

KNOWLEDGE ORGANISER – St Gregory’s RC Primary School

Topic: Design Technology

Year Group: 2 Autumn 1

Strand: Mechanisms - Wheels and Axles – A van for Postman Pat to Deliver Christmas parcels in

What I should already know	Sticky knowledge	Key skills
<ul style="list-style-type: none"> • I know that mechanisms are the parts that make something work • I know what a plan/ design is. • I know how to make my mechanism stronger. • I can use drawings and labels to design a product. • I can explain what went well with my product. • I know why a model has not been successful. 	<ul style="list-style-type: none"> • I know that wheels help vehicles and objects move easily. • I know that axles are rods that help wheels to rotate • I know how to use wheels and axles to create a moving vehicle. • I know how to make my vehicle look attractive. • I know how my product has/ has not achieved its purpose • I know the difference between fixed wheels and free wheels 	<p>Design:</p> <ul style="list-style-type: none"> • I can identify a purpose for my design. • I can identify a design criterion. <p>Make:</p> <ul style="list-style-type: none"> • I can measure, cut and score with some accuracy. • I can use hand tools appropriately and safely. • I can assemble, join and combine materials to make a product. • I can discuss my work as it progresses
<p align="center">Design brief</p>		
<p>Design, make and evaluate a car for the crayons to escape on their big day out.</p>		<p>Evaluate:</p> <ul style="list-style-type: none"> • I can identify strengths and changes I might make • I can discuss how close my finished products meet the design criteria. <p>Technical knowledge:</p> <ul style="list-style-type: none"> • I can select which tools I will use and why I have used these. • I can join materials using a variety of temporary ways and explain why I have used this method. • I can attach wheels to a chassis using an axle.

Vocabulary	
Axle	A rod that passes through the centre of a wheel/ wheels.
Criteria	A set of features that the product must have
Design	Your own ideas of how a product looks, feels or moves.
Evaluate	To judge how good or bad something is.
Free wheels	The axle is glued to the base of the car and the wheels are free on the axle. The wheels move alone.
Functionality	If a product is suited for a purpose or job.
Make	Create something by putting parts or objects together
Mechanism	Parts that make an object or machine move
Purpose	The reason why something is created or made
Measure	Take an exact quantity or length of something.

Diagrams/Pictures


