

KEVICC KS3 Curriculum: Design & Technology	Subject: Product Design	Key terms and vocabulary.
Year: 8 Term: Various	Topic: USB Mood Light Design	Which words will be explicitly taught & how frequently will understanding be checked? How will assimilation of new vocab be checked?
<p><b>What is the essential knowledge from this unit? What do students need to remember and understand?</b></p> <ul style="list-style-type: none"> <li>• Effective Soldering Techniques and the Functions of Various Components.</li> <li>• Develop an understanding of systems, inputs, process, output and feedback systems.</li> <li>• An understanding and ability to measure, cut, file and construct light structure made from softwood.</li> <li>• An understanding of basic two-dimensional Computer Aided Design skills and how such files can be outputted to a CNC laser cutter.</li> <li>• Knowledge of cutting, joining, wasting and finishing techniques.</li> <li>• Knowledge of safe working practices in workshop in relation to a range of machine, hand tools and processes.</li> <li>• A deep understanding of categorisation of woods and timbers, timber types, their uses, how they are processes and standard stock forms.</li> <li>• Understanding of design techniques that allow the development of creative concepts through sketching modelling and reflection in an iterative manner.</li> </ul>		<p>Vocabulary regularly tested verbally in class and also tested at end of module unit test.</p> <p>Key Words. Aesthetics Customer Cost Environmental Safety Scale/Size Function Materials Ergonomics Social and Moral Issues Input Process Output Feedback PCB Solder Volcano Resist Lead free Flux LED Switch Butt Joint Plywood Softwood Hardwood Manufactured Boards CAD CAM Extrusion PVA Edit Select Delete Intersection A3 Grid Lock</p>
<p><b>What prior learning supports understanding of this content?</b></p> <p>The product design classes covered in Year 7 in CAD/CAM (Phone Stands/Ice scrapper/crab lines) and Product Design (Candle structure) in the workshop areas supports this new unit.</p>	<p><b>How does this content link to future learning?</b></p> <p>All research, analysis, design and making skills are directly transferrable to other D&amp;T areas and curriculums. Content is linked to both the GCSE and 'A' Level courses.</p>	
<p><b>Reading:</b></p> <p>Students are asked to investigate a range of sources for design panel inspiration. They may be asked to evaluate existing product and look at the materials relevance, the designers thinking and to apply the ACCESS FM analysis and notation system.</p>	<p><b>Writing:</b></p> <p>Students are helped to evaluate and notate designs using help sheets based on the ACCESS FM system following discussions and questioning. Notes are made during the research, designing, development and evaluation stages of the project.</p> <p>Research assignments for home learning will require information to be processed and recorded to prove understanding and to aid revision.</p>	
<p><b>Key assessments:</b></p> <p>How will students review the information learned? How will feedback be seen?</p> <p>Students will peer assess and self-evaluate ideas, skills and knowledge formally midway through the project.</p> <p>Staff will assess work on design research &amp; design sheets, the practical itself and evaluation and sketched improvements. Peer assessment will also occur at design stages as part of the selection process.</p>		