Ravens Wood School

KS3 Curriculum Plan

Subject: **DT**

Module 2 **Photo Frame Project**

Overarching Topic:			
Why is this topic being studied at this time? How does it fit into the wider subject curriculum?	In this school due to the vast extra-curricular choices on offer, students create memories that will stay with them forever. While this module while offer students exposure to a vast range of workshop tools and machines it also gives them the opportunity to make a product where they can display one of their favorite memories in the form of a photograph. This project introduces students to working with jigs and templates to ensure accuracy and attention to detail underpins every process they attempt. Students will produce an outcome of which they are proud to take home and display their favorite memory. This will instill a love of learning as they embark on their journey through year 7.		
	Critical	**Core**	**Pinnacle**
The Big Questions (What questions will students be able to answer upon mastery of the topic?)	- What makes a successful photo-frame design? - Can you analyse the features of an existing product? - Can you identify the features and steps taken to use a machine with accuracy? - What are jigs and templates? - What is a self-finishing material? - Can you complete a WWW & EBI evaluation of your product?	- How are materials joined together? - What are the differences between temporary and permanent joining? - How can you apply a finish to manufactured board? - Can you produce a template using CAD? - How are surfaces of materials prepared for the application of materials? - Can you explain the advantages of using Jigs and templates - Can you reflect on your product outcome and compare it to products already on the market?	- Why is MDF considered to be a controversial material? - When is a moment in time truly captured? - Can you justify the way you have designed your photo frame? - If a company was to mass produce your product, what changes would they need to make? - Can you explain the environmental impact of the design you have chosen? - Can you write a critical evaluation of your product?

The Key Skills/ Techniques	The sophistication and application of skills will become more advanced as students' progress through the critical, core and pinnacle knowledge.	
	Skill/Technique	**How will this skill be developed?**
	Product Analysis using ACCESS FM on existing products	Students will analyse existing products from today's market and identify key design features as-well as potential flaws.
	Research into specific machinery and Joining methods	Students will develop in-depth knowledge of the various workshop machines prior to using them in the manufacture of their product
	Manufacture of a photo frame from Plastic and manufactured Board using Jigs and templates	Students will use jigs during the marking out procedure for the base and frame of the product. Jigs will be used in the thermo-forming of the acrylic plastic.
	Evaluation of a finished Product	Students will consider comparisons with existing products, feedback from a third party, Potential changes due to mass production as well as their own personal feelings to evaluate their completed product.