


Knowledge Organiser
How can we light up our frame built cars?

<u>Year Group: Six</u>	<u>Subject: Design and Technology</u> <u>Electrical Systems – More complex switches and circuits</u>	<u>Topic:</u> <u>Design, make and evaluate a car with light up headlights.</u>
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What will I learn?	Key vocabulary:	
<ul style="list-style-type: none"> How to design, make and evaluate car with light up headlights. Through group discussion, be able to understand the differences and similarities between vehicles, how they move and their components. How to use cutting skills to prepare wood How to strength, stiffen and reinforce different materials. How to use a hand-drill to make holes to prepare for axles. How to use an electric motor, battery, switch and transmission system so that the electric motor can make the vehicle move forward in a straight line. 	Design, make, evaluate	Frame structure
	Triangulation	Stability and strength
	Re-inforce	function
	Series circuit	component
	Light emitting diodes (L.E.Ds)	G clamp
	Junior hacksaw	stiffen
How will I learn?		
<ul style="list-style-type: none"> Through exploration of different types of toy cars. By producing detailed, annotated sketches of vehicles and their components By using appropriate tools to trim, fix and drill wood to make a frame chassis and holes for axles. Through using and applying existing scientific knowledge of circuits. Through team-work and problem solving to overcome design and construction difficulties. 		