



# DT PROGRESSION OF SKILLS

Federation of Grewelthorpe and  
Fountains C of E Primary Schools

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
<b>Design</b>	<ul style="list-style-type: none"> <li>ELG from Expressive Art and Design: Being Imaginative</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>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</li> <li>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul>				

**Examples**

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| <ul style="list-style-type: none"> <li>Being Imaginative: • Use what they have learnt about media and materials in original ways, thinking about uses and purposes. • They represent their own ideas, thoughts and feelings through design and technology.</li> </ul> | <ul style="list-style-type: none"> <li>State the purpose of the design and the intended user Explore materials, make templates and mock ups e.g. moving picture / lighthouse</li> <li>Generate own ideas for design by drawing on own experiences or from reading</li> </ul> | <ul style="list-style-type: none"> <li>Gather information about the needs and wants of particular individuals and groups</li> <li>Develop their own design criteria and use these to inform their ideas Research designs</li> <li>Share and clarify ideas through discussion</li> <li>Model their ideas using prototypes and pattern pieces</li> <li>Use annotated sketches, cross-sectional drawings and diagrams Use computer-aided design</li> </ul> | <ul style="list-style-type: none"> <li>Carry out research, using surveys, interviews, questionnaires and web-based resources Identify the needs, wants, preferences and values of particular individuals and groups</li> <li>Develop a simple design specification to guide their thinking Recognise when their products have to fulfil conflicting requirements</li> <li>Generate innovative ideas, drawing on research</li> <li>Make design decisions, taking account of constraints such as time, resources and cost</li> <li>Develop prototypes</li> </ul> |
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	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
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<b>Make</b>	<ul style="list-style-type: none"> <li>• ELG from Expressive Art and Design:</li> <li>• Exploring and using media and materials ELG from Physical development: Moving and Handling.</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing]</li> <li>• select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristic</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately</li> <li>• 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</li> </ul>				
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Examples	<ul style="list-style-type: none"> <li>• Exploring and using media and materials: <ul style="list-style-type: none"> <li>• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> </ul> </li> <li>• Moving and Handling: <ul style="list-style-type: none"> <li>• Handle equipment and tools effectively, including pencils for writing.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Select from a range of tools and equipment explaining their choices</li> <li>• Select from a range of materials and components according to their characteristics</li> <li>• Follow procedures for safety</li> <li>• Use and make own templates</li> <li>• Measure, mark out, cut out and shape materials and components</li> <li>• Assemble, join and combine materials and components</li> <li>• Use simple fixing materials e.g. temporary – paper clips tape and permanent – glue, staples</li> <li>• Use finishing techniques, including those from art and design</li> </ul>	<ul style="list-style-type: none"> <li>• Follow procedures for safety</li> <li>• Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components</li> <li>• Measure, mark out, cut and shape materials and components with some accuracy</li> <li>• Assemble, join and combine materials and components with some accuracy apply a range of finishing techniques, include those from art and design, with some accuracy</li> </ul>	<ul style="list-style-type: none"> <li>• Follow procedures for safety</li> <li>• Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components</li> <li>• Accurately measure to nearest mm, mark out, cut and shape materials and components</li> <li>• Accurately assemble, join and combine materials/ components</li> <li>• Accurately apply a range of finishing techniques, including those from art and design</li> <li>• Use techniques that involve a number of steps</li> <li>• Demonstrate resourcefulness, e.g. make refinements</li> </ul>
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	EYFS	Y1	Y2	Y3	Y4	Y5	
<b>Evaluate</b>	<ul style="list-style-type: none"> <li>• ELG from Communication and Language: Speaking.</li> </ul>	Pupils should be taught to: <ul style="list-style-type: none"> <li>• explore and evaluate a range of existing products</li> <li>• evaluate their ideas and products against design criteria</li> </ul>		Pupils should be taught to: <ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul>			
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Communication and Language, Speaking: • Children express themselves effectively. • They develop their own narratives and explanations by connecting ideas and events.</li> </ul>	<ul style="list-style-type: none"> <li>• Talk about their design ideas and what they are making</li> <li>• Make simple judgements about their products and ideas against design criteria</li> <li>• Suggest how their products could be improved</li> <li>• Evaluating products and components used</li> <li>• Investigate - what products are, who they are for, how they are made and what materials are used</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the strengths and weaknesses of their ideas and products</li> <li>• Consider the views of others, including intended users, to improve their work</li> <li>• Refer back to their design criteria as they design and make</li> <li>• Use their design criteria to evaluate their completed products</li> <li>• Identify the strengths and weaknesses of their ideas and products</li> <li>• Consider the views of others, including intended users, to improve their work</li> <li>• Investigate - how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants</li> <li>• Investigate - who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused</li> <li>• Identify great designers and their work and use research of designers to influence work</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the strengths and weaknesses of their ideas and products</li> <li>• Consider the views of others, including intended users, to improve their work</li> <li>• Refer back to their design criteria as they design and make</li> <li>• Use their design criteria to evaluate their completed products</li> <li>• Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make</li> <li>• Compare their ideas and products to their original design specification</li> <li>• Investigate - how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants</li> <li>• Investigate - how much products cost to make, how innovative products are and how sustainable the materials in products are</li> <li>• Identify great designers and their work and use research of designers to influence work</li> </ul>			

	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
<b>Technical Knowledge</b>		<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>• explore and use mechanisms [e.g. levers, sliders, wheels and axles], in their products</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> <li>• understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</li> <li>• understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers and motors]</li> <li>• apply their understanding of computing to program, monitor and control their products</li> </ul>				

**Examples**

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| <ul style="list-style-type: none"> <li>• Understand about the simple working characteristics of materials and components</li> <li>• Understand about the movement of simple mechanisms including levers, sliders (Year 1) wheels and axles (Year 2)</li> <li>• Understand that food ingredients should be combined according to their sensory characteristics</li> <li>• Know the correct technical vocabulary for the projects they are undertaking</li> <li>• Understand how freestanding structures can be made stronger, stiffer and more stable</li> </ul> | <ul style="list-style-type: none"> <li>• Understand how to use learning from science and maths to help design and make products that work</li> <li>• Know that materials have both functional properties and aesthetic qualities</li> <li>• Know that materials can be combined and mixed to create more useful characteristics</li> <li>• Know that mechanical and electrical systems have an input, process and output</li> <li>• Use the correct technical vocabulary for the projects they are undertaking</li> <li>• Understand how levers and linkages or pneumatic systems create movement</li> <li>• Understand how simple electrical circuits and components can be used to create functional products</li> <li>• Understand how to program a computer to control their products</li> <li>• Know how to make strong, stiff shell structures Know that a single fabric shape can be used to make a 3D textiles product</li> <li>• Know that food ingredients can be fresh, pre-cooked and processed</li> </ul> | <ul style="list-style-type: none"> <li>• Understand how to use learning from science and maths to help design and make products that work</li> <li>• Know that materials have both functional properties and aesthetic qualities</li> <li>• Know that materials can be combined and mixed to create more useful characteristics</li> <li>• Know that mechanical and electrical systems have an input, process and output</li> <li>• Use the correct technical vocabulary for the projects they are undertaking</li> <li>• Understand how cams, pulleys and gears create movement</li> <li>• Understand how more complex electrical circuits and components can be used to create functional products</li> <li>• Understand how to program a computer to monitor changes in the environment / control their products</li> <li>• Know how to reinforce/strengthen a 3D framework</li> <li>• Know that a 3D textiles product can be made from a combination of fabric shapes Know hat a recipe can be adapted a by adding or substituting one or more ingredients</li> </ul> |
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	EYFS	Y1	Y2	Y3	Y4	Y5	Y6
<b>Cooking and Nutrition</b>	<ul style="list-style-type: none"> <li>• ELG from Physical Development: Health and Self Care.</li> </ul>	Pupils should be taught to: <ul style="list-style-type: none"> <li>• use the basic principles of a healthy and varied diet to prepare dishes</li> <li>• understand where food comes from</li> </ul>		Pupils should be taught to: <ul style="list-style-type: none"> <li>• understand and apply the principles of a healthy and varied diet</li> <li>• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</li> </ul>			
Examples	<ul style="list-style-type: none"> <li>• Children know the importance of good health, physical exercise and a healthy diet.</li> </ul>	<ul style="list-style-type: none"> <li>• Know where food comes from</li> <li>• Use appropriate equipment to weigh and measure ingredients</li> <li>• Prepare simple dishes safely and hygienically, without using a heat sources</li> <li>• Use techniques such as cutting Name and sort foods into the five groups of the 'eat well' plate</li> <li>• Know that everyone should eat at least five portions of fruit and vegetables every day</li> </ul>		<ul style="list-style-type: none"> <li>• Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world</li> <li>• Know that seasons may affect the food available</li> <li>• Understand how food is processed into ingredients that can be eaten or used in cooking</li> <li>• How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source</li> <li>• How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</li> <li>• Know that a healthy diet is made up from a variety and balance of different foods and drinks, as depicted in the 'eat well' plate</li> <li>• Know that to be active and healthy, food is needed to provide energy for the body</li> <li>• Measure using grams</li> <li>• Follow a recipe</li> </ul>		<ul style="list-style-type: none"> <li>• Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world</li> <li>• Know that seasons may affect the food available</li> <li>• Understand how food is processed into ingredients that can be eaten or used in cooking</li> <li>• How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source</li> <li>• How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</li> <li>• Know that recipes can be adapted to change the appearance, taste, texture and aroma</li> <li>• Know that different foods contain different substances - nutrients, water and fibre - that are needed for health</li> <li>• Understand the need for correct storage</li> <li>• Measure accurately</li> <li>• Work out ratios in recipes</li> </ul>	

<p><b><u>Cooking progression of skills</u></b></p>	<p><b>KNIFE SKILLS</b> Bridge knife technique – soft foods e.g. strawberry, cherry tomato</p> <p><b>WEIGHING AND MEASURING</b> Using measuring spoons and cups Using balancing scales</p> <p><b>BAKING SKILLS</b> Sieving e.g. flour Kneading Shaping e.g. bread rolls Cutting out rolled pastry Glazing e.g. brushing with egg, milk, oil</p> <p><b>OTHER SKILLS</b> Tearing e.g. herbs Crumbling cheese e.g. Feta cheese Arranging ingredients/toppings Spreading with the back of a spoon e.g. pizza topping Scooping e.g. removing mango flesh from hedgehogged shell, or baked potato from its jacket Using a lemon squeezer Beating ingredients together e.g. salad dressing Garnishing and decorating</p>	<p>(Previous skills, but to also include the following)</p> <p><b>KNIFE SKILLS</b> Claw knife technique – soft foods e.g. cucumber Snipping herbs in a jug using scissors</p> <p><b>BAKING SKILLS</b> All-in-one cake mixing Scraping out a bowl with a spatula Dividing mixture into tins e.g. muffins Handling and folding filo pastry</p> <p><b>OTHER SKILLS</b> Mashing</p>	<p>(Previous skills, but to also include the following)</p> <p><b>KNIFE SKILLS</b> Bridge knife technique – harder foods e.g. apple Hedgehog a mango cheek with a round bladed knife Grating soft foods e.g. courgette, cheese</p> <p><b>WEIGHING AND MEASURING</b> Using a jug to measure liquids</p> <p><b>BAKING SKILLS</b> Cutting fat into flour Cracking an egg Beating an egg Rubbing fat into flour Mixing to form bread dough Handling and rolling puff pastry</p> <p><b>OTHER SKILLS</b> Spreading with a table knife e.g. butter Crushing garlic Shaping e.g. fishcakes/burgers</p>	<p>(Previous skills, but to also include the following)</p> <p><b>KNIFE SKILLS</b> Claw knife technique – harder foods e.g. carrot Peeling soft vegetables e.g. courgette</p> <p><b>WEIGHING AND MEASURING</b> Using digital or spring balance scales</p> <p><b>BAKING SKILLS</b> Adding liquid to flour Cutting out rolled pastry</p> <p><b>OTHER SKILLS</b> Coating e.g. with egg and breadcrumbs Shelling a hard boiled egg Draining through a sieve or colander</p>	<p>(Previous skills, but to also include the following)</p> <p><b>KNIFE SKILLS</b> Grating harder foods e.g. carrot, apple</p> <p><b>BAKING SKILLS</b> Separating an egg Creaming fat and sugar Folding flour into creamed mixture Handling and rolling shortcrust pastry</p> <p><b>OTHER SKILLS</b> Seasoning to taste</p>	<p>(Previous skills, but to also include the following)</p> <p><b>KNIFE SKILLS</b> Simple combination of bridge and claw e.g. onion Coring an apple Fine grating e.g. parmesan cheese, nutmeg.</p> <p><b>OTHER SKILLS</b> Using the hob (only with adult supervision) e.g. to sweat vegetables for soup Whisking e.g. egg whites or cream</p>	<p>(Previous skills, but to also include the following)</p> <p><b>KNIFE SKILLS</b> Fine chopping of herbs Peeling e.g. carrot</p>
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