



## St James' Church of England Primary School Key Learning in Design & Technology – Year 5 & Year 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> </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> </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> </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>

- Use a range of cooking techniques.
- Know where and how ingredients are grown and processed.
- Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable fishing etc.

- Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision).
- Combine fabrics to create more useful properties.
- Make quality products.

- Build frameworks to support mechanisms.
- Stiffen and reinforce complex structures.