

<b>YEAR: 9</b>	<b>SUBJECT: D&amp;T</b>	<b>TITLE: Developments - Paper Car</b>
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**OBJECTIVE: To introduce the pupils introduced to developments / nets and design and make a model of an environmentally friendly car.**

<b>STAGE</b>	<b>ADDITIONAL SKILLS</b>	<b>EXTENSION WORK</b>	<b>RESOURCES</b>	<b>H&amp;S</b>
<p><b>Stage One:</b> The pupils will be shown a range of developments / nets. These will be in the form of existing packages and pictures / animations.</p> <p>They will be introduced to the concept of an environmentally friendly car - solar powered, hydrogen or electric..</p> <p>They will collect research on environmentally friendly cars, number plates, wheel trims etc and present these graphically.</p>	<p>L. Key words associated with the project. ICT. Pupils will research environmentally friendly cars and accessories and present this using appropriate software. C. Environment discussed in detail. HWK. Complete the presentation of the research.</p>	<p>Collect and present additional research.</p>	<p>Drawing equipment, ICT access, Internet access.</p>	<p>CONTROL MEASURE</p> <p>CLEAPPS REF.</p> <p>RESIDUAL RISK</p>
<p><b>Stage Two:</b> Lesson starter - the pupils will attempt the key word / phrase starter relating to the term 'environment'. The pupils will design a symbol / logo relating to their choice of environmentally friendly car. The symbol must promote alternative energy chosen to power their car (sports car or 4 by 4). Three basic designs will be attempted and these will be drawn within the basic shape of the car.</p>	<p>L. Keywords relating to the environment (Lessons Starter) N. Measuring an individual's carbon footprint will be discussed and explained. ICT. Potential use of graphics package. HWK. Complete the logo design and select best version.</p>	<p>Look at some examples of existing environmentally friendly cars and add comments.</p>	<p>Drawing equipment, ICT access, Internet access. Example products.</p>	<p>CONTROL MEASURE</p> <p>CLEAPPS REF.</p> <p>RESIDUAL RISK</p>
<p><b>Stage Three:</b> The pupils will view the video relating to alternative energy (10 minutes). Questions will be asked relating to the video.</p> <p>The pupils will start to transfer their designs to the development. They will be shown how to scale their symbol / logo</p>	<p>ICT. Potential use of graphics software and further research. N. Use of scales - enlargement of design. L. Pupils view the video of mechanical devices and note useful terminology. HWK. Draw accessories / additional symbols at home.</p>	<p>Collect images of symbols / logos of organisations promoting environmentally friendly energy production.</p>	<p>Drawing/writing equipment. ICT access. Pictures of environmentally friendly cars. Video, Alternative Energy.</p>	<p>CONTROL MEASURE Use of Scissors - discussed. No need to use craft knives.</p> <p>CLEAPPS REF.</p> <p>RESIDUAL RISK Low</p>

STAGE	ADDITIONAL SKILLS	EXTENSION WORK	RESOURCES	H&S
<p><b>Stage Six:</b> The pupils will evaluate their designs by marking each others model cars.</p> <p>The criteria will be discussed. This will include symbol design, colour scheme, effectiveness plus any other factors suggested by the pupils.</p> <p>The pupils will present a table of results, adding appropriate graphics.</p>	<p>ICT. Potential collection of data using spreadsheets and use of formulas to determine totals, average etc.....</p> <p>L. Evaluation terminology discussed.</p> <p>N. Average mark and totals determined.</p> <p>HWK. Complete presentation of evaluation.</p>	<p>Evaluate an existing environmentally friendly form of transport.</p>	<p>Drawing/writing equipment. ICT access. Example toys. Pictures of mechanisms.</p>	<p>CONTROL MEASURE</p> <p>CLEAPPS REF.</p> <p>RESIDUAL RISK</p>