



## DT Skills Progression Grid

KEY SKILLS	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Design</b>	Use media and materials and begin to think about their uses and purposes.	Begin to design purposeful, functional and appealing products based on a design criteria.	Design purposeful, functional and appealing products based on a design criteria.	Begin to generate idea and develop design criteria to inform the design of functional and appealing products.	With increasing confidence, generate ideas and develop design criteria to inform the design of functional and appealing products that are fit for purpose and aimed at particular individuals or groups.	Begin to use research and develop design criteria to inform the design of functional and appealing products that are fit for purpose and aimed at particular individuals or groups.	Confidently use research and develop design criteria to inform the design of functional and appealing products that are fit for purpose and aimed at particular individuals or groups.
	Represent their ideas, thoughts and feelings through art, role-play and talking.	Begin to develop and communicate their ideas through talking and drawing.	Develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, ICT.	Begin to generate, model and communicate their ideas through discussion and annotated sketches.	With increasing confidence, generate, develop, model and communicate their ideas through discussion and annotated sketches, cross sectional and exploded diagrams.	Independently generate, develop, model and communicate their ideas through discussion and annotated sketches, making prototypes where applicable.	Confidently generate, develop, model and communicate their ideas through discussion and annotated sketches, making prototypes, pattern pieces and computer aided-design.

<p><b>Make</b></p>	<p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p>	<p>Uses a range of selected tools and equipment to perform practical tasks (for example, cutting and joining)</p> <p>Uses a wide range of materials, components, including construction materials and textiles.</p>	<p>Selects from a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</p> <p>Starts to choose from a wide range of materials, components, including construction materials and textiles, according to their characteristics.</p>	<p>Begins to explain their choice of tools and equipment to perform practical tasks accurately.</p> <p>Selects from a wide range of materials, components, including construction materials and textiles, according to their characteristics .</p>	<p>Explains use of a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p> <p>Selects from a wide range of materials, components, including construction materials and textiles, according to their characteristics.</p>	<p>Explains and chooses a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p> <p>Explains choice when using a wide range of materials, components, including construction materials and textiles, according to their characteristics.</p>	<p>Confidently explains and chooses a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p> <p>Confidently explains and chooses from a wide range of materials, components, including construction materials and textiles, according to their characteristics.</p>
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<p><b>Evaluate</b></p>	<p>Use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p>	<p>To explore a range of existing products and talk about what is good and bad about them.</p> <p>Say whether the product does what it is meant to (does it fit the design criteria) and how it could be improved.</p>	<p>Describe how their own and pre-existing products work, evaluating what went well and what could be done differently.</p> <p>Say whether their own product does what it is meant to (does it fit the design criteria) and suggest ways to improve or do things differently.</p>	<p>Evaluate own and existing products.</p> <p>Suggest what could be changed to improve a design, beginning to link this to the design brief.</p>	<p>Evaluate the appearance and usability of own and pre-existing products.</p> <p>Explain how the original design could be improved, considering the appearance and usability and linking this to the design brief.</p>	<p>Evaluate the appearance and function of a product (own and pre-existing) against the design criteria, saying whether it is fit for purpose.</p> <p>Suggest improvements that could be made.</p>	<p>Evaluate the appearance and test the function of a product (own and existing) against the original criteria, saying whether it is fit for purpose.</p> <p>Suggest improvements that could be made, considering materials, methods, sustainability of the product and how much a product costs to make.</p>
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<p><b>Technical knowledge</b></p>		<p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products.</p>	<p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products (for example, gears, levers and pulleys).</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products (for example, gears, levers and pulleys).</p> <p>Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs and buzzers).</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>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]</p> <p>Apply their understanding of computing to program, monitor and control their products.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>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]</p> <p>Apply their understanding of computing to program, monitor and control their products.</p>
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<p><b>Cooking and Nutrition</b></p>	<p>Know the importance for good health of physical exercise and a healthy diet and talk about ways to be healthy.</p>	<p>Know the importance for good health of physical exercise and a healthy diet and talk about ways to be healthy.</p> <p>Understand where food comes from.</p>	<p>Know the importance for good health of physical exercise and a healthy diet and talk about ways to be healthy.</p> <p>Understand where food comes from.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of dishes using a range of cooking techniques.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of dishes using a range of cooking techniques.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of dishes using a range of cooking Techniques.</p> <p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p> <p>Prepare and cook a variety of dishes using a range of cooking Techniques.</p> <p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>
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