

Design and Technology

KNOWLEDGE AND SKILLS PROGRESSION



Skills	Year 3	Year 4	Year 5	Year 6
Technical Knowledge	<p>Pupils can begin to choose appropriate tools, equipment, components and techniques to make functional products.</p> <p>Pupils can begin to apply technical knowledge and understanding of the nature of materials to cut, shape and join them with some accuracy.</p> <p>Pupils can begin to apply understanding of how to strengthen, stiffen and reinforce more complex structures</p>	<p>Pupils can choose appropriate tools, equipment, components and techniques to make functional products.</p> <p>Pupils can apply their technical knowledge and understanding of the nature of materials to cut, shape and join them with some accuracy.</p> <p>Pupils can apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Pupils understand and use electrical systems in products (for example, series circuits, incorporating switches, bulbs, buzzers and motors).</p>	<p>Pupils can choose appropriate tools, equipment, components and techniques to make functional products.</p> <p>Pupils can apply their technical knowledge and understanding of the nature of materials to cut, shape and join them with accuracy.</p> <p>Pupils understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages.</p> <p>Pupils can begin to apply their understanding of computing to program, monitor and control their products.</p>	<p>Pupils can choose appropriate tools, equipment, components and techniques to make functional products.</p> <p>Pupils can apply their technical knowledge and understanding of the nature of materials to cut, shape and join them with accuracy.</p> <p>Pupils understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages.</p> <p>Pupils can apply their understanding of computing to program, monitor and control their products.</p>
Designing and Making	<p>Pupils can generate ideas and recognise how designs could meet a range of different needs and users.</p> <p>Pupils can begin to think ahead about the order of their work and</p>	<p>Pupils can generate ideas and recognise their designs could meet a range of different needs and users.</p> <p>Pupils can think ahead about the order of their work and make a</p>	<p>Pupils 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.</p>	<p>Pupils 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.</p>

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	<p>make a realistic plan for achieving their aims.</p> <p>Pupils can begin to produce step by step plans to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and patterns and select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Pupils can begin to 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.</p>	<p>realistic plan for achieving my aims.</p> <p>Pupils produce step by step plans to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and patterns and select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Pupils can 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.</p>	<p>Pupils can generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p> <p>Pupils can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Pupils can 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.</p>	<p>Pupils can generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p> <p>Pupils can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Pupils can 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.</p>
<p>Evaluation</p>	<p>Pupils can begin to reflect on the design and make process and identify some improvements to their products.</p> <p>Pupils can begin to understand how key events and individuals in design and technology have helped shape the world. (Go Green homework – research child)</p>	<p>Pupils can reflect on the design and make process and identify some improvements to their products.</p> <p>Pupils understand how key events and individuals in design and technology have helped shape the world.</p>	<p>Pupils can investigate and analyse a range of existing products, evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Pupils understand and can explain how key events and individuals in</p>	<p>Pupils can investigate and analyse a range of existing products, evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Pupils can understand and complain how key events and individuals in design and</p>

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	<p>inventors... should we consider key events / individuals instead?)</p>		<p>design and technology have helped shape the world.</p> <p>Pupils can identify what is working well and what could be improved to overcome technical problems.</p> <p>When evaluating, pupils pay attention to the quality of finish.</p>	<p>technology have helped shape the world.</p> <p>Pupils can identify what is working well and what could be improved to overcome technical problems and give reasons why</p> <p>When evaluating, pupils pay attention to the quality of finish.</p>
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<p>HISTORICAL COMMUNICATION</p>	<p>Pupils can present recalled or selected information in a variety of ways using specialist vocabulary.</p> <p>Pupils can record some of the main events, people and changes in the history of Britain and the wider world.</p> <p>Pupils are beginning to use place value in the context of timelines.</p>		<p>Pupils can thoughtfully select and organise relevant historical information and use key historical vocabulary in structured, informed, written responses, analyses or descriptions.</p> <p>Pupils can make pertinent and valid comparisons between periods.</p> <p>Pupils confidently use/apply mathematical skills when placing events in chronological order, using place value, negative nos. etc</p>	
<p>HISTORICAL CONCEPTS</p>	<p>Pupils <u>are beginning to discuss</u> the reasons for and the results of the main events and changes of a time studied.</p> <p>Pupils <u>are beginning to discuss</u> a range of similarities/ differences between different times in the past in the periods covered so far.</p>	<p>Pupils <u>can give reasons for</u> and the results of the main events and changes of a time studied.</p> <p>Pupils <u>can identify</u> a range of similarities/ differences between different times in the past in the periods covered so far.</p>	<p>Pupils <u>are starting to understand</u> the complexity of people's lives in the past and how some societies are very different due to changes or challenges at the time.</p> <p>Pupils can see the relationship between different periods and <u>are beginning to discuss the impact of them.</u></p> <p>Pupils <u>are starting to understand</u> change and continuity (eg what changes/stays the same between different periods of time)</p> <p>Pupils can discuss trends over time (communication).</p>	<p>Pupils <u>can discuss</u> the complexity of people's lives in the past and how some societies are very different due to changes or challenges at the time.</p> <p>Pupils can see the relationship between different periods and the legacy or impact on them and their identity.</p> <p>Pupils <u>understand</u> change and continuity (eg what changes/stays the same between different periods of time)</p> <p>Pupils can discuss trends over time (children's toys and clothes).</p>