li>Make prototypes.</li> <li>Develop one idea in depth.</li> <li>Use researched information to inform decisions.</li> <li>Produce detailed lists of ingredients / components / materials and tools.</li> <li>Use a computer to model ideas.</li> <li>Select from and use a wide range of tools.</li> <li>Cut accurately and safely to a marked line.</li> <li>Select from and use a wide range of materials.</li> <li>Use appropriate finishing techniques for the project.</li> <li>Refine their product – review and rework/improve.</li> </ul>	<ul style="list-style-type: none"> <li>Research and evaluate existing products (including book and web based research).</li> <li>Consider user and purpose.</li> <li>Identify the strengths and weaknesses of their design ideas.</li> <li>Give a report using correct technical vocabulary.</li> <li>Consider and explain how the finished product could be improved related to design criteria.</li> <li>Discuss how well the finished product meets the design criteria of the user. Test on the user!</li> <li>Understand how key people have influenced design.</li> </ul>
Food	Textiles	Structures	Mechanical and Electrical Systems and ICT
<ul style="list-style-type: none"> <li>Prepare food products taking into account the properties of ingredients and sensory characteristics.</li> <li>Weigh and measure using scales.</li> <li>Select and prepare foods for a particular purpose.</li> <li>Work safely and hygienically.</li> <li>Show awareness of a healthy diet (using the eatwell plate).</li> <li>Use a range of cooking techniques.</li> <li>Know where and how ingredients are grown and processed.</li> <li>Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable fishing etc.</li> </ul>	<ul style="list-style-type: none"> <li>Use the correct vocabulary appropriate to the project.</li> <li>Create 3D products using patterns pieces and seam allowance.</li> <li>Understand pattern layout.</li> <li>Decorate textiles appropriately (often before joining components).</li> <li>Pin and tack fabric pieces together.</li> <li>Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision).</li> <li>Combine fabrics to create more useful properties.</li> <li>Make quality products.</li> </ul>	<ul style="list-style-type: none"> <li>Use the correct terminology for tools materials and processes.</li> <li>Use bradawl to mark hole positions.</li> <li>Use hand drill to drill tight and loose fit holes.</li> <li>Cut strip wood, dowel, square section wood accurately to 1mm.</li> <li>Join materials using appropriate methods.</li> <li>Build frameworks to support mechanisms.</li> <li>Stiffen and reinforce complex structures.</li> </ul>	<ul style="list-style-type: none"> <li>Develop a technical vocabulary appropriate to the project.</li> <li>Use mechanical systems such as cams, pulleys and gears.</li> <li>Use electrical systems such as motors.</li> <li>Program, monitor and control using ICT.</li> </ul>