



Aspire Curriculum Knowledge Organiser: Grand Designs

Big Question: Can we design an eco-friendly moving vehicle?

Year 6

Spring



Ford Model T



Carl Benz



Elon Musk

Big Ideas	What? Key Knowledge Takeaways	Key Vocabulary	Definition
<p>I can develop ideas from research, interviews or questionnaires.</p> <p>I can create a design using annotated sketches/pictorial representations, different viewpoints and computer-aided design.</p> <p>I can independently create a design specification for my design.</p> <p>I can consider time, resources and cost.</p> <p>I can create a product that is innovative, functional, appealing and fit for purpose.</p> <p>I can present my ideas/product using a range of technical language.</p> <p>I can identify famous designers and critically discuss their impact on the world.</p>	<ul style="list-style-type: none"> To know how a vehicle moves using wheels and axles To be able to assemble components to make working models To know how to control the speed and direction of movement using pulleys and/or gears To know how electrical circuits with switches can be used to achieve functional results To know how to use tools safely and accurately 	<p>proto type vehicle</p> <p>pulley</p> <p>dowling</p> <p>body shell</p> <p>chassis</p>	<p>A first or preliminary version of a device or vehicle from which other forms are developed.</p> <p>A wheel with a grooved rim around which a cord passes, which acts to change the direction of a force applied to the cord</p> <p>A dowel is a cylindrical rod, usually made of wood, plastic, or metal.</p> <p>The outer shell of an automobile body, excluding doors, window glass, interior fittings, and all mechanical components.</p> <p>The base frame of a car, carriage, or other wheeled vehicle.</p>
Who? Famous People			
Carl Benz	Henry Ford	Florence Lawrence	Toyota
<p>Invented the first car in 1886 powered by an internal combustion engine.</p>	<p>First person to produce cars on an assembly line in 1908.</p>	<p>Invented indicators and brake lights on cars.</p>	<p>Toyota invented the first petrol-electric hybrid car in 1997.</p>
			<p>Elon Musk</p> <p>Tesla Model S—Plugin electric vehicle was ranked as the world's bestselling plugin electric vehicle in 2015.</p>