

Design & Technology Skills Progression Map

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Explore	Investigate models similar to what they want to make.	Investigate models, similar to which they will make.	Investigate models, similar to which they will make.	Investigate models. Take components apart and discuss the parts needed and what they do.	Investigate models. Take components apart and discuss the parts needed and how mechanisms work. Begin to understand technical language.	Investigate models. Take components apart and discuss the parts needed and how mechanisms work. Develop technical language.	Investigate models. Take components apart and discuss the parts needed and how mechanisms work. Develop technical language.
Design	Work in different contexts, school, playground, outdoor areas and home Generate ideas from examples and begin to talk about what their designs will be like.	Design original products from existing ideas Describe who their products are for and the purpose of the products.	Design original products from existing and imaginary ideas. Describe who their products are for and the purpose of the products. Discuss components, materials, joins and assembly	Design from a range of contexts: Home. school, leisure and industry. Decide who their products are for and the purpose of the products. Gather information and generate ideas from information collected about the needs and wants of the target user.	Design from a range of contexts: Home. school, leisure and industry. Design their own design criteria. Gather information and generate ideas from information collected about the needs and wants of the target user.	Confidently design from a range of contexts: Home. school, leisure industry, enterprise and web-based sources.. Design their own design criteria. Gather information and generate ideas from information collected about the needs and	Confidently design from a range of contexts: Home. school, leisure industry, enterprise and web-based sources.. Describe in detail design features and why they would appeal to the end user. Carry out research of needs and wants of a market. Model ideas



				Discuss the purpose of the product.	Consider the purpose of the product. Indicate design features that will appeal to the user. Model ideas using prototypes.	wants of the target user. Describe in detail the purpose of their product. Indicate design features that will appeal to the user. Model ideas using prototypes.	with prototypes. Annotate sketches and present cross sectional drawings, exploded designs and computer aided diagrams.
Make	Manipulate malleable materials and make suggestions of tools to use.	Plans by discussing what to do next. Uses a range of materials. Choose a range of tools.	Select from a range of tools, materials and components. Use measures, cut-outs and shapes. Follow safety procedures.	Select from a range of tools, materials and components. Order the main stages of making. Use measures, cut-outs and shapes. Follow safety procedures.	Select from a range of tools, materials and components. Order the main stages of making. Use measures, nets and shapes. Follow safety procedures. Follow design criteria.	Confidently Select from a range of tools, materials and components. Order the main stages of making. Produce an appropriate list of tools and materials. Use measures, nets and shapes. Follow safety procedures. Follow design criteria.	Confidently Select from a range of tools, materials and components. Order the main stages of making. Produce an appropriate list of tools and materials. Use measures, nets and shapes. Accurately apply a range of finishing techniques. Be resourceful, innovative and resilient.



							Follow safety procedures. Follow design criteria.
Evaluate	Discuss their work. Saying what is good.	Talk about their design ideas. Discuss how to make them better. Explore what products are.	Discuss their ideas against design criteria. Make simple judgements about their products. Discuss likes and dislikes of product.	Investigate and analyse how well the product has been made. Identify the strengths and areas for improvement in their product. Consider the views of others. Use their design criteria to evaluate the product.	Investigate and analyse how well the product has been made. Identify the strengths and areas for improvement in their product. Discuss methods of construction and materials used. Consider the views of others. Use their design criteria to evaluate the product.	Investigate and analyse how well the product has been made. Identify the strengths and areas for improvement in their product. Discuss methods of construction and materials used. Consider the views of others.	Investigate and analyse how well the product has been made. Identify the strengths and areas for improvement in their product. Asses if the product meets the criteria. Discuss what amendments and improvements can be made. Discuss methods of construction and materials used. Consider the views of others.

<p>Technical knowledge</p>	<p>Recognise that a range of technology can be used in various places such as home and school.</p>	<p>Select and use technology for particular purposes. Understand the simple characteristics of materials and components.</p>	<p>Understand the working characteristics of their products. Know about the simple movements of levers, sliders, wheels and axles.</p>	<p>Use mathematical and scientific knowledge to understand how the product is made and works. Understand that materials have aesthetic qualities. Know how mechanical features create movement.</p>	<p>Use mathematical and scientific knowledge to understand how the product is made and works. Understand that materials have functional and aesthetic qualities. Know how mechanical features create movement. Know that simple electric circuits can be used to create a function.</p>	<p>Use mathematical and scientific knowledge to understand how the product is made and works. Program a computer to control their products. Understand that materials have functional and aesthetic qualities. Know how mechanical features create movement. Recognise that materials can be mixed. Explore more complex electric circuits.</p>	<p>Use mathematical and scientific knowledge to understand how the product is made and works. Program a computer to control their products. Understand that materials have functional and aesthetic qualities. Know how mechanical features create movement. Recognise that materials can be mixed. Make strong stiff shell structures and 3D models.</p>
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