



Caring, Successful,
Happy Learners

Learning Organiser **Design Technology: Exploring the Wilder World** Year 2

Summer Term

British and School Values				Basic Skills (Reading & Communication)	Personal Development Positive mental and physical well being	Wonderful Words (Vocabulary & Quality Texts)	Memorable Experiences
respect	caring	safety	best				

Key Substantive “sticky” Knowledge I know...	Key Disciplinary Knowledge & Skills I can...
<p>Design.</p> <ul style="list-style-type: none"> How to design a product using a design criteria. Understand how to draw a design for a product. Know that an axle is a rod on which one or more wheels can rotate and turn with the axle. Know that an axle holder is the component through which an axle fits and rotates. Know that a chassis is the frame or base on which a vehicle is built. <p>Make</p> <ul style="list-style-type: none"> Select from a range of materials which are suitable for the item I wish to make. That there are different, simple methods to fix wheels and axels to a product. That the frame of a vehicle (chassis) needs to be balanced How to use tools safely and effectively. <p>Evaluate</p> <ul style="list-style-type: none"> How to evaluate existing products. That wheels and axels can be found in many products. How to evaluate a finished product. 	<p>Design</p> <ul style="list-style-type: none"> Design a purposeful product based on a design criteria Describe through images and words what I want to make. Design a moving vehicle that includes wheels, axels and holders. <p>Make.</p> <ul style="list-style-type: none"> Select a range of materials, which are suitable for the item I wish to make. Cut, join, assemble and finish a moon buggy. Use tools safely and effectively to cut and assemble components neatly. <p>Evaluate</p> <ul style="list-style-type: none"> Explore existing products to understand how wheels and axels move. Discuss the finished product against success criteria.

Learning Sequence			
	Substantive knowledge	Disciplinary knowledge objective	Activity
1	That wheels and axels can be found in many products. How to explore and evaluate existing products.	Explore existing products to understand how wheels and axels move. Develop a design criteria based on knowledge of existing product.	Explore existing products (various vehicles) to identify key components including properties of materials, movement and shape of product. Discuss different materials that vehicles are made from, list, and decide the most appropriate. Discuss design criteria and list.
2	To know how to present a design.	Draw a design for a moon buggy.	Model how to draw design and add detail. Label the design with materials.
3	To know how to use their ideas to test various wheels and axel holders.	Test different size wheels and fixed and free axel holders.	Use knowledge of wheels and axels to test fixed and free axels. Use techniques to join and check against design criteria.
4	To know how to use tools with control and join materials.	Select, mark and saw my wood to make a chassis. Join materials together.	Draw around template onto fabric. Model how to use tools safely to saw along marks. Glue wood together to make a chassis.
5		Use techniques to add features to product.	Following design, add axels holders, axels and wheels to the product to allow the wheels to move.
6			Following design, add features to the product to match the design.
7	To know how to evaluate a finished product.	Use design criteria to evaluate the finished product.	Discuss the finished product. Does it match the design criteria? Does it match the drawn design? Write a simple evaluation.

Prior Knowledge I remember	Wonderful Words Key Vocabulary						Planned Experiences and Enrichment										
	Known Vocabulary			New Vocabulary													
<ul style="list-style-type: none"> Fabrics are collectively called textiles and are a type of material. Fabrics can be used to make a range of products. How to use scissors safely 	Design	Fabric	Cut	Evaluate	Needle	Wool	Stitch	Vehicle	axle holder	cutting	wheel	chassis	mechanism	axle	body	names of tools	Design and make project: Moon buggy

