Stepgates Community School Curriculum Mapping: Design and Technology 2021-2022

Early Years	Reception	Areas of Learning	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Three and Four-Year-Olds **Personal, Social and Emotional Development** Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them. **Physical Development** Use large-muscle movements to wave flags and streamers, paint and make marks. Choose the right resources to carry out their own plan. Use one-handed tools and equipment, for example, making snips in paper with scissors. **Understanding the World** Explore how things work. **Expressive Arts and Design** Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. Explore different materials freely, in order to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to	**ELG: Expressive Arts and Design- Creating with Materials** Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used. **ELG: Physical Development- Fine Motor Skills** · Use a range of small tools, including scissors, paintbrushes and cutlery. **Physical Development** Progress towards a more fluent style of moving, with developing control and grace. Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. **Expressive Arts and Design**	Developing, planning and communicating ideas.	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.	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.	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. Make drawings with labels when designing.	Generate ideas, considering the purposes for which they are designing. 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. Make labelled drawings from different views showing specific features. Evaluate products and identify criteria that can be used for their own designs.	Generate ideas through brainstorming and identify a purpose for their product. Draw up a specification for their design. Use results of investigations, information sources, including ICT when developing design ideas. 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.	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.
		Working with tools, equipment, materials and components to make quality products (inc-food)	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. 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	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 basic sewing techniques. Follow safe procedures for food safety and hygiene. Choose and use appropriate finishing techniques	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 Measure, tape or pin, cut and join fabric with some accuracy Demonstrate hygienic food preparation and storage Use finishing techniques strengthen and improve	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 Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Sew using a range of different stitches, weave and knit Measure, tape or pin, cut and join fabric with some accuracy	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 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	Select appropriate tools, materials, components and techniques Assemble components make working models Use tools safely and accurately Construct products using permanent joining techniques Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Make modifications as they go along Pin, sew and stitch materials together create a product Achieve a quality product

use to express them. Create closed shapes with continuous lines, and begin to use these shapes to represent objects.	Explore, use and refine a variety of artistic effects to express their ideas and feelings. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills.		appearance of their product.		the appearance of their product using a range of equipment including ICT.	Use simple graphical communication techniques		
		Evaluating processes and products	Evaluate their product by discussing how well it works in relation to the purpose. Evaluate their product by asking questions about what they have made and how they have gone about it. Evaluate their products as they are developed, identifying strengths and possible changes they might make.	Evaluate against their design criteria Talk about their ideas, saying what they like and dislike about them Evaluate their products as they are developed, identifying strengths and possible changes they might make	Evaluate their product against original design criteria e.g. how well it meets its intended purpose Evaluate against their original criteria and suggest ways that their product could be improved Disassemble and evaluate familiar products	Evaluate their work both during and at the end of the assignment Evaluate against their original criteria and suggest ways that their product could be improved Evaluate their products carrying out appropriate tests	Evaluate a product against the original design specification Evaluate against their original criteria and suggest ways that their product could be improved Evaluate it personally and seek evaluation from others	Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests Evaluate against their original criteria and suggest ways that their product could be improved Record their evaluations using drawings with labels