



Design and Technology Learning Map



Year	Autumn	Spring	Summer
Nursery	Experiments with blocks, colours and marks. Make presents for Spot using junk modelling. Design and build a trap to catch Santa. Design and build toys for Santa's workshop. Understands that they can use lines to enclose a space, and then begin to use these shapes to represent objects. Using junk modelling to create their own models.	Build a bridge and Three Little Pig's houses Beginning to construct, stacking blocks vertically, horizontally, making enclosures, and creating spaces. Realises tools can be used for a purpose. Design and build houses for elves. Joins construction pieces together to build and balance. Realises tools can be used for a purpose. Using big and small construction to enhance their creativity and imagination.	Constructs with a purpose in mind, using a variety of resources. Create space rockets, rocket packs and vehicles out of junk modelling Constructs with a purpose in mind, using a variety of resources.
Reception			Design and create a planter. Building transport using crates and blocks – linked to outdoor provision and resources.
Year 1	DT1/1.4b explore and use mechanisms, in their products. DT1/1.1a design purposeful, functional, appealing products for themselves and other users based on design criteria DT1/1.3b evaluate their ideas and products against design criteria Plan design and evaluate a moving toy. Moving toys and levers - using split pins for arms and legs	DT1/2.1a use the basic principles of a healthy and varied diet to prepare dishes Cutting, washing. make fruit salad	Fruit Salad DT1/1.4a build structures, exploring how they can be made stronger, stiffer and more stable DT1/1.3b evaluate their ideas and products against design criteria Design and make a bridge
Year 2	DT1/1.2b select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Making a Christmas gift - cutting/gluing and making own templates.	DT1/1.4b explore and use mechanisms, in their products. Links to the Polar Express - making nets/cutting. Make train Using CAMs to make person/smoke from the train.	DT1/2.1a use the basic principles of a healthy and varied diet to prepare dishes DT1/2.1b understand where food comes from. Deciding ingredients, weighing and preparing. Make a dish/cake.
Year 3	DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures Design, make and evaluate a Stone Age shelter.	DT2/1.2b 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. Making own templates, hand stitching and embellishing - making a bookmark	Bookmarks Making own templates, hand stitching and embellishing - making a bookmark Balloon cars DT2/1.4b understand and use mechanical systems in their products Making balloon cars - linked to the fastest car - looking at recycled materials - aerodynamic properties
Year 4	DT2/1.2a select from and use a wider range of tools and equipment to perform practical tasks accurately Use mod rock to mould an Ancient Greek mask and paint to create a final piece. Know how to sculpt clay and other mouldable materials	Lockdown DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures Textiles - screen printing, block printing, embossing, lino printing	DT2/2.1c become competent in a range of cooking techniques Cooking different breads - linked to evacuation.
Year 5	Bird houses DT2/1.2a select from and use a wider range of tools and equipment to perform practical tasks accurately Materials - exploring wood qualities - natural vs man-made - cutting, finish, sanding, polishing - focus on practical tasks. Bird houses	Making Spaghetti Bolognese Preparing ingredients, chopping, mixing, seasoning and cooking DT2/2.1c understand the source, seasonality and characteristics of a broad range of ingredients Know how to prepare a meal by collecting ingredients. DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures DT2/1.2b 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 hand stitching, design, research and evaluate the template. Different types of fabric and stiffeners - computer aided design.	Stuffed Toys hand stitching, design, research and evaluate the template. Different types of fabric and stiffeners - computer aided design DT2/1.4a apply their understanding of how to strengthen, stiffen and reinforce more complex structures DT2/1.2b 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 hand stitching, design, research and evaluate the template. Different types of fabric and stiffeners - computer aided design. DT2/1.4b understand and use mechanical systems in their products DT2/2.1c understand the source, seasonality and characteristics of a broad range of ingredients Know how to prepare a meal by collecting ingredients.

Year 6	<p>Automata toys</p> <p>DT2/2.1a understand and apply the principles of a healthy and varied diet DT2/2.1b cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet DT2/2.1c become competent in a range of cooking techniques Savoury dish linked to The Victorians at Christmas</p>	<p>Food</p> <p>DT2/1.4d apply their understanding of computing to programme, monitor and control their products. Packaging - making package for Easter eggs.</p>	<p>Food</p> <p>DT2/1.1b generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design DT2/1.4c understand and use electrical systems in their products Theatre Project – working to a budget, research, design and build a scale model – linking to all areas of the curriculum including light/ electricity and the theatre.</p>
Year	Autumn – Content: Food	Spring – Content: Textiles	Summer – Content: Resistant Materials
Year 7 Skills	<p>Basic knife skills. Bridge and claw method. Cuts. Use of basic kitchen equipment weighing and measuring basics. Rubbing in method/melting method. Portion control.</p>	<p>Hand stitch – threading a needle. Machine stitch – different stitches and threading a machine. Decoration – fabric pens/paints, sewing beads and buttons. Template construction and cutting. Project – Willy Wonka inspired cushion.</p>	<p>Mirror Project. Designing – Drawing skills. CAD/CAM Building confidence. Hand tools and work shop equipment. Working independently.</p>
Knowledge	<p>Hygiene and safety rules. Names of kitchen equipment. Safe use of sharp knives and cooker. Simple planning of dishes.</p>	<p>Design-Make-Evaluation. Health and safety in the Textiles studio and with equipment. Fabric, fibres and Yarns. (Understand how they are made prior learning homework then expand a class.</p>	<p>Cutting Sanding surface finishing Shaping Health and Safety. Materials and processes. Health and Safety in the workshop. Woods Sustainable issues.</p> <p>Woods, metal and plastics. CAD/CAM Joining materials Manipulating materials.</p>
Year 8 Skills	<p>Bread making skills. Confident use of sharp knives and basic kitchen equipment. Confident use of the cooker. Safe use of small electrical equipment.</p>	<p>Further development – hand stitch and machine stitch (decorative stitches) Decorating – fabric pens / paints and dyes, image transfer. Finishing – high quality standard. Project – Day of the dead inspired keyring.</p>	<p>Jewellery Workshop equipment. Combining materials Gluing Service finishing Cutting, shaping Hand shaping tools.</p>
Knowledge	<p>Use of yeast in cookery. Functions of ingredients. Adapting recipes by changing ingredients. Cultural differences of foods/dishes. Food hygiene – coloured chopping boards. Prevention of cross contamination.</p>	<p>Design – Make – Evaluation Yarns, Fibres and fabrics – Expanding Knowledge CAD/CAM – embroidery machine. E – Textiles Fabric dyes – experiments and recording of findings.</p>	<p>Research techniques. Research and analysis methods. Environmental issues. Finishing techniques. Veneers.</p>
<p>Hospitality & Catering Single lesson will be theory on course content. Double lesson will develop practical skills.</p>			
Year 9 Skills	<p>Knife skills. Use of electrical equipment. Hygiene & Safety in operation. Organisation and time plans.</p> <p>Methods: Rubbing in, Creaming, Whisking, Melting.</p>	<p>Pastry making. Cake making. Sauce making. Biscuits/deserts.</p> <p>High quality finishing. Decoration, garnish</p>	<p>Commodities. Fruit & veg Chicken/Meat Dairy, cereals, Mains, deserts.</p>
Knowledge	<p>LO1 Understand the environment in which hospitality and catering providers operate.</p>	<p>1.3 Describe working conditions of different job roles across the hospitality and catering industry.</p>	<p>LO2 Understand how hospitality and catering provision operates.</p>

	<p>1.1 Describe the structure of the hospitality and catering industry</p> <p>Hospitality and catering industry</p> <ul style="list-style-type: none"> Types of provider Types of service Commercial/non-commercial establishment Services provided Suppliers Where hospitality is provided at non-catering venues Standards and ratings. <p>Job roles within the industry</p> <p>1.2 Analyse job requirements within the hospitality and Catering industry.</p> <p>Requirements</p> <ul style="list-style-type: none"> Supply and demand Jobs for specific needs Rates of pay Qualifications and experience, training <p>Personal attributes.</p>	<p>Working conditions</p> <ul style="list-style-type: none"> Different types of contract Working hours Rates of pay <p>Holiday entitlement, remuneration.</p> <p>1.4 Explain factors affecting the success of hospitality and catering providers.</p> <p>Factors</p> <ul style="list-style-type: none"> Costs, profit, Economy Environment Emerging cooking techniques/technology Customer demographics/lifestyle and expectations Customer service Competition <p>Trends, media, political factors.</p>	<p>2.1 Describe the operation of the kitchen</p> <p>Operation</p> <ul style="list-style-type: none"> layout work flow operational activities equipment and materials stock control documentation and administration staff allocations dress code <p>safety and security</p> <p>2.2 Describe the operation of front of house.</p> <p>Operation</p> <ul style="list-style-type: none"> layout work flow operational activities equipment and materials stock control documentation and administration staff allocations dress code <p>safety and security</p>
<p>Year 10</p>	<p>2.3 Explain how hospitality and catering provision meets customer requirements.</p> <p>Customer</p> <ul style="list-style-type: none"> leisure business/corporate local residents <p>Requirements</p> <ul style="list-style-type: none"> customer needs, expectations customer trends <p>customer rights, equality</p> <p>Responsibilities of employees & of employers</p> <p>In relation to</p> <ul style="list-style-type: none"> health and safety at work act reporting injuries, disease and dangerous occurrences regulations (RIDDOR) control of substances hazardous to health regulations (COSHH) manual handling operations regulations <p>personal protective equipment at work regulations(PPER)</p>	<p>3.2 Identify risks to personal safety in hospitality and catering.</p> <p>Risks</p> <ul style="list-style-type: none"> to health to security level of risk in relation to employers, employees, suppliers and customers. <p>3.3 Personal safety control measures for hospitality and catering provision.</p> <p>Control measures</p> <ul style="list-style-type: none"> for employees for customers. <p>LO4</p> <p>Know how food can cause ill health.</p> <p>4.1 Describe food related causes of ill health.</p> <p>Causes</p> <ul style="list-style-type: none"> bacteria, microbes, chemicals, metals, poisonous plants allergies, intolerances. <p>4.2 Describe the role and responsibilities of the environmental health officer (EHO)</p> <p>Role</p> <ul style="list-style-type: none"> enforcing environmental health laws <p>Responsibilities</p> <ul style="list-style-type: none"> inspecting business for food safety standards follow up complaints, submitting reports follow up outbreaks of food poisoning collecting samples for testing giving evidence in prosecutions, maintaining evidence. <p>4.3 Describe Food Safety legislation</p> <p>Legislation</p> <ul style="list-style-type: none"> Food Safety Act Food Safety (General Food Hygiene Regulation) Food Labelling Regulations <p>4.4 Describe common types of food poisoning</p> <p>Common types</p> <ul style="list-style-type: none"> Campylobacter Salmonella E-Coli Clostridium perfringens 	<p>Revision for early entry</p>

		<ul style="list-style-type: none">• Listeria• Bacillus cereus• Staphylococcus aureus	
Year 11	Unit 2	Coursework Unit 2	

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