St. Mary's Church of England Primary School, Fownhope

Progression of Knowledge and Skills in Design and Technology

"What we nurture today flourishes tomorrow"

Year	Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products (including food)	Evaluating processes and products
1	□ Draw on their own experience to help generate ideas □ Suggest ideas and explain what they are going to do □ Identify a target group for what they intend to design and make □ Model their ideas in card and paper □ Develop their design ideas applying findings from	□ Make their design using appropriate techniques □ With help measure, mark out, cut and shape a range of materials □ Use tools e.g. scissors and a hole punch safely □ Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape □ Select and use appropriate fruit and vegetables, processes and tools □ Use basic food handling, hygienic practices and personal hygiene □ Use simple finishing techniques to improve the appearance of their product	□ Evaluate their product by discussing how well it works in relation to the purpose □ Evaluate their products as they are developed, identifying strengths and possible changes they might make □ Evaluate their product by asking questions about what they have made and how they have gone about it
2	□ Generate ideas by drawing on their own and other people's experiences □ Develop their design ideas through discussion, observation , drawing and modelling □ Identify a purpose for what they intend to design and make □ Identify simple design criteria □ Make simple drawings	□ Begin to select tools and materials; use vocabulary to name and describe them □ Measure, cut and score with some accuracy □ Use hand tools safely and appropriately □ Assemble, join and combine materials in order to make a product □ Cut, shape and join fabric to make a simple garment. Use basic sewing techniques □ Follow safe procedures for food safety and hygiene □ Choose and use appropriate finishing techniques	□ Evaluate against their design criteria □ Evaluate their products as they are developed, identifying strengths and possible changes they might make □ Talk about their ideas, saying what they like and dislike about them
3	Generate ideas for an item, considering its purpose and the user/s □ Identify a purpose and establish criteria for a successful product. □ Plan the order of their work before starting □ Explore, develop and communicate design proposals by modelling ideas □ Make drawings with labels when designing	□ Select tools and techniques for making their product □ Measure, mark out, cut, score and assemble components with more accuracy □ Work safely and accurately with a range of simple tools □ Think about their ideas as they make progress and be willing change things if this helps them improve their work □ Measure, tape or pin, cut and join fabric with some accuracy	□ Evaluate their product against original design criteria e.g. how well it meets its intended purpose □ Disassemble and evaluate familiar products

		□ Demonstrate hygienic food preparation and storage □ Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT	
4	Generate ideas, considering the purposes for which they are designing □ Make labelled drawings from different views showing specific features □ Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail □ Evaluate products and identify criteria that can be used for their own designs	□ Select appropriate tools and techniques for making their product □ Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques □ Join and combine materials and components accurately in temporary and permanent ways □ Sew using a range of different stitches, weave and knit □ Measure, tape or pin, cut and join fabric with some accuracy □ Use simple graphical communication techniques	□ Evaluate their work both during and at the end of the assignment □ Evaluate their products carrying out appropriate tests
5	□ Generate ideas through brainstorming and identify a purpose for their product □ Draw up a specification for their design □ Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail □ Use results of investigations, information sources, including ICT when developing design ideas	□ Select appropriate materials, tools and techniques □ Measure and mark out accurately □ Use skills in using different tools and equipment safely and accurately □ Weigh and measure accurately (time, dry ingredients, liquids) □ Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens □ Cut and join with accuracy to ensure a good-quality finish to the product	□ Evaluate a product against the original design specification □ Evaluate it personally and seek evaluation from others
6	Communicate their ideas through detailed labelled drawings □ Develop a design specification □ Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways □ Plan the order of their work, choosing appropriate materials, tools and techniques	□ Select appropriate tools, materials, components and techniques □ Assemble components and make working models □ Use tools safely and accurately □ Construct products using permanent joining techniques □ Make modifications as they go along □ Pin, sew and stitch materials together create a product □ Achieve a quality product	□ Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests □ Record their evaluations using drawings with labels □ Evaluate against their original criteria and suggest ways that their product could be improved