

Key Learning in Design and Technology: Years 5 and 6

Design		Make	Evaluate
- List tools needed before starting the activity. - Plan the sequence of work e.g. using a storyboard. - Record ideas using annotated diagrams. - Use models, kits and drawings to help formulate design ideas. - Combine modelling and drawing to refine ideas. - Devise step by step plans which can be read / followed by someone else. - Use exploded diagrams and cross-sectional diagrams to communicate ideas. - Sketch and model alternative ideas. - Decide which design idea to develop.		- Make prototypes. - Develop one idea in depth. - Use researched information to inform decisions. - Produce detailed lists of ingredients / components / materials and tools. - Use a computer to model ideas. - Select from and use a wide range of tools. - Cut accurately and safely to a marked line. - Select from and use a wide range of materials. - Use appropriate finishing techniques for the project. - Refine their product – review and rework/improve.	- Research and evaluate existing products (including book and web based research). - Consider user and purpose. - Identify the strengths and weaknesses of their design ideas. - Give a report using correct technical vocabulary. - Consider and explain how the finished product could be improved related to design criteria. - Discuss how well the finished product meets the design criteria of the user. Test on the user! - Understand how key people have influenced design.
Food	Textiles	Structures	Mechanical and Electrical Systems and ICT
- Prepare food products taking into account the properties of ingredients and sensory characteristics. - Weigh and measure using scales. - Select and prepare foods for a particular purpose. - Work safely and hygienically. - Show awareness of a healthy diet (using the eatwell plate). - 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.	- Use the correct vocabulary appropriate to the project. - Create 3D products using patterns pieces and seam allowance. - Understand pattern layout. - Decorate textiles appropriately (often before joining components). - Pin and tack fabric pieces together. - Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision). - Combine fabrics to create more useful properties. - Make quality products.	- Use the correct terminology for tools materials and processes. - Use bradawl to mark hole positions. - Use hand drill to drill tight and loose fit holes. - Cut strip wood, dowel, square section wood accurately to 1mm. - Join materials using appropriate methods. - Build frameworks to support mechanisms. - Stiffen and reinforce complex structures.	- Develop a technical vocabulary appropriate to the project. - Use mechanical systems such as cams, pulleys and gears. - Use electrical systems such as motors. - Program, monitor and control using ICT.