

Y9	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher Feedback point (TFP)	Homework
Product Design	<ol style="list-style-type: none"> <li>1. What is iterative designing?</li> <li>2. What design strategies can I employ to help independently manufacture a prototype of my own design?</li> <li>3. How do you identify a primary user and then design a product that would meet their needs and wants?</li> <li>4. What are the different scales of production?</li> <li>5. What designers and design eras influence product design today?</li> </ol>	<ol style="list-style-type: none"> <li>1. What does it mean to Explore, Create and Evaluate?</li> <li>2. Why is rapid prototyping so important when developing a product?</li> <li>3. What is the difference between primary and secondary research?</li> <li>4. When working independently it is important to explore manufacturing processes. What are the most suitable materials and manufacturing processes available to me?</li> <li>5. What projects have gone before me and how can I adapt / modify the designs to produced a more sophisticated outcome?</li> <li>6. When developing a design sheet it is important that it not only communicates all of my ideas but it also looks great. How do I do that?</li> <li>7. How does evaluating as I go help the design process?</li> <li>8. What are the differences between Mass, Batch and One-Off Production</li> <li>9. How do you set up a production and how can it be refined to improve productivity?</li> </ol>	<p>Verbal feedback throughout the project to support students when working practically. This could be technical support on how to correctly use tools and machines as well as offering help when students lack confidence.</p> <p><b>TFP</b> : Project Booklet to be reviewed every two weeks.</p> <p><b>Formative Assessment</b> : Mid term test - <a href="http://technologystudent.com">technologystudent.com</a></p> <p><b>Summative Assessment</b> : Final practical outcome and completion of project booklet. Students will be assessed on the accuracy of the final outcome, creativity and attention to detail in their supporting written work.</p>	<p>Design Eras and Designers</p> <p>Harry Beck Q&amp;A</p>

Y9	Big Question/Theme	Small Questions	Opportunities and Criteria. Teacher Feedback point (TFP)	Homework
Graphic Products	<ol style="list-style-type: none"> <li>1. Can you use a range of navigation, drawing, typography and tracing tools on industry standard Computer Aided Design (CAD) software.</li> <li>2. Can you create an original and creative corporate identity for a given design brief and ensure it is engaging for a given primary user?</li> <li>3. Can you apply the principles of layout design to create an organised and aesthetically correct graphics product?</li> <li>4. Can you safely use graphics practical tools and equipment to produce an accurate graphics product.</li> </ol>	<p>Do you understand the differences between a bitmap file and a vector file?</p> <p>Can you identify the five principles of logo design?</p> <p>Can you hand draw a range of creative and original logos for a given brief and target market?</p> <p>Can you produce a computer generated version of a hand drawn logo?</p> <p>Can you identify product and user requirements and compile a design specification?</p> <p>Can you be selective, creative and skilful when using a graphics vector pack?</p> <p>Can you arrange graphics elements in accordance to layout design rules?</p> <p>Can you apply hierarchy of text theory to layout typography elements?</p> <p>Can you use colour theory to create a successful and impactful full colour graphics product?</p> <p>Can you use a lamination machine?</p> <p>Can you follow the health and safety rules when using a scalpel?</p> <p>Can you follow a demonstration full of techniques and advice to accurately cut out laminated card with a scalpel, safely rule and cutting mat?</p> <p>Can you critically evaluate your own design and practical work against the specification criteria you have previously outlined?</p>		

Y9	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher Feedback point (TFP)	Homework
Design Engineering	<ol style="list-style-type: none"> <li>1. How do electronic components improve marketability of products?</li> <li>2. How are electronic systems designed using dedicated design engineering software?</li> <li>3. How are electronic systems manufactured in a workshop environment?</li> </ol>	<ol style="list-style-type: none"> <li>1. What is meant by the term marketability?</li> <li>2. What is electricity?</li> <li>3. How do voltage and current differ?</li> <li>4. What are resistors, capacitors, diodes, transistors and drivers?</li> <li>5. What is meant by the unit Ohms?</li> <li>6. What is meant by the unit Farad?</li> <li>7. How do we use a variety of components to create a range of outputs?</li> <li>8. How do we use a variety of components to create a range of inputs?</li> <li>9. How can we use CAD and physical prototyping to plan and test circuits?</li> <li>10. What manufacturing methods are used to create a PCB?</li> <li>11. What methods are used to join electronic components to create a working circuit?</li> </ol>		

Y9	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher Feedback point (TFP)	Homework
Fashion & textiles	<ol style="list-style-type: none"> <li>1. How can products be used to improve the safety and visibility of others?</li> <li>2. What effects do the construction of knitted fabrics and fabric finishes have on the properties of the fabric.</li> <li>3. What construction techniques are used to form or shape textile materials in garments?</li> <li>4. What is a Smart, Modern Material or e-textile and what are the properties of these materials?</li> </ol>	<ol style="list-style-type: none"> <li>1. What is a property of a material?</li> <li>2. What is a knitted fabric and what properties does this have?</li> <li>3. What is fabric finish, what does brushing do to alter the properties of the fabric?</li> <li>4. What is a dart and what does it do in a garment? What other methods of shaping are there?</li> <li>5. How do modern materials work?</li> <li>6. How does a smart material work?</li> <li>7. What can e-textiles be used for?</li> <li>8. How can these materials be used together to improve the function of a hat?</li> </ol>		

Y9	Big Question/Theme	Small Questions	Assessment Opportunities and Criteria. Teacher Feedback point (TFP)	Homework
Food Technology	<ol style="list-style-type: none"> <li>1. How do you conduct practical work in a highly skilled manner?</li> <li>2. How do you make pasta and a sauce?</li> <li>3. How can you shape and form truffles?</li> <li>4. How can you produce a well risen bread dough?</li> <li>5. How can you produce a marble effect in a cake?</li> <li>6. How do you produce shortcrust pastry?</li> <li>7. How can you shape and form pasties?</li> <li>8. How can you select appropriate skills, equipment and ingredient for a final dish?</li> </ol>	<ol style="list-style-type: none"> <li>1. What is classed as a low, medium and high level skill?</li> <li>2. Why do you use strong flour or 00 flour to make pasta?</li> <li>3. How do you laminate pasta using a pasta maker?</li> <li>4. What is gelatinisation?</li> <li>5. What is fermentation?</li> <li>6. What is gluten and how do we develop it when making pasta and bread?</li> <li>7. What are the perfect conditions for shortcrust pastry making?</li> <li>8. How can you crimp and seal effectively?</li> <li>9. What is glazing and how does it improve the quality of what you make?</li> <li>10. What are the key points in planning your final dish?</li> </ol>		