



Lakeside Primary Academy -DT Progression of Skills



Strand DESIGN						
End of Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> -Safely use and explore a variety of materials, tools and techniques -Make use of props and materials 	<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 -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 and label parts 	<ul style="list-style-type: none"> -Generate ideas for an item, considering its purpose and the user/s -Identify a purpose and establish criteria for a successful product. -Disassemble and evaluate familiar products -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 	<ul style="list-style-type: none"> -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. Disassemble and evaluate familiar products. Select tools and techniques for making their product 	<ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> -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 Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.
Vocabulary: Draw	Vocabulary: design, draw, customer	Vocabulary: purpose, design, criteria	Vocabulary: product, material, tools	Vocabulary: evaluate	Vocabulary: design specification	Vocabulary: design proposal



Strand Food						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
-Understanding the importance of healthy food choices	-Cut ingredients safely and hygienically. -Assemble or cook ingredients. -Select and use appropriate fruit and vegetables, processes and tools	-Cut, peel or grate ingredients safely and hygienically. -Measure or weigh using measuring cups or electronic scales.	-Prepare ingredients hygienically using appropriate utensils. - Measure accurately. - Follow a recipe. -Assemble or cook ingredients	-Prepare ingredients hygienically using appropriate utensils. - Measure ingredients to the nearest gram. - Assemble and cook ingredients (controlling the temperature of the oven or hob, if cooking).	-Understand the importance of correct storage and handling of ingredients (knowledge of micro-organisms). - Demonstrate a range of baking and cooking techniques.	-Measure accurately and calculate ratios of ingredients to scale up or down from recipe. - Create and refine recipes, including ingredients, methods, cooking times and temperatures.
Vocabulary: healthy Names of different types of fruit and vegetables	Vocabulary: hygiene fruit and vegetable names, names of equipment and utensils	Vocabulary: measure fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients	Vocabulary: name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	Vocabulary: taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	Vocabulary: ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied,	Vocabulary: gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble



Strand Working with tools, materials, equipment and components						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>-Hold a pencil effectively using the tripod grip in almost all cases</p> <p>-Use a range of small tools, including scissors, paint brushes and cutlery</p> <p>-Begin to show accuracy and care when drawing.</p> <p>- Share their creations, explaining the process they have used</p>	<p>-Make design using appropriate techniques.</p> <p>-With help measure, mark out, cut and shape a range of materials.</p> <p>-Use tools eg.scissors and a hole punch safely.</p> <p>-Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.</p> <p>.Use simple finishing techniques to improve the appearance of their product.</p> <p>Create products using levers and wheels.</p>	<p>-Begin to select tools and materials; use vocab' to name and describe them.</p> <p>-Measure, cut and score with some accuracy.</p> <p>-Use hand tools safely and appropriately.</p> <p>-Assemble, join and combine materials in order to make a product.</p> <p>-Cut, shape and join fabric to make a simple garment.</p> <p>-Use basic sewing techniques.</p> <p>-Choose and use appropriate finishing techniques.</p> <p>-Create products using winding mechanisms.</p>	<p>-Select tools and techniques for making their product.</p> <p>-Measure, mark out, cut, score and assemble components with more accuracy.</p> <p>-Work safely and accurately with a range of simple tools.</p> <p>-Think about their ideas as they make progress and be willing to change things if this helps them improve their work.</p> <p>-Measure, tape or pin, cut and join fabric with some accuracy.</p> <p>-Use finishing techniques.</p> <p>-Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).</p>	<p>-Select appropriate tools and techniques for making their product.</p> <p>-Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.</p> <p>-Join and combine materials and components accurately in temporary and permanent ways.</p> <p>-Sew using a range of different stitches, weave and knit.</p> <p>-Measure, tape or pin, cut and join fabric with some accuracy.</p> <p>-Use simple graphical communication techniques.</p> <p>- Use scientific knowledge to choose appropriate mechanisms for a product.</p>	<p>-Select appropriate materials, tools and techniques.</p> <p>-Measure and mark out accurately.</p> <p>-Use skills in using different tools and equipment safely and accurately.</p> <p>-Cut and join with accuracy to ensure a good-quality finish to the product.</p> <p>-Convert rotary motion to linear using cams.</p>	<p>-Select appropriate tools, materials, components and techniques.</p> <p>-Assemble components & make working models.</p> <p>-Use tools safely and accurately.</p> <p>-Construct products using permanent joining techniques.</p> <p>-Make modifications as they go along</p> <p>Pin, sew and stitch materials together to create a product.</p> <p>-Achieve a quality product.</p> <p>-Use innovative combinations of electronics (or computing) and mechanics in product designs.</p>
<p>Vocabulary: Materials, tools, colour</p>	<p>Vocabulary: Join, tools, cut, shape, mark, parts, hygiene</p>	<p>Vocabulary: Accuracy, measure, assemble, combine, fabric</p>	<p>Vocabulary: Components, equipment</p>	<p>Vocabulary: Graphical communication</p>	<p>Vocabulary: Weigh, quality, hazards</p>	<p>Vocabulary: Construct, permanent</p>



Strand Computing, electrical and electronics						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
-Select and use technology for particular purposes.	-Recognise if a battery operated device works or not.	-Model designs using software	-Control and monitor models using software designed for this purpose.	-Control and monitor models using software designed for this purpose. -Create parallel circuits.	-Write code to control and monitor models or products. -Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).	-Write code to control and monitor models or products. -Create circuits using electronics kits that employ a number of components with increasing confidence.
Vocabulary: Technology	Vocabulary: battery	Vocabulary: software	Vocabulary: insulator, conductor, crocodile clip, control, program, system, input device, output device	Vocabulary: insulator, conductor, crocodile clip, control, program, system, input device, output device	Vocabulary: reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED),	Vocabulary: reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED),



Strand Evaluation						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>-Offer explanations, making use of recently introduced vocabulary</p> <p>-Express own ideas and feelings</p> <p>-Participate in small group, class and one-to-one discussions</p> <p>-Share their creations, explaining the process they have used</p>	<p>-Evaluate their product by discussing how well it works in relation to the purpose</p> <p>-Evaluate their products as they are developed, identifying strengths and possible changes they might make</p> <p>-Evaluate their product by asking questions about what they have made and how they have gone about it</p>	<p>-Evaluate against their design criteria</p> <p>-Evaluate their products as they are developed, identifying strengths and possible changes they might make</p> <p>-Talk about their ideas, saying what they like and dislike about them</p>	<p>-Evaluate their product against original design criteria e.g. how well it meets its intended purpose</p>	<p>-Evaluate products and identify criteria that can be used for their own designs</p> <p>-Evaluate their work both during and at the end of the assignment</p> <p>-Evaluate their products carrying out appropriate tests</p>	<p>-Evaluate a product against the original design specification</p> <p>-Evaluate it personally and seek evaluation from others</p>	<p>-Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests</p> <p>-Record their evaluations using drawings with labels</p> <p>-Evaluate against their original criteria and suggest ways that their product could be improved.</p>
<p>Vocabulary: Creation, made, designed, materials, difficulty, liked, changed,</p>	<p>Vocabulary: Design, evaluate, make, user, purpose, ideas, product,</p>	<p>Vocabulary: Purpose, ideas, design criteria, product, function</p>	<p>Vocabulary: Prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing</p>	<p>Vocabulary: Design brief design criteria, innovative, prototype,</p>	<p>Vocabulary: Design decisions, functionality, authentic, user, purpose, design specification, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype</p>	<p>Vocabulary: Function design, specification, prototype, annotated sketch, innovation, research, functional, mock-up, prototype</p>