

## Progression of Skills and Knowledge in Design Technology



*Design Technology*

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EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design						
<p>(Managing Self) Be confident to try new activities and show Independence, resilience and perseverance in the face of challenge</p> <p>(Self Regulation) Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate</p> <p>(Creating with Materials) Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p>	<p>Design simple products that work and look appealing</p> <p>Discuss and draw ideas and use ICT to communicate</p>	<p>Design products for others and themselves that are purposeful, functional and appealing</p> <p>Generate, develop, model and communicate ideas through talking, drawing, templates and ICT</p>	<p>Communicate ideas using different strategies eg <i>discussion, sketch</i></p> <p>Use research to inform design</p> <p>Take risks to become innovative and resourceful</p>	<p>Communicate, generate and develop ideas using a range of strategies eg prototypes, pattern pieces</p> <p>Use research to inform design and develop design criteria</p> <p>Take risks to become innovative and resourceful</p>	<p>Communicate, generate, develop and model ideas using a range of strategies eg computer-aided design, cross-sectional and exploded diagrams</p> <p>Use research to inform design and generate own design criteria</p> <p>Communicate, generate and develop ideas, drawing on other disciplines eg science, maths, computing</p> <p>Confidently take calculated risks to become innovative, resourceful and enterprising</p>	<p>Communicate, generate and develop ideas, drawing on other disciplines eg science, maths, computing</p> <p>Use research to inform innovative design and generate own design criteria</p> <p>Confidently take calculated risks to become innovative, resourceful and enterprising</p>
Evaluate						
<p>(Speaking) Offer explanations for <i>why</i> things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate</p> <p>(Creating with Materials) Share their creations, explaining the process they have used</p>	<p>Explore existing products eg <i>home, school</i> Discuss own ideas and designs</p>	<p>Explore and evaluate a range of existing products eg <i>home, school</i></p> <p>Evaluate own ideas and designs against given design criteria</p>	<p>Evaluate own ideas and designs against given design criteria and consider the views of others to improve their work</p> <p>Investigate a range of existing products that address real/relevant problems, in a range of relevant contexts eg <i>home, leisure, school</i></p>	<p>Evaluate own and others' work suggesting improvements and consider the views of others to improve their work</p> <p>Investigate a range of existing products in a range of relevant contexts eg <i>culture, industry</i></p>	<p>Generate own design criteria and evaluate ideas and products against these</p> <p>Investigate and analyse a range of existing products that address real/relevant problems, in a range of relevant contexts</p> <p>Understand how key events and individuals in D&amp;T helped to shape the world</p>	<p>Generate own design criteria and critique ideas and products against these</p> <p>Explain and understand how key events and individuals in D&amp;T helped to shape the world</p>

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Technical Knowledge						
	<p>Start to build structures, exploring ways to stiffen, stable and strengthen</p> <p>Explore simple mechanisms</p>	<p>Build structures, exploring ways to stiffen, stabilise and strengthen</p> <p>Explore and use mechanisms eg <i>levers, wheels and axles</i></p>	<p>Apply understanding of how to strengthen, stiffen and reinforce structures</p> <p>Identify range of mechanical systems and how they work (gears, pulleys, cams, levers and linkages)</p>	<p>Apply understanding of how to strengthen, stiffen in order to reinforce more complex structures</p> <p>Use computing to program, monitor and control products</p> <p>Identify wider range of mechanical systems and how they work (gears, pulleys, cams, levers and linkages)</p> <p>Use understanding of electrical systems (series circuits, switches, bulbs and motors)</p>	<p>Construct more complex structures by applying range of strategies in order to solve real/ relevant problems</p> <p>Drawing on disciplines &amp; making connections to wider subject areas, apply understanding of computing to program, monitor and control products</p> <p>Making connections to real &amp; relevant problems, apply understanding of wider range of mechanical systems (gears, pulleys, cams, levers and linkages)</p> <p>Making connections to real &amp; relevant problems, apply understanding of electrical systems (series circuits, switches, bulbs and motors)</p>	<p>Construct more complex structures by applying range of strategies in order to solve real / relevant problems</p> <p>Drawing on disciplines &amp; making connections to wider subject areas, apply understanding of computing to program, monitor and control products</p> <p>Making connections to real &amp; relevant problems, apply understanding of wider range of mechanical systems (gears, pulleys, cams, levers and linkages)</p> <p>Making connections to real &amp; relevant problems, apply understanding of electrical systems (series circuits, switches, bulbs and motors)</p>



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Make						
(Fine Motor) Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases - Use a range of small toys, including scissors, paint brushes and cutlery - Begin to show accuracy and care when drawing (Creating with Materials) Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function	Use a range of materials and components eg construction, textiles and ingredients  Use a range of tools and equipment to perform practical tasks eg <i>cut, shape, join and finish</i>	Select from and use a wide range of materials and components (according to their characteristics) eg <i>construction, textiles and ingredients</i>  Select from and use a wide range of tools and equipment to perform practical tasks eg cut, shape, join and finish	Select from and use a wide range of tools, equipment, materials and components accurately	Select from and use a wider range of tools, equipment, materials and components accurately to make prototypes	According to their functional properties and aesthetic qualities, select from and use a wide range of tools, equipment, materials and components accurately to make high quality prototypes	According to their functional properties and aesthetic qualities, select from and use a wide range of tools, equipment, materials and components accurately to make high quality prototypes  Safely use and explore a variety of quality prototypes
Food Technology						
	Begin to understand where food comes from  Prepare simple dishes using knowledge of healthy food	Use basic principles of a healthy and varied diet to prepare dishes  Understand where food comes from	Apply principles of a healthy, varied diet when preparing variety of savoury dishes  Apply understanding of seasonality and its link to ingredients	Know where and how a variety of ingredients is grown, reared, caught and processed	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques  Know where and how a variety of ingredients are grown, reared, caught and processed and its impact on meal design  Develop crucial life skill of feeding themselves and others affordably and well