Expressive Arts and Design ELG Creating with Materials	National Curriculum Expectations	
Children at the expected level of development will: ▪ Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. ▪ Share their creations, explaining the processes they have used.	**In KS1 pupils should be taught:** **Design** ▪ design purposeful, functional, appealing products for themselves and other users based on design criteria ▪ generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **Make** ▪ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] ▪ select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **Evaluate** ▪ explore and evaluate a range of existing products ▪ evaluate their ideas and products against design criteria **Technical knowledge** ▪ build structures, exploring how they can be made stronger, stiffer and more stable ▪ explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. **Cooking and nutrition** ▪ use the basic principles of a healthy and varied diet to prepare dishes ▪ understand where food comes from	**In KS2 pupils should be taught:** **Design** ▪ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ▪ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** ▪ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ▪ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** ▪ investigate and analyse a range of existing products ▪ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work ▪ understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** ▪ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ▪ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]

		▪ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ▪ apply their understanding of computing to program, monitor and control their products. **Cooking and nutrition** • understand and apply the principles of a healthy and varied diet • prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

	End of Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Developing, planning and communicating ideas.	Begin to talk about what they are designing and making, eg join, build and shape. Begin to plan and adapt initial ideas to make their ideas better. Develop their own ideas and then plan which materials they will use.	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	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	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	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	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	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

		findings from their earlier research	Make simple drawings and label parts	Make drawings with labels when designing	making, if the first attempts fail Evaluate products and identify criteria that can be used for their own designs	first attempts fail Use results of investigations, information sources, including ICT when developing design ideas	appropriate materials, tools and techniques
	End of Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working with tools, equipment, materials and components to make quality products (inc-food)	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Select tools and techniques needed to shape, assemble and join materials. To learn how to use a range of tools independently within within their child initiated learning eg. scissors, hole punch, stapler, rolling pins,	Make their design using appropriate techniques With help measure, mark out, cut and shape a range of materials Use tools *eg 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	Begin to select tools and materials; use vocab' 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	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	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	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	Select appropriate tools, materials, components and techniques Assemble components 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

	knifes, forks pastry cutters. Children have basic hygiene awareness when they are working with food.	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.	basic sewing techniques Follow safe procedures for food safety and hygiene Choose and use appropriate finishing techniques	Measure, tape or pin, cut and join fabric with some accuracy Demonstrate hygienic food preparation and storage Use finishing techniques strengthen and improve the appearance of their product using a range of equipment	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	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	together create a product Achieve a quality product
	End of Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating processes and products	Begin to talk about changes made during the making process e.g. making a decision to use a different joining method. Share their creations explaining the process they have used.	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 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	Evaluate their product against original design criteria *e.g. how well it meets its intended purpose* Disassemble and evaluate familiar products	Evaluate their work both during and at the end of the assignment Evaluate their products carrying out appropriate tests	Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others	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

		Evaluate their product by asking questions about what they have made and how they have gone about it	and dislike about them				and suggest ways that their product could be improved