


KS1 DT		Cycle A- Year 1/2 - Autumn - Mechanisms - Wheels and Axles	
Design		Make	Evaluate
<ul style="list-style-type: none"> • Use pictures and words to convey what they want to design/make. • Propose more than one idea for their product. • Use kits/reclaimed materials to develop more than one idea. • Model ideas with kits, reclaimed materials. • Select appropriate technique explaining: First... Next... Last.... • Explore ideas by rearranging materials. • Select pictures to help develop ideas. • Use drawings to record ideas as they are developed. • Add notes to drawings to help explanations. • Describe their models and drawings of ideas and intentions. 		<ul style="list-style-type: none"> • Discuss their work as it progresses. • Select materials from a limited range that will meet the design criteria. • Select and name the tools needed to work the materials. • Explain what they are making. • Explain which materials they are using and why. • Name the tools they are using. • Describe what they need to do next. 	<ul style="list-style-type: none"> • Explore existing products and investigate how they have been made. • Decide how existing products do/do not achieve their purpose. • Talk about their design as they develop and identify good and bad points. • Note changes made during the making process as annotation to plans/drawings. • Say what they like and do not like about items they have made and attempt to say why. • Discuss how closely their finished product meets their design criteria and how well it meets the needs of the user.
Key Learning		Vocabulary	Inventor- Mary Anderson
<ul style="list-style-type: none"> • Explore how to make structures stronger • Investigate different techniques for stiffening a variety of materials • Test different methods of enabling structures to remain stable • Join appropriately for different materials and situations e.g glue, tape • Mark out materials to be cut using a template • Use a glue gun with close supervision. 		<ul style="list-style-type: none"> • investigating, planning, • design, make, evaluate, • user, purpose, ideas, • design criteria, product, function • cut, fold, join, fix • structure, wall, tower, framework, • weak, strong, • base, top, underneath, side, edge, surface, • thinner, thicker, corner, point, straight, curved, • metal, wood, plastic • circle, triangle, square, rectangle, cuboid, cube, cylinder • Chassis, wheel, axle, washer 	 <p>Mary Anderson is an American inventor who patented the first windshield clearing device.</p>
National Curriculum links:			
<ul style="list-style-type: none"> • 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 			

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Design	Make	Evaluate	Technical knowledge
<ul style="list-style-type: none"> Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology 	<ul style="list-style-type: none"> select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics 	<ul style="list-style-type: none"> Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria 	<ul style="list-style-type: none"> Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.