



The T-RF- Design and Technology Progression



		Links to Expressive Arts and Design				
Early Years		Nursery		Reception		
		<ul style="list-style-type: none"> • Use and experiment with various construction materials. • Begin to construct stacking blocks vertically and horizontally, making enclosures and creating spaces. • Join construction pieces together to build and balance • Talk about what I like about my work. • Use different tools when baking. • Know that I must wash my hands before cooking. 		<ul style="list-style-type: none"> • Realise that tools can be used for a purpose. • Safely explore and use simple tools and techniques competently and appropriately. • Select tools and use techniques needed to shape, assemble and join materials. • Understand that different materials can be combined to create new designs and effects. • Safely use and explore a variety of materials, tools and techniques experimenting with design and function. • Share creations explaining the processes used. • Use tools for baking correctly. 		
Year 1		Year 2	Year 3	Year 4	Year 5	Year 6
Designing	<ul style="list-style-type: none"> • Use own ideas to design something and describe how their own idea works. • Design a product which moves. • Explain to someone else how they want to make their product and make a simple plan before making. 	<ul style="list-style-type: none"> • Think of an idea and plan what to do next. • Explain why they have chosen specific textiles. 	<ul style="list-style-type: none"> • I can prove that a design meets a set criteria. • I can design a product and make sure that it is aesthetically pleasing. • I can choose a material for both its suitability and its appearance. 	<ul style="list-style-type: none"> • I can use ideas from other people when designing. • I can produce a plan and explain it. • I can persevere and adapt work when original ideas don't work. • I can communicate ideas through annotated sketches and drawings. 	<ul style="list-style-type: none"> • I can come up with a range of ideas after collecting information from different sources. • I can produce a detailed step-by-step plan. • I can explain how a product will appeal to a specific audience. • I can design a product containing pulleys and gears. 	<ul style="list-style-type: none"> • I can use market research to inform plans and ideas. • I can follow and refine original plans. • I can justify planning in a convincing way. • I can show that culture and society is considered in plans and designs.

Making	<ul style="list-style-type: none"> • Use own ideas to make something. • Make a product which moves. • Choose appropriate resources and tools. 	<ul style="list-style-type: none"> • Choose tools and materials and explain why they have chosen them. • Join materials and components in different ways. • Measure materials to use in a model or structure. 	<ul style="list-style-type: none"> • I can follow a step- by- step plan choosing the right equipment and tools. • I can select the most appropriate tools and materials. • I can work accurately to measure, make cuts and make holes. 	<ul style="list-style-type: none"> • I know which tools to use for a particular task and show knowledge of handling the tool. • I know which materials is likely to give the best outcome. • I can measure accurately. • I can make a product that uses electrical and mechanical components. 	<ul style="list-style-type: none"> • I can use a range of tools and equipment competently. • I can use a variety of methods to create my design Eg discussion, annotated sketches, exploded diagrams and make a prototype before making the final version. • I can make a product that relies on pulleys, gears and cams. 	<ul style="list-style-type: none"> • I know which tool to use for a specific practical task. • I know how to use a range of tools correctly and safely. • I know what each tool is used for. • I can explain why a specific tool is best for a specific action.
Evaluation	<ul style="list-style-type: none"> • Describe how something works. • Explain what works well and not so well in the model they have made. 	<ul style="list-style-type: none"> • Explain what went well with their work. 	<ul style="list-style-type: none"> • I can explain how to improve a finished model. • I understand why a model has or has not been successful. 	<ul style="list-style-type: none"> • I can evaluate and suggest improvements for a design. • I can evaluate products for their appearance and design. • I can explain how the original design has been improved. • I can present a product in an interesting way. 	<ul style="list-style-type: none"> • I can suggest alternative plans outlining the positive features and drawbacks. • I can evaluate appearance and function against the original criteria. 	<ul style="list-style-type: none"> • I know how to test and evaluate designed products. • I can explain how products should be stored and justify my reasons. • I can evaluate a product against a clear criteria.
Technical Knowledge	<ul style="list-style-type: none"> • Make their own model stronger. 	<ul style="list-style-type: none"> • Make a model stronger and more stable. • Use wheels and axles, when appropriate to do so. 	<ul style="list-style-type: none"> • I know how to strengthen a product by stiffening or reinforcing a part. • I can use a simple IT program within the design. 	<ul style="list-style-type: none"> • I can link scientific knowledge by using switches, lights or buzzers. • I can use electrical systems to enhance the product. • I can use IT to add to the quality of the finished product Eg nutritional information on labels. 	<ul style="list-style-type: none"> • I can link scientific knowledge to the design by using pulleys, gears and cams. • I can use a more complex IT program to enhance the quality of the product produced. 	<ul style="list-style-type: none"> • I can use electrical systems correctly and accurately to enhance a given product. • I know which IT product would further enhance a given product. • I can use my knowledge to improve a finished product by reinforcing.

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Food technology	<ul style="list-style-type: none"> • Cut food safely. 	<ul style="list-style-type: none"> • Weigh ingredients to use in a recipe. • Describe the ingredients use when making a dish or cake. 	<ul style="list-style-type: none"> • I can describe how food ingredients come together. • I can weigh out ingredients and follow a recipe. • I can talk about which food is healthy and which is not. • I know when food is ready to be harvested. 	<ul style="list-style-type: none"> • I know how to be both hygienic and safe when using food. • I can bring a creative element to the food product being designed. 	<ul style="list-style-type: none"> • I can be both hygienic and safe in a kitchen. • I know how to prepare a meal by collecting the correct ingredients. • I understand that different foods are harvested at different times. 	<ul style="list-style-type: none"> • I can work within a budget to create a meal or menu Eg cross curricular Maths.

Vocabulary

Construct, Template, Design, Evaluate, Ingredients, Components,
Joining, Mechanism, Finishing, Materials, Axle, Levers

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