



Summer Bridging Unit

This work is to be completed over the summer and handed in to your subject teacher at the end of your third full week in Sixth Form.

Name: Date:

Work to be completed	How this will link to the start of course in September	Progress - <i>teacher use only</i>
<p>Task 1 Demonstrating understanding of the course content and how you will be assessed. Read the course syllabus & answer the following questions:</p> <ol style="list-style-type: none"> 1) How long is the A Level exam and how much does it count towards your final grade? 2) How many units of study are there for the theory exam? 3) What is meant by the 'Independent Design and Make Project' and what % of the A Level is it worth? 	<ul style="list-style-type: none"> • To have an understanding of where your marks are awarded for the final A Level grade • To have an understanding of what is involved with the NEA and how onerous it is 	<p>1: Above the expected standard of an A Level study 2: The expected standard of A Level study 3: Below the expected standard of A Level study</p> <p>Above: units of study have been listed, alongside bullet pointed information on what is included in point 3.</p> <p>Below: only part of the task has been completed.</p> <p>Meeting: numbers have been listed with no other information.</p>

<p>Task 2 Demonstrating the key skill of designing which is required for this course.</p> <p>Create a design page for the following problem: 'Cutting and opening avocados can be very tricky and dangerous, especially when using sharp knives. Design a device to help aid the user to safely cut an avocado in half'.</p>	<ul style="list-style-type: none"> • We cover design strategies 1st during the transition phase (isometric, oblique, freehand, perspective etc.) • We cover annotation and how to present work appropriately 	<p>Above: 4-5 design ideas drawn, using different design strategies, a copious amount of technical annotation added and presented professionally.</p> <p>Below: 2-3 design ideas which have been drawn quickly with very little effort.</p> <p>Meeting: 3-4 design ideas which have been drawn using different design strategies and have been annotated.</p>
<p>Task 3 Research based task which will support your Term One studies. Smart and modern materials are prevalent in modern world society. Research the properties, uses and any other relevant information for the following materials:</p> <ul style="list-style-type: none"> • Thermos-ceramics • Shape Memory Alloys (SMAs) • Reactive glass • Liquid Crystal Displays (LCDs) • Photochromic materials • Thermochromic materials • Quantum Tunnelling Composites (QTCs) 	<ul style="list-style-type: none"> • We learn about these materials during the 1st term of Year 12 • This is the material area which students struggle with the most • It is important to spend some time studying these materials, prior to lesson, so that it is easier to understand when taught and therefore easier to remember and recall 	<p>Above: lots of different uses have been listed, alongside the properties linked to the them. Work is presented really professionally and images have been used to help convey the information covered. Carefully selected content, any unknown words have been defined.</p> <p>Below: 1-2 uses for each material and 1-2 properties of each material have been listed. Work is present immaturely.</p> <p>Meeting: 3-4 uses and 3-4 properties listed for each material. Presented really neatly and work included has been carefully selected.</p>

Additional information

Useful resources to support:	<ul style="list-style-type: none">• https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/design-technology-product-design-2017.html (Specification syllabus can be found here)• https://designandtechbase.com/#google_vignette (DT Base – you can use this to see Edexcel past paper Qs and useful resources for the exam)
Essential equipment for September:	Several HB pencils, sharpener and eraser 30cm ruler Coloured pencils Fine liners (more than 1)
Optional: Further ways to demonstrate intellectual curiosity:	<ul style="list-style-type: none">• https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/design-technology-product-design-2017/exemplar-library.html (NEA library - to see exemplar folders and grades that they achieved)• https://www.dezeen.com/ (Look at this website – great design work)• (if you have Instagram) Follow ‘@opumo’ – great design work - https://www.opumo.com/• Visit or go on the website for The Design Museum in London - https://designmuseum.org/