

Year 8 Design & Technology - Systems CAD CAM Lighting Learning Programme 5

<p>The LORIC skill focus for his LP is: COMMUNICATION. The Moral Virtues focus for this LP are: COURAGE and HUMILITY.</p> <p>Courage - Acting with bravery and overcoming fears. Humility - Having a modest view of oneself.</p> <p>What will I be learning about in this Learning Programme? Electronic systems and their input, process and output. The function of electronic components. How to solder safely to produce a functioning light. How to use CAD/CAM to manufacture.</p> <p>Where have I seen this learning before? In KS2 design & technology you will have used simple electronic components to make electrical systems in a product.</p> <p>What could I use it for? You can use electronic components to manufacture electronic systems in design & technology over your next 5 years; you will apply your knowledge of electronic systems in the GCSE Design & Technology exam.</p>		<p>Literacy:</p> <ul style="list-style-type: none"> Capital letters must be used at the start of sentences and for the first letter of proper nouns Full stops must be used at the end of a sentence Question marks must be used at the end of a question Apostrophes should only be used for possession or omission Days of the week and months must be spelled correctly Key words must be spelled correctly
<p>In LP5.1, I will know:</p> <p>what all systems consist of - input, process, output; how to use diagrams to show how electronic circuits work.</p>	<p>11/05/26 - (WK 1)</p> <p>Key Vocabulary</p> <p>Input</p>	<p>Homework</p> <p>3 systems in your home, identify the input, and outputs.</p>
<p>In LP5.2, I will know:</p> <p>how to explore the CAD CAM Light project context; how to identify the needs and wants of you primary user.</p>	<p>18/05/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>Technical Specification</p>	<p>Homework</p> <p>Design research.</p>
<p>LP5 RLW, I will:</p> <p>review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.</p>	<p>01/06/26 - (WK 1)</p> <p>Revision</p>	<p>Use revision techniques to prepare for the summative assessment.</p>
<p>In LP5.3, I will know:</p> <p>how to produce a series of design options for my CAD CAM light project.</p> <p>Extended Task.</p>	<p>08/05/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>Design Fixation</p>	<p>Homework</p> <p>Sensors in systems.</p>
<p>In LP5.4, I will know:</p> <p>how to solder safely; how to precisely solder components onto my PCB.</p>	<p>15/06/26 - (WK 1)</p> <p>Key Vocabulary</p> <p>Soldering</p>	<p>Homework</p> <p>Soldering Iron Safety.</p>
<p>In LP5.5, I will know:</p> <p>how to use CAD and CAM to manufacture my light;</p>	<p>22/06/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>CAD (Computer aided design)</p>	<p>Homework</p> <p>Advantages and Disadvantages of CAD and CAM.</p>
<p>In LP5.6, I will know:</p> <p>the main stages of the vacuum forming process; how to safely use the vacuum former to form the base of my light.</p> <p>Extended Task.</p>	<p>29/06/26 - (WK 1)</p> <p>Key Vocabulary</p> <p>Vacuum</p>	<p>Homework</p> <p>Vacuum forming stages.</p>
<p>In LP5.7, I will know:</p> <p>how to assemble, test and evaluate my final manufactured light.</p>	<p>06/07/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>Evaluate</p>	<p>Homework</p> <p>Primary user feedback.</p>
<p>Resources to support learning: The following websites contain extensive revision material and information to increase design & technology subject knowledge: www.technologystudent.com; www.mr-dt.com; www.bbc.co.uk/bitesize.</p>		
<p>FFET Award Challenge for this Learning Programme: Create a safe soldering fact sheet for pupils to use as a guide when soldering.</p>		

