

Key Learning in Design and Technology: Years 3 and 4

Design		Make	Evaluate
- Develop more than one design or adaptation of an initial design. - Plan a sequence of actions to make a product. - Record the plan by drawing using annotated sketches. - Begin to use cross-sectional and exploded diagrams. - Use prototypes to develop and share ideas. - Think ahead about the order of their work and decide upon tools and materials. - Propose realistic suggestions as to how they can achieve their design ideas. - Consider aesthetic qualities of materials chosen. - Use CAD where appropriate.		- Prepare pattern pieces as templates for their design. - Cut slots. - Cut internal shapes. - Select from a range of tools for cutting shaping joining and finishing. - Use tools with accuracy. - Select from techniques for different parts of the process. - Select from materials according to their functional properties. - Plan the stages of the making process. - Use appropriate finishing techniques.	- Investigate similar products to the one to be made to give starting points for a design. - Draw/sketch products to help analyse and understand how products are made. - Research needs of user. - Identify the strengths and weaknesses of their design ideas in relation to purpose/user. - Decide which design idea to develop. - Consider and explain how the finished product could be improved. - Discuss how well the finished product meets the design criteria of the user. - Investigate key events and individuals in Design and Technology.
Food	Textiles	Structures	Mechanical and Electrical Systems and ICT
- Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. - Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury). - Follow instructions/recipes. - Make healthy eating choices – use the <i>Eatwell plate</i>. - Join and combine a range of ingredients. - Explore seasonality of vegetables and fruit. - Find out which fruit and vegetables are grown in countries/continents studied in Geography. - Develop understanding of how meat/fish are reared/caught.	- Develop vocabulary for tools materials and their properties. - Understand seam allowance. - Join fabrics using running stitch, over sewing, blanket stitch. - Prototype a product using J cloths. - Use prototype to make pattern. - Explore strengthening and stiffening of fabrics. - Explore fastenings (inventors?) and recreate some. - Sew on buttons and make loops. - Use appropriate decoration techniques.	- Develop vocabulary related to the project. - Create shell or frame structures. - Strengthen frames with diagonal struts. - Make structures more stable by giving them a wide base. - Measure and mark square section, strip and dowel accurately to 1cm.	- Develop vocabulary related to the project. - Use mechanical systems such as gears, pulleys, levers and linkages. - Incorporate a circuit into a model. - Use electrical systems such as switches bulbs and buzzers. - Use ICT to control products. - Use lolly sticks/card to make levers and linkages. - Use linkages to make movement larger or more varied.