Design and Technology Progression

	Design	Make	Evaluate
F	• Explain verbally what they will make with a purpose in mind • Explain how they will make their product	• Manipulate materials to achieve a planned effect. • Construct with a purpose in mind, using a variety of resources. • Use simple tools and techniques competently and appropriately. • Select appropriate resources and adapts work where necessary. • Select tools and techniques needed to shape, assemble and join materials they are using.	• Adapt work as they go along where necessary
1	• Draw on their own experience to generate ideas • Suggest ideas and explain what they are going to do • Identify a target group for what they are going to design and make • Model their ideas in card and paper • Develop their design ideas from their prototype	• Make their design using appropriate techniques • With support, measure, mark out, cut and shape a range of materials • Assemble and join materials and components using temporary methods (glues/ masking tape) • Use tools (Scissors/ hole punch etc.) safely • Use simple finishing techniques to improve the appearance of their product • Explore methods for making structures stronger and more stable • Begin to explore and use mechanisms (levers, sliders, wheels and axels) • Use basic food handling, hygienic practices and personal hygiene With support, use appropriate kitchen tools	• 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
2	• Generate ideas by drawing on their own and other people's experiences • Develop their design ideas through discussion and drawing • Identify a purpose for what they are going to make • Identify simple design criteria • Make simple drawings and label parts • Explore methods and develop design ideas by modelling and prototyping	• Begin to select appropriate tools and materials • Measure, mark out, cut, shape and score with some accuracy • Assemble and join materials and components in order to make a product • Use hand tools safely and appropriately • Choose and use finishing techniques to improve the appearance of their product • Explore methods for making structures stronger and more stable • Explore and use mechanisms (levers, sliders, wheels and axels) • Follow safe procedures for food safety and hygiene • Begin to weigh and measure and use appropriate kitchen tools • Cut, shape and join fabric using basic sewing 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
3/4	• Generate ideas for an item considering its purpose and the user/s • Identify a purpose and establish design criteria • Design and plan out methods before starting • Make labelled drawings from different views showing specific features • Explore methods and develop design ideas by modelling/ prototyping and suggest alternative methods of making if the first method fails	• Select appropriate tools, materials and techniques for making their product • Measure, mark out, cut, score and shape a range of materials with increasing accuracy • Assemble and join materials and components accurately using temporary and permanent methods • Work safely and accurately with a range of simple tools • Choose and use finishing techniques to improve the strength and appearance of their product, using a range of equipment including ICT • Apply understanding of how to strengthen and reinforce structures • Use mechanisms (gears, pulleys, cams, levers and linkages) • Use electrical systems (circuits, switches, bulbs, buzzers and motors) • Apply the rules for basic food hygiene and other safe practices (e.g. using ovens) • Use kitchen tools safely and weigh/measure with increasing accuracy • Measure, pin, cut and join fabric with some accuracy. Sew using a range of stitches, weave and knit	• Evaluate their product against the original design criteria • Evaluate their work both at the end of the assignment and during • Evaluate their product by carrying out simple tests to determine if it is fit for purpose

5/6	• Investigate existing products using information sources and ICT to help develop design ideas • Generate ideas through brainstorming and identify a purpose for their product • Draw up a specification for their design • Plan the order of their work, choosing appropriate materials, tools, techniques and processes • Make labelled drawings from different views showing specific features • Explore methods and develop design ideas by modelling/prototyping and suggest alternative methods of making if the first method fails	• Select appropriate tools, materials, components and techniques for making their product • Measure, mark out, cut, score and shape a range of materials accurately • Assemble and construct products using permanent joining techniques • Work safely and accurately with a range of simple tools • Choose and use finishing techniques to improve the strength and appearance of their product, using a range of equipment including ICT • Use mechanisms (gears, pulleys, cams, levers and linkages) • Use electrical systems (circuits, switches, bulbs, buzzers and motors) • Apply the rules for basic food hygiene and other safe practices (e.g. using ovens) • Use kitchen tools safely and weigh/measure accurately • Pin, sew, cut and stitch materials together using a range of sewing techniques to create a product	• Evaluate their product against the original design criteria, identifying strengths and areas for development • Evaluate their work both at the end of the assignment and during • Evaluate their product by carrying out simple tests to determine if it is fit for purpose • Evaluate personally and seek evaluation from others

Design and Technology Long Term Plan

Year 1	Structures – Freestanding structures	Mechanisms – Sliders and levers	Food - Preparing fruit and vegetable dishes
Year 2	Mechanisms – Wheels and axels	Food - Preparing fruit and vegetable dishes	Textiles – Templates and joining techniques
Year 3	Structures – shell structures	Mechanisms – pneumatic systems	Food – Savoury dishes
Year 4	Textiles – Use a simple fabric shape to make a 3D product.	Electrical systems – simple circuits	Food – Cake
Year 5	Mechanisms – CAMS	Structures - Reinforce and strengthen a 3D framework. Eg. Design and make a tent/den.	Food – Savoury dishes
Year 6	Textiles - Make a 3D product from a combination of fabric shapes. (e.g. make a bag)	Mechanisms – Gears and pulleys (e.g. Fairground rides)	Food – Bread