



DESIGN & TECHNOLOGY A Level Transition Pack



Planning on studying A level Product Design next year? (7552)

Product Design requires you to develop skills and understanding in both making and designing (Non-examined assessment) NEA, as well as having a comprehensive understanding of the fundamental elements of 'Core technical principles' and 'Core Design and making principles'.

The course is assessed as followed. - 50% Non-examined assessment (NEA) and - 50% 2 Examination Papers.

The NEA (50%) consists of a single design and make activity at A-level. Students will develop a design brief in response to a context set and research that has been conducted in the classroom setting.

Imaginative practical work is at the heart of this course. Students will develop intellectual curiosity about the design and manufacture of products. You will explore, design, create and evaluate innovative solutions in response to realistic design contexts. Making products involves working with a range of materials. Only by experiencing working with the materials first-hand can you start to understand their properties and the ways in which those materials can be used for a variety of purposes. You will need to know different methods of working with materials in order to understand the right method of productions of your product.

In preparation for the examination papers (50%) students will complete classwork and independent tasks to understand the fundamental elements of 'Core technical principles' and 'Core Design and making principles', within Design Technology. There are 24 areas that will be covered in detail, preparing you for your examination. You will have covered some of the topics at GCSE, but if you did not sit the GCSE DT, don't worry, we have had many successful students that did not complete the GCSE course and achieved well at A-Level.

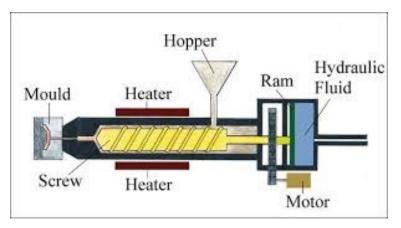


How are products made? What manufacturing processes do they undertake to be made.Research the following selection of Manufacturing Processes; 1.Vacuum Forming,2.Thermoforming, 3.Calendaring, 4.Line Bending, 5.Injection Moulding, 6.Blow Moulding,7.Rotational Moulding.

For each one;

- 1. Tell me what types of product are made from that process and why.
- 2. Explain the stage of the process using notes and diagrams. (It is important that you can identify each one and draw a simple diagram as you will be expected to be able to show this knowledge in the exam).

Here is an example of one of the manufacturing processes, can you identify which one it might be.



A good way of cementing your knowledge about the manufacturing processes is by watching short clips of each one on you tube or similar channels. They only need to be 3 or 4 minutes long to get a better understanding of the process.





Another area that you will study at A-level Product Design is looking at Design Theory and in particularly looking at the work of others.

Research the <u>Art Deco</u> movement and explain when and how it became so popular. Draw 2 or 3 products that reflect the movement and inspiration that you would expect Art Deco products to represent. Art Deco furniture is still very popular in today's market 100 years on!

Research <u>James Dyson</u> and explain what he did to be one of the great designers of his time. Have a look at his foundation website and see the wonderful work that he is doing today to inspire the next design and engineering generation of the future, at; https://www.jamesdysonfoundation.co.uk/

For both parts (Art Deco and James Dyson) product a piece of work that could go up on the wall as a poster or display. Imagine you are entering a competition and you have been asked to produce a visual piece of work to promote and explain the work of Art Deco and James Dyson. Be as creative as you like and don't restrict yourself to one A3 piece of paper. Be a designer and be as imaginative as you can.

This is the website for the exam board. It is very good practice to download the specifications yourselves and put it in your folders. The specification clearly sets out all the topics you will be taught. This website will also give you more information about how many exams there are, how long they should take and the content assessed in each one.

https://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552

Please complete the activities on this booklet and present your work in a format of your own choice. It could be a PowerPoint presentation or a word document. You could also do the activities on paper and take pictures of your work. Please send the work via email to jwalsh@sbsj.co.uk

Please keep activity 2 safe which you can use to present when we are back in September and begin the course.

Finally, if you have any questions regarding A Level Product Design then feel free to contact any of the Technology Team at school, that includes myself, Mr Walsh.