Design and Technology Progression of Skills

	DESIGN – Developing, planning and communicating ideas	MAKE – Working with tools, equipment, materials and components to make products (including food)	EVALUATE – Evaluating processes and products
Yr 1	* Draw on their own experiences to generate ideas * Suggest ideas and explain what they are going to do * Be able to plan what they are going to make * Identify a target group for their product * Be able to describe their plans in pictures and words	* Make their design using appropriate techniques * With help measure, mark out, cut and shape a range of materials * Be able to use simple tools (e.g. scissors and a hole punch) and materials safely to make products * Be able to choose appropriate tools and materials for their tasks * Assemble, join and combine materials and components together using a variety of temporary methods e.g glues or masking tape * To look at mechanisms – e.g. levers and sliders in bird feeders * 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 * Be able to comment on the usefulness of products in everyday use
Yr 2	* Generate ideas by drawing on their own and other people's experiences * Develop their design ideas through a variety of means e.g discussion, observation, drawing and modelling * Identify a purpose for their product * Identify simple design criteria	* 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	* 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

	* Make simple drawings and label parts * Know that products in everyday use have an effect on people's lives	* Follow safe procedures for food safety and hygiene. Select and use appropriate food, processes and tools * Choose and use appropriate finishing techniques	* Be able to comment on the usefulness of products in everyday use
Yr 3	* Generate ideas for an item, considering its' purpose and the user. Establish criteria for a successful product * Plan the order of the 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 and equipment * Think about their ideas as they make progress and be willing to change things if this helps them to improve their work * Demonstrate hygienic food preparation and storage * Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment	* Evaluate their product against the original design criteria e.g. how well it meets its intended purpose * Be able to suggest improvements to products in everyday use * Be able to identify the ways in which products in everyday use meet specific needs
Yr 4	* Generate ideas considering the purpose of the design * Make labelled drawings from different views showing specific features * Be able to design and make products to meet specific needs * Be able to make usable plans * Develop a clear idea of what has to be done, planning on how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempt fails	* Select appropriate tools and techniques for making their product * Be able to use simple tools and equipment with some accuracy * 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	* Evaluate their work both during and at the end of their assignment (identifying and implementing improvements) * Evaluate their products carrying out appropriate tests * Be able to identify the ways in which products in everyday use meet specific needs

	* Know that the way in which products in everyday use are designed and made affects their usefulness * Evaluate products and identify criteria that can be used for their own design		
Yr 5	* Know that technology affects people's lives * Generate ideas through brainstorming and identify a purpose for their product * Draw up a specification for their design * Be able to consider the needs of users when designing and making * Develop a clear idea of what has to be done, with a step by step plan how to use materials, equipment and processes * Be able to gather and use information to suggest solutions to problems * Use results of investigations, information sources, including ICT when developing design ideas * To understand the need for accurate design and working	* Select appropriate materials, tools and techniques for the task and understand that different techniques, tools and materials are needed for different tasks * Measure and mark out accurately * Use skills in using different tools and equipment safely and accurately * Cut and join with accuracy to ensure a good-equality finish to the product * Use techniques that involve a number of steps * To learn about a number of mechanisms e.g. pulleys, levers and linkages * Mechanisms: Understand how systems such as cams, pulleys or gears create movement (e.g. bridges)	* Evaluate a product against the original design specification and improve if needed * Evaluate it personally and seek evaluation from others * Be able to investigate the way in which simple products in everyday use are designed and made and how they work * Be able to evaluate the effectiveness of simple products in everyday use * Understand that the quality of a product depends on how well it is made and how it meets its intended purpose
Yr 6	* Communicate ideas through detailed labelled drawings * Develop a design specification. Explore, develop and communicate aspects of their design proposals by	* Select appropriate tools, materials, components and techniques * Assemble components to make working models * Use tools safely and accurately	* Evaluate their product identifying strengths and areas for development, and carrying out appropriate tests * Record their evaluations using drawings with labels

	modelling their ideas in a variety of ways * Be able to consider the needs of users when designing and making * Plan the order of their work – step by step, choosing appropriate materials, tools and techniques	* Construct products (including food) using permanent joining techniques * Make modifications as they go along * Weigh and measure accurately * Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens	* Evaluate against their original criteria and suggest ways that their product could be improved * Understand that the quality of a product depends on how well it is made and how well it meets its intended purpose (also evaluate advertisements)