

Progression of Skills in DT

SKILL 1 - Design

NC:

EYFS	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Select appropriate resources Use gestures, talking and arrangements of materials and components to show design Use contexts set by the teacher and myself Use language of designing and making (<i>join, build, shape, longer, shorter, heavier etc.</i>)	Explain to someone how they want to make their product & then make a simple plan Design a product that moves Design something & describe how their own idea works	Design by choosing tools & materials Think of an idea & plan what to do next	Follow a step-by-step plan, choosing the right equipment & materials	Bring a creative element to the product being designed Use ideas from others when designing Present product in an interesting way Produce a plan & explain it Communicate ideas in a range of ways , including annotated sketches & drawings	Produce a step-by-step plan Design a product that requires pulleys & gears Link specific knowledge of design, using pulleys or gears	Show that culture & society is considered in plans and designs	<i>Students will be introduced to the Product Design workshop and the various safety requirements. They will learn the importance of Product Design in society and they will produce their first design brief for a client.</i> <i>Students will continue with research for their project and learn techniques to help generate and develop design ideas.</i>

SKILL 2 - Nutrition

NC:

EYFS	Y1	Y2	Y3	Y4	Y5	Y6	Y7
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<p>Begin to understand some food preparation tools, techniques and processes</p> <p>Practise stirring, mixing, pouring, blending</p> <p>Discuss how to make an activity safe and hygienic</p> <p>Understand need for variety in food</p> <p>Begin to understand that eating well contributes to good health</p>	<p>Cut food safely</p>	<p>Weigh ingredients to use in a recipe</p> <p>Describe ingredients used when making a dish or a cake</p>	<p>Describe how food ingredients come together</p> <p>Weigh out ingredients & follow a given recipe to create a dish</p> <p>Talk about which food is healthy & which is not</p> <p>Know when food is ready to be harvested</p>	<p>Know how to be both hygienic & safe when using food</p>	<p>Be both hygienic & safe in the kitchen</p> <p>Know how to prepare a meal by collecting the ingredients</p> <p>Know which season various foods are available for harvesting</p>	<p>Understand the difference between a savoury & a sweet dish</p> <p>Explain, with reasons, how food products should be stored</p>	<p><i>Equipment, Processes and Skills</i> Pupils utilise the Food workbook to complete a range of theory activities around the themes of Equipment, Processes and Skills.</p> <p><i>Hygiene & Safety.</i> Pupils will complete practical work which allows them to implement Hygiene and Safety practices. Food Sources & Availability and Sensory/Organoleptic Evaluation</p> <p>Pupils utilise the Food workbook to complete a range of theory activities focussing on where food ingredients are sourced, how ethically and sustainably they are sourced and how the senses are used to judge foods in relation to customer acceptability.</p> <p>Pupils utilise the Food workbook to complete a range of theory activities which focus around effective nutrition and healthy eating.</p> <p>Pupils will complete practical work which allows them to consider effective nutrition in practice and to further their utilisation of Hygiene & Safety in practice, Independence and Competency.</p>
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SKILL 3 - Technology

NC:

EYFS	Y1	Y2	Y3	Y4	Y5	Y6	Y7
<p>Use simple tools and techniques</p> <p>Select tools & techniques to shape, assemble and join</p>	<p>Choose appropriate tools & resources</p>	<p>Choose tools & materials and explain why you chose them</p> <p>Use wheels & axels when appropriate</p>	<p>Select the most appropriate tools & techniques for a given task</p> <p>Make a product which uses</p>	<p>Use IT where appropriate to add to the quality of a product</p> <p>Know which tools are used for a specific task & show</p>	<p>Use a range of tools & equipment competently</p> <p>Use more complex IT programs to help to enhance the</p>	<p>Know which IT product would further enhance a specific product</p> <p>Know which tools to use for a specific practical task</p>	<p><i>Pupils will complete practical work which allows them to implement their knowledge of utilising Equipment, Processes and Skills.</i></p>

			mechanical components	knowledge of handling the tool Link scientific knowledge by using lights, switches & buzzers Use electrical systems to enhance the quality of a product	quality of the product produced	Use electrical systems correctly & accurately to enhance a given product Know how to use any tool correctly & safely Know what each tool is used for Explain why a specific tool is best for a specific action	
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SKILL 4 - Data

NC:

EYFS	Y1	Y2	Y3	Y4	Y5	Y6	Y7
					Come up with a range of ideas after collecting information	Use market research to inform	

SKILL 5 - Evaluate

NC:

EYFS	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Adapt work if necessary Dismantle, examine, talk about existing objects/structures Consider and manage some risks Practise some appropriate safety	Describe how something works Explain what works well & not so well in the model that they have made	Explain what went well with their work	Know why a model has not been successful Know how to improve a finished model	Evaluate & suggest improvement for design Evaluate products for both purpose & design	Evaluate appearance & function against original criteria Suggest alternative plans, outlining the positive features & drawbacks	Evaluate product against clear criteria Know how to test & evaluate design products Follow & refine original plans	<i>Students will self-assess and peer assess each other's work and produce a short evaluation. Modelling - Students will learn to model their design ideas to eradicate any issues</i>

measures independently Talk about how things work Look at similarities and differences between existing objects / materials / tools Show an interest in technological toys Describe textures				Explain how the original design has been improved			before they begin manufacture of their final product
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SKILL 6 - Functionality

NC:

EYFS	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Construct with a purpose, using a variety of resources Build / construct with a wide range of objects Replicate structures with materials / components Understand different media can be combined for a purpose	Make a product that moves Make their own model stronger	Explain why they have chosen specific textiles Measure materials to use in a model or structure Make a model more stronger & stable	Know how to strength a product by stiffening a given part or by re- enforcing part of the structure Choose a material for both its suitability & appearance Work accurately to measure, make cuts & holes	Know which material is to give the best outcome Measure accurately	Make a product that relies upon pulleys & gears Explain how a product will appeal to a specific audience	Use knowledge to improve a made product by strengthen, stiffening & re-in forcing	Materials research - Students will study materials that they will be using for the product (Various woods and plastics). What properties do they have? Where do they come from? What makes them suitable for our product? They will then produce a final design fully annotated including measurements and materials. They will produce a plan for manufacture. Practical lessons - Laser Cutting / Coping saws Students will learn how to use machines and equipment safely and sensibly to manufacture their products. They will learn to work as a team and peer assess each other's work. Assembly of product - Students will learn the correct way to join and assemble products depending on the type of material used. Correct glues etc.

SKILL 7 - Innovation

NC:

EYFS	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Record experiences by drawing, writing, voice recording	Use own ideas to make something	Join materials & components in different ways	Design a product & make sure that it looks attractive	Preserve & adapt when original ideas do not work	Make a prototype before making a final version	Justify planning in a convincing way Work within a budget to create a meal	Produce a final design fully annotated including measurements and materials. Graphic Design is and why it is important within everyday life and industry. Students will then begin a skills booklet focussing on the Develop of practical drawing skills, in particular: Drawing/Rendering skills will be covered as these are essential as they progress in design. •Colour Theory. •Colour messages. •Rendering. •Isometric and oblique shapes. •Rendering techniques: cross-hatching, vertical lines, dots. •Adding shadows to an object