

We currently have an academisation order in place, which means that we intend to become part of the ELAN MAT in due course. At present ELAN have kindly started to welcome us into their family of schools and we are using the ELAN progression documents to ensure that our curriculum meets the needs of our children.

Banwell Primary School: ELAN Design & Technology Progression

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	<ul style="list-style-type: none"> -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 their earlier research. 	<ul style="list-style-type: none"> -Generate ideas by drawing on their own and other people's experiences. -Use knowledge of existing products to help come up with ideas. -Develop their design ideas through discussion, observation, drawing with labels and modelling. -Identify a purpose and simple design criteria. -Model ideas by exploring materials, components and construction kits and by making templates and mock-ups. 	<ul style="list-style-type: none"> -Generate ideas for an item, considering its purpose and the user/s. -Gather information about the needs and wants of particular individuals and groups. -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. Use computer aided design to develop and communicate ideas. 	<ul style="list-style-type: none"> -Consider the purposes for which they are designing. -Develop their own design criteria -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. 	<ul style="list-style-type: none"> -Carry out research using surveys, interviews, questionnaires and web-based resources. -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. 	<ul style="list-style-type: none"> -Identify the needs, wants, preferences and values of particular individuals and groups. -Communicate their ideas through detailed labelled drawings – cross -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.
Make: Planning & Construction	<ul style="list-style-type: none"> -Make their design using appropriate techniques, selecting from a range of tools and equipment. -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. 	<ul style="list-style-type: none"> -Begin to select tools and materials according to their characteristics; 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. 	<ul style="list-style-type: none"> -Select tools, equipment and techniques suitable for the task. -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 to change things if this helps them improve their work. 	<ul style="list-style-type: none"> -Order the main stages of making. -Explain their selection of 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. 	<ul style="list-style-type: none"> -Produce appropriate lists of tools and techniques according to their functional properties. -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-quality finish to the product. 	<ul style="list-style-type: none"> -Formulate step-by-step plans as a guide to making. -Select appropriate tools, materials, components and techniques according to their aesthetic qualities. -Assemble components. - -Make working models. -Use tools safely and accurately. -Construct products using permanent joins. -Make modifications as they go along.

						-Achieve a quality product.
Make: Textiles	-Cut fabric into shapes.	-Cut, shape and join fabric to make a simple garment. Use basic sewing techniques.	-Measure, tape or pin, cut and join fabric with some accuracy.	-Sew using a range of different stitches, weave and knit.	-Measure, tape or pin, cut and join fabric with some accuracy.	-Pin, sew and stitch materials together create a product.
Make: Finishing Techniques	-Use simple finishing techniques to improve the appearance of their product.	-Choose and use appropriate finishing techniques.	-Use finishing techniques to improve function and appearance.	-Use finishing techniques to improve function and appearance.	-Strengthen and improve the appearance of their product using a range of equipment including ICT.	-Demonstrate resourcefulness when tackling practical problems and find solutions.
Evaluate: Existing products	-Explore what/who products are for. -Explore how products work and are used.	-Explore where might they be used. -What materials have been used. -Likes/dislikes.	-How well have products been designed? -How well have products been made? -Who designed and made the product? -Where was it designed and made?	-Why have materials been chosen? -What construction methods have been used? -When was it designed and made? -Can the product be recycled or reused?	-How well does it work? -How well does it achieve its purpose? -How much does it cost to make? -How innovative is it?	-How well does it meet the user needs and wants? -How sustainable are the materials in it? -What impact does the product have beyond its intended purpose?
Evaluate: Own products	-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.	-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. -Suggest how their products could be improved.	-Evaluate their product against original design criteria e.g. how well it meets its intended purpose. -Disassemble and evaluate familiar products. -Identify strengths and areas for development in their ideas and products.	-Evaluate their work both during and at the end of the assignment, according to their design criteria. -Evaluate their products carrying out appropriate tests. -Consider the ideas of others to improve their work.	-Evaluate a product against the original design specification. -Evaluate it personally and seek evaluation from others. -Critically evaluate the quality of the design, manufacture and fitness for purpose of their product as they design and make.	-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.
Technical Knowledge	-About the simple working characteristics of materials and components. -About the movement of simple mechanisms such as levers, sliders, wheels and axles.	-How freestanding structures can be made stronger, stiffer and more stable. -3D textiles can be assembled from two identical fabric shapes.	-That materials have both functional and aesthetic qualities. -Mechanical and electrical systems have an input, process and output.	-How to use learning from science & maths to help to design and make products that work. -How levers, linkages and pneumatic systems create movement.	-Materials can be combined and mixed to create more useful characteristics. -How to program a computer for control.	-How to program a computer to monitor changes in the environment and control their products. -How to reinforce and strengthen a 3d frame.

	-Correct technical vocabulary for the projects they are undertaking.	-Food ingredients should be combined according to sensory characteristics.	-About inventors, designers, engineers, chefs, and manufacturers who have developed ground-breaking products.	-Simple electrical circuits can be used to create functional products. -How to make strong, stiff, shell structures. -Food ingredients can be fresh, pre-cooked and processed.	-How systems such as cams, pulleys or gears create movement. -How more complex electrical circuits can be used to create functional products.	-That a recipe can be adapted by adding or substituting one or more ingredients.
Cooking & Nutrition	-That all food comes from plants or animals. -That everyone should eat at least 5 portions of fruit and vegetables a day. -Select and use appropriate fruit and vegetables, processes and tools.	-That food has to be farmed, grown elsewhere or caught. -How to name and sort food into the five groups on The Eatwell Plate. -Use basic food handling, hygienic practices and personal hygiene.	-That food is grown, reared, and caught in the UK, Europe and wider world. -Follow safe procedures for food safety and hygiene. -How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.	-That a healthy diet is made up from a variety of balance of different food and drink. -That to be active and healthy, food and drink are needed to provide energy for the body. -Demonstrate hygienic food preparation and storage.	-That seasons may affect the food available. -That different food and drink contain different substances – nutrients, water and fibre – that are needed for health. -Weigh and measure accurately (time, dry ingredients, liquids).	-How food is processed into ingredients that can be eaten or used in cooking. -How recipes can be adapted to change appearance, taste, texture and aroma. -Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.