

# Design Technology Learning Progression



Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating					
<ul style="list-style-type: none"> <li>-I know what a product is</li> <li>-I can say what a product is for</li> <li>-I can describe a product (who is it for, what is made from, how is it made, how it works)</li> <li>-I can talk about my own work (features, design, opinion)</li> <li>-I describe how my product works</li> </ul>	<ul style="list-style-type: none"> <li>-I know the features of familiar products</li> <li>-I can give reasons for some features (colour choice, material used, joining technique)</li> <li>-I talk about my own and others' work (features, design, opinion)</li> <li>-I can explain why I chose certain materials, techniques and tools</li> <li>-I describe how my product works</li> </ul>	<ul style="list-style-type: none"> <li>-I can start to research and evaluate existing products</li> <li>-I understand that products are designed for a purpose (e.g. a problem, an audience, an event)</li> <li>-I talk about my own and others' work (features, design, opinion)</li> <li>-I can explain why I chose certain materials, techniques and tools</li> <li>- I can say what I would do to improve my product</li> </ul>	<ul style="list-style-type: none"> <li>-I can research and evaluate existing products to inform me in my own planning</li> <li>-I understand that products are designed for a purpose (e.g. a problem, an audience, an event)</li> <li>-I identify what is working well and what can be improved (this is during the make as well as at the end)</li> </ul>	<ul style="list-style-type: none"> <li>-I can research and evaluate existing products giving reasons for the decisions of the designers (materials, design, tools, techniques)</li> <li>-I can use the ideas from current designers to help me with my own</li> <li>-I reflect on my designs and develop them bearing in mind the way they will be used (during the process)</li> </ul>	<ul style="list-style-type: none"> <li>-I can research and evaluate existing products giving reasons for the decisions of the designers (materials, design, tools, techniques)</li> <li>-I can use the ideas from current designers to help me with my own</li> <li>-I reflect on my designs and develop them bearing in mind the way they will be used (during the process)</li> </ul>

Knowledge of Designers		
<ul style="list-style-type: none"> <li>-I know what a designer does</li> <li>-I know the names and the products of some British designers</li> <li>-I can say what I like and dislike about the product and the designer</li> </ul>	<ul style="list-style-type: none"> <li>-I know some designers from history</li> <li>-I know some international designers</li> <li>-I can talk about some of the tools, techniques and design used by the designer</li> </ul>	<ul style="list-style-type: none"> <li>-I know how key events and individuals have influenced the world (in terms of products)</li> <li>-I can compare and contrast the work of different designers (e.g. historical and modern)</li> <li>-I can give reasons for the decisions made by the designer</li> </ul>

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Designing					
<ul style="list-style-type: none"> <li>-I think of ideas and with help can put them into practice</li> <li>-I know what a design is and its purpose</li> <li>-I use pictures and words to describe what I want to do (materials and tools)</li> </ul>	<ul style="list-style-type: none"> <li>-I think of ideas and with help can put them into practice</li> <li>-I know what a design is and its purpose</li> <li>-I use pictures and words to describe what I want to do (materials, techniques, features-mechanics etc. and tools)</li> </ul>	<ul style="list-style-type: none"> <li>-I think of ideas and plan what to do next, based on what I know about materials and components</li> <li>-I select the appropriate tools, techniques and materials</li> <li>-I can plan using specific materials and explain my choice</li> <li>-I use pictures and words to describe what I want to do (materials, techniques, features-mechanics etc. and tools)</li> </ul>	<ul style="list-style-type: none"> <li>-I think of ideas and plan what to do next, based on what I know about materials and components</li> <li>-I select the appropriate tools, techniques and materials explaining my choices</li> <li>-I communicate my ideas using labelled sketches giving reasons for my choices</li> <li>-I start to produce step by step plans</li> </ul>	<ul style="list-style-type: none"> <li>-I use my knowledge of design and designers and further research to help influence my own design</li> <li>-I can create models or prototypes to show aspects of my design</li> <li>-I produce step by step plans</li> <li>-I can use computer aided design</li> <li>-I come up with solutions to problems as they happen.</li> </ul>	<ul style="list-style-type: none"> <li>-I use my knowledge of design designers and further research to help influence my own design</li> <li>-I can create models or prototypes to show aspects of my design</li> <li>-I produce step by step plans</li> <li>-I can use computer aided design</li> <li>-I can take part in technical discussions about my ideas</li> <li>-I come up with solutions to problems as they happen.</li> </ul>

Making
(Skills are over two years of progress as learners will not have the opportunity to do each type on an annual basis)

Construction		
<ul style="list-style-type: none"> <li>-I know what materials I can use for my structure</li> <li>-I know what a join is and can use one</li> <li>-I measure and mark out materials with care and increasing accuracy</li> <li>-I cut materials safely (scissors, junior hacksaw)</li> <li>-I am careful to make my work look as neat as possible</li> <li>-I have found out how to make materials for my structure stronger (folding, rolling and joining, columns and triangles)</li> </ul>	<ul style="list-style-type: none"> <li>-I can use appropriate materials and an appropriate join</li> <li>-I measure and mark out materials with care and increasing accuracy (cm)</li> <li>-I can use scoring and folding to shape materials accurately</li> <li>-I make cuts accurately (scissors and saws)</li> <li>-I make holes accurately (drill, punch)</li> <li>-I join materials to make products using both permanent and temporary fastenings</li> </ul>	<ul style="list-style-type: none"> <li>I select from a variety of materials best suited to my design</li> <li>I measure using mm and then use scoring, and folding to shape materials accurately.</li> <li>I make cuts accurately and reject pieces that are not accurate and improve my technique.</li> <li>My joins are strong and stable, giving extra strength to my products.</li> <li>Some joins are flexible to allow for dismantling or folding.</li> </ul>

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	<p>-My methods of working are increasingly precise aiming for a high quality finish</p> <p>-I use art skills to apply texture and design to my products</p>	<p>My methods of working are precise so that products have a high quality finish.</p> <p>I can use computer programming when creating a product</p>
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Mechanics and (KS2) Electrics		
<p>I have explored how moving objects work.</p> <p>I have looked at wheels, axels, turning mechanisms, hinges and simple levers.</p> <p>I have made a product that moves using a turning mechanism (e.g. wheels, winding) or a lever or a hinge (to make a movement)</p>	<p>I know the application of mechanisms to create movement.</p> <p>I combine a number of components well in my product.</p> <p>I use simple circuits to either illuminate or create motion.</p> <p>I have made a product that uses both electrical and mechanical components.</p> <p>My product has a good finish so that a user will find it both useful and attractive.</p>	<p>I have chosen components that can be controlled by switches or by ICT equipment.</p> <p>My product is improved after testing.</p> <p>I use my science skills (resistance, batteries in series or parallel, variable resistance to dim lights or control speed) to alter the way my electrical products behave.</p> <p>I use precise electrical connections.</p> <p>I have explored mechanical movement using hydraulics and pneumatics.</p> <p>I use other DT skills to create housings for my mechanical components.</p> <p>My product is well finished in a way that would appeal to users</p>

Textiles		
<p>I know that textiles have different properties: touch, insulation, texture and waterproof. I select the appropriate textile so that it does the job I want it to.</p> <p>I can describe textiles by the way they feel.</p> <p>I have altered a textile to make it stronger.</p> <p>I have made a product from textiles.</p> <p>I can measure, mark out and cut fabric.</p> <p>I can join fabrics using glue and running stitch.</p> <p>I make sure my work is neat and tidy.</p>	<p>I select the appropriate textile(s) for my product.</p> <p>I use sharp scissors accurately to cut textiles.</p> <p>I know that the texture and other properties of materials affect my choice..</p> <p>My textile work incorporates the views of intended users' and for the purpose.</p> <p>I use my art textiles skills such as stitching to help create a product that is sturdy and fit for purpose.</p> <p>I combine materials to add strength or visual appeal</p> <p>My textile products include structural changes, such as plaiting or weaving to create new products such as rope, belts, bracelets etc.</p>	<p>My products have an awareness of commercial appeal.</p> <p>I experiment with a range of materials until I find the right mix of affordability, appeal and appropriateness for the job.</p> <p>I combine art skills to add colour and texture to my work.</p> <p>I mark out using my own patterns and templates</p> <p>I join textiles using art skills of stitching, embroidering and plaiting to make a durable and desirable products.</p>

Cooking and nutrition		
<ul style="list-style-type: none"> <li>-With help, I can use knives safely</li> <li>-I use a mixing bowl</li> <li>-I am aware of hygiene for cooking</li> <li>-I know some things are made and some things are natural</li> <li>-I know some things are dangerous to eat raw</li> <li>-I know heat changes food</li> <li>-I can use a variety of utensils safely</li> <li>-I know what the food groups are</li> <li>-I know where some foods come from</li> <li>-I am aware there are different ways to cook</li> <li>-I can prepare a healthy snack and breakfast</li> </ul>	<ul style="list-style-type: none"> <li>-I can select ingredients for my product with reasons</li> <li>-I work in a safe, hygienic way</li> <li>-I am beginning to measure out my ingredients</li> <li>-I understand what is healthy and unhealthy</li> <li>-I know I can boil and bake to cook</li> <li>-I understand why we need a healthy diet</li> <li>-I use my knowledge of the food groups to plan a lunch</li> <li>-I know where food comes from</li> <li>-I can prepare a healthy lunch</li> </ul>	<ul style="list-style-type: none"> <li>-I can explain why I have chosen ingredients in a dish</li> <li>-I know why I need certain food types</li> <li>-I know I can grill, boil, fry and bake to cook</li> <li>-I know about local produce</li> <li>-I understand seasonality and this affects food</li> <li>-I know where different crops can be found around the world</li> <li>-I understand the concept of carbon footprints</li> <li>-I know different cultures have different diets</li> <li>-I can design and prepare a healthy dinner</li> </ul>