The Warriner School Subject Curriculum Map

Unit objectives: (NC Statements)

- Understand the concept of dimensions on working drawings (Designing)
- Identify key features and specification in a product and relate them to the performance of a product. (Designing)
- Identify suitable processes for making a product and use them with confidence and skill. (Making)
- Make observed evaluations as work progresses and modify accordingly. (Evaluation)
- Used appropriate making skills and processes to produce a good quality functioning prototype (Making)
- Make comparisons using the finished prototype against a specification and identify what went well and suggest modifications.

Context for study:

Students will create a product and suitable packaging by firstly developing a set of criteria and features to suit a user of their choice. They will identify materials and finishes to satisfy their target market. They will learn how to construct a frame out of wood using joints. A packaging activity will accompany the activity where students will consider materials, function, consumer information and sustainability. They will learn about:

- Different types of wood, their origins, properties and uses.
- The safe use and identification of wood working tools and machines.
- How to accurately mark out, cut and construct wood joints to make a frame.
- How surface finishes are applied onto the surface of wood and the benefits of their application.
- Methods of ensuring accuracy and quality of finish.
- Card and board suitable for packaging
- Consumer symbols for packaging
- Techniques for cutting and folding card and board

Sequence of learning: *Knowledge content - list of statements of what students should know by progressing through this unit* (identify key tier 2/3 vocabulary in **bold**) All pupils should know and have an understanding of;

- To be able to write a relevant specification in relation to a given Design Brief,
- To identify **properties**, **origins** and **uses** of some materials.
- Recognise technical terms communication information: half lap joint, exploded view, assembled view.
- Select and safely use specialist tools, appropriate techniques, processes, equipment and machinery with good accuracy.
- To include Tenon Saw, Band Faced sander, marking knife, mallet, marking gauge, bevel chisel, tooth set.
- Demonstrate an understanding of how to read and interpret data in tabular form and relate it to a working drawing using technical terms such as end view, side view, plan view.
- Demonstrate a good understanding of the working properties and performance characteristics of the specified materials and, where appropriate, demonstrated consideration of surface treatments/finishes.
- Able to suggest **improvements and modifications** to how the student has worked and the final piece of work.



 Possible Misconceptions and adaptive responses to these: <i>identified through formative assessment/retrieval practice/diagnostic questioning.</i> Q&A during the lessons – both group and one to one Short answer questions that demonstrate understanding and AfL Group demonstrations and use of peer observations. 	 Literacy and Oracy development opportunities: Details of high-quality texts, explicit vocabulary teaching, modelled writing, structured talk. Design terminology Written evaluation of the outcome
 Assessment/Final outcomes: How will students apply their detailed learning in a meaningful way that relates to the subject's discipline? worked with appropriate materials and components to complete all aspects of the manufacture of their prototype to a defined standard. used appropriate making skills and processes to produce a good quality functioning prototype that meets all requirements of the specification and user. Ongoing assessment in line with Dept policy. 	 Written evaluation of the outcome Completed work booklet Various starter tasks Encourage students to answer in full sentences when developing specifications in response to verbal/written feedback. Use of technical / specialist terms in class discussion.