Subject: Design Technology Sweet Dispenser

During this project you will be working as a **designer**. The designer rarely creates products solely for their own pleasure. In the course of this unit, you will come to understand the relationship between the **client** and **designer**.

You will need to understand the **problem** and **research existing solutions**. You will then follow a **design brief** and **specification** to enable you to create a **range of designs**. These designs will be developed towards a **manufacturable product**. When designing you will need to consider the **ergonomics** of the product to ensure it is comfortable, safe and easy to use.

Manufacturers often follow a style of drawing called **orthographic projection**. You will be expected to read this, produce parts to a high **tolerance** and manufacture a working **prototype**. On completion, you will need to **evaluate** work completed against requirements in your **specification** suggesting **modifications** that could be made to improve it.

In the workshop, you will build on previous knowledge of **solid timber** and **manufactured board** using a range of hand and machine techniques to realise your outcome.

Year group: 9

Week beginning	Subject Topic	Key Learning points/big questions	Independent/Home learning	Key Vocab	Linked Assessment	Resources
1	Introduction to brief Analysis of needs and wants	• To understand what a problem outline is and how this relates to a design brief • To understand how and why a design brief is used. • To understand the concept of iterative design • To consider what a need and a want is in a product		Iterative design Problem outline Design brief	LSTs End of unit assessment and booklet	https://eggbuckland.sharepoint.com/:f:/g/Technology/EiVf9iJ_KnBFlNKFlkhX4P8BMQ1CDvg4qbp59a5fV0-fXQ?e=WDdtdh
2	Product analysis looking at existing products Specification	• To understand how existing products and the work of professionals can help in product development. To identify key features in existing products • To understand what ergonomics are and why it is important in the development of products • To understand what a specification is and adapt one to scaffold designing	Use the ACCESS FM criteria to help you create a product analysis on a product of your choice.	Research Ergonomics Specification		
3	Range of ideas Development of idea	• To generate a range of annotated ideas based on the specification • To develop an idea annotating with key dimensions, methods of construction, how it will function, materials, joints, finishes etc.		Initial ideas Development		
4	Practical manufacture 1	• To use 1 of 2 drawings provided to manufacture the product • To deepen personal knowledge and understanding into natural timber, manufacture board, timber conversion. • To have a specific knowledge of plywood, its strengths and weaknesses. • To understand the term laminate regarding wood • Use of hand and machine tools. Re-cap work carried out in Yr 7 and 8	Identify a small item you might buy frequently. Design an interesting and engaging machine to sell the product. Think about where the product will be sited and the intended consumer	Natural timber Manufactured board Timber conversion Plywood Laminate		
5	Practical manufacture 2	• As above • To consider the word “prototype” regarding a manufactured product • Introduce the hole saw and Forsner bit		Prototype Hole saw Forsner bit		
6	Practical manufacture 3	• As above • Revise sanding sealer and wax		Sanding sealer Wax		

		• Demonstrate drilling and fixing lid				
7	Evaluation			Evaluation Modify		