Christmas Home Learning Challenges



GCSE SUBJECT: Design Technology

**CHECKLIST**

Subject Priorities from the Mock Exam:

* Learn the structure for each type of question – make sure that you answer in full sentences and **justify** your answers.
* Revise and understand the **working properties of materials** – pros and cons, why are they chosen for the manufacture of products. Avoid focussing on aesthetic merits of materials.
* Practice drawing technical drawing skills – **isometric and orthographic** **projection** in particular.

**HOME LEARNING TASK:**

**Produce a materials learning mat for the different material groups – timbers, paper & board, metals, plastics and textiles – focusing on the working properties of the different materials.**

**Include a definition of what is meant by ‘working properties’.**

**Supporting resources on TEAMS**



**Subject Enrichment Challenge:**

Something to watch: Have a look at ‘The Secret Genius of Modern Life’ on iplayer. It talks about the history and manufacture of products, from design processes and prototyping right through to testing. Watch one of the following from the second series – Headphones, Microwave, Smartphone or Vacuum Cleaner. Make notes on the history of the product you chose, key design moments – what influences the changes to design, materials or manufacture. What are the customer needs that have changed the design or function of the product? What might be next in the product evolution?



**Making Notes: Wider Reading (Enrichment Challenge)**

Use the following template to help you make notes on each article / lecture / podcast that you engage with to develop your understanding of the subject’s key ideas and concepts and to apply it to your study in lesso

**Summary:** *Summarise the knowledge you have now learnt relating to this topic.*

**Key Ideas:** *In this section, record the main ideas explored in the text. Consider key words and vocabulary, questions, comments and the big ideas which the text explores.*

Notes: I*n this section, write notes from the article / video / podcast. Try to keep your writing in note-form. This will ensure you can record as much information as possible.*

**To do:**

*(What do I need to do to apply these ideas to my areas of study/ what questions do I still have for my teacher?)*

Name:

Subject & Topic: