

Whole School Design Technology Skills Progression

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others

	YR	Y1	Y2	End of KS1
	Children will build on these skills:			
Design	<p>Have own ideas and explain what I want to do</p> <p>Select appropriate resources (such as taught skills - spring, lever, split pins)</p> <p>Use gestures, talking and arrangements of materials and components to show design</p> <p>Use contexts set by the teacher and myself</p> <p>Use language of designing and making (join, build, shape, longer, shorter, heavier etc.)</p>	<p>Have own ideas and explain what I want to do, evaluate and refine</p> <p>Explain what my product is for, and how it will work</p> <p>Use pictures and words to plan</p> <p>Design a product for myself following design criteria</p>	<p>Have own ideas and plan what to do next</p> <p>Select suitable materials</p> <p>Explain what I want to do and describe how I may do it</p> <p>Explain purpose of product, how it will work and how it will be suitable for the user</p> <p>Describe design using pictures, words, models, diagrams</p> <p>Design products for myself and others following design criteria</p> <p>Use knowledge of existing products to produce ideas</p>	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p>

<p>Make</p>	<p>Construct with a purpose, using a variety of resources</p> <p>Use simple tools and techniques</p> <p>Build / construct with a wide range of objects</p> <p>Select tools & techniques to shape, assemble and join</p> <p>Replicate structures with materials / components</p> <p>Record experiences by drawing, writing, voice recording</p> <p>Understand different media can be combined for a purpose</p>	<p>Explain what I'm making and why</p> <p>Consider what I need to do next</p> <p>Select tools/equipment to cut, shape, join, finish and explain choices</p> <p>Measure, mark out, cut and shape, with support</p> <p>Choose suitable materials and explain choices</p>	<p>Explain what I am making and why it fits the purpose</p> <p>Make suggestions as to what I need to do next.</p> <p>Join materials and components together in different ways</p> <p>Measure, mark out, cut and shape materials and components, with support.</p> <p>Describe which tools I'm using and why</p> <p>Choose suitable materials and explain choices depending on characteristics.</p> <p>Use finishing techniques to make product look good</p>	<p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p>
<p>Evaluate</p>	<p>Adapt work if necessary</p> <p>Dismantle, examine, talk about existing objects/structures</p> <p>Consider and manage some risks</p> <p>Practise some appropriate safety measures independently</p> <p>Talk about how things work</p>	<p>Talk about my work, linking it to what I was asked to do</p> <p>Talk about existing products, and say what is and isn't good</p> <p>Talk about things that other people have made</p> <p>Begin to talk about what could make product better</p>	<p>Describe what went well, thinking about design criteria</p> <p>Talk about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion</p> <p>Evaluate how good existing products are</p>	<p>Explore and evaluate a range of existing products</p> <p>Evaluate their ideas and products against design criteria</p>

	Look at similarities and differences between existing objects / materials / tools		Talk about what I would do differently if I were to do it again and why	
Technical Knowledge	<p>Begin to use levers or slides</p> <p>Cut materials safely using tools provided.</p> <p>Begin to join materials, with support</p>	<p>Begin to measure and join materials, with some support</p> <p>Describe differences in materials</p> <p>Suggest ways to make material/product stronger</p> <p>Measure, cut and join textiles to make a product, with some support</p> <p>Choose suitable textiles</p>	<p>Measure materials</p> <p>Describe some different characteristics of materials</p> <p>Join materials in different ways</p> <p>Use own ideas to try to make product stronger</p> <p>Begin to understand how to use wheels and axles</p> <p>Join textiles together to make a product, and explain how I did it</p> <p>Carefully cut textiles to produce accurate pieces</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>