AS Product Design Summer Work 2015

Some of these tasks you may have completed during your Product Design GCSE studies in Y10-11, in which case, double check you still have it and have it ready to bring in September.

- Download and install 2D &3D CAD software to use at home. Use the <u>CBSCDT website</u> (https://sites.google.com/a/cbsc.co.uk/cbsc-design-technology/home/cad) to install the following programs:
 - a. Techsoft 2D Design (used the most, for laser cutting, vinyl stickers, CNC routing, working drawings etc)
 - b. Creo Parametric (essential for A Level work, 3D printing, CNC machining, working drawings, architecture etc). Follow the instructions carefully. If you have an Apple Mac or have trouble downloading Creo, you must install an alternative such as Inventor, 123D Design, Sketchup or Tinkercad.
 - c. The Gimp (a freeware version of Photoshop), essential for image manipulation, packaging graphics, marketing etc
- 2. Choose a suitable product for in-depth investigation. Normally in Y12, students investigate aftershave/perfume bottles and packaging so you can choose one that you like, or any other suitable product as long as it:
 - a. consists of at least 4 different materials (e.g. glass, PP, white carton board, steel spring)
 - b. was made using at least 4 different processes (e.g. blow moulded, injection moulded, litho printed, die cut)
 - c. consists of both the product and the packaging (box, carton, insert, blister, bag, can etc)
 - d. has some sort of graphics added to it (brand logo, product name, decorative artwork etc)
- 3. Draw at least 2 different design ideas, layouts etc for a practical project that will start around November. You will be making a scale model of your design, which can be any of the following:
 - a. A high street café or fast food outlet
 - b. A children's playground, activity centre, youth club etc
 - c. A nightclub, concert stage or set for a live show, play etc
- 4. Watch all the videos and make notes, sketches etc on the following topics:
 - a. Printing methods (offset litho, flexographic, screen, digital, gravure)
 - b. Print finishes (foil block, emboss, varnish, spot UV, lamination, die cutting)
 - c. CAD, CAM & CNC (3D printing, laser cutting, CNC maching etc)
 - d. Design Movements (Arts & Crafts, Art Nouveau, Art Deco, Modernism & Bauhaus, American Industrial/Streamlining, Post Modernism)
- 5. The videos can be found here:
 - a. <u>CBSCDT Product Design Site</u> (https://sites.google.com/a/cbsc.co.uk/product-design-theory)
 - b. <u>CBSCDT Printing</u>, <u>Cutting & Finishing Site</u> (https://sites.google.com/a/cbsc.co.uk/printing-cutting-finishing)
 - c. CBSCDT YouTube channel (https://www.youtube.com/user/CBSCDT)
- 6. It would also be really good if you get the chance over the Summer break, to go into London to visit the following museums; V&A (South Kensington), Science Museum (South Kensington) and Design Museum (London Bridge/South Bank)