Curriculum Summary Document

Year 9 – D & T

Mechancal Marvels: Pewter Products: Building Spaces for Nature

Module/Unit of Learning	Taught During	What will students learn?	How does this help to build a broad and strong foundation?	Links to other Subjects
LC1 – Mechanical Marvels	**Autumn One**	Students use their design skills to think creatively about how to convert types of motion and how to create a balancing figure to demonstrate the turning effect of forces and the use of counterweights.	This creates a common D & T language and secures the core knowledge and practical skills needed for annotation, design, and construction work throughout Key Stage 3.	Maths – fractions and measurements Science – forces and motion English/Oracy – precise D & T vocabulary
	Autumn Two	Students will use frames to demonstrate ideas on motion (types, directions and geared systems). Also, use all of their skills with tools and equipment to construct a balancing figure. This will include using a centre lathe to construct aluminium counterweights. The figure need to be accurately constructed making sure that it is within tolerance in order to function.		Maths – fractions and measurements Science – forces and motion English/Oracy – precise D & T vocabulary
LC2 – Pewter Products	**Spring One**	Students will be designing and building a relief project using pewter casting. Students will continue building on their knowledge of how to create more intricate designs but by using a variety of materials.	The unit broadens students' understanding of materials and where they come from while transferring existing knowledge to a new design and production task.	Maths – fractions and measurements Science – Ores, Metals and their properties Geography/PSHE – Ethical extraction of metals English/Oracy – precise D & T vocabulary

Module/Unit of Learning	Taught During	What will students learn?	How does this help to build a broad and strong foundation?	Links to other Subjects
	Spring Two	Students will be constructing a user-centred design based on using a mould where they will be designing, constructing and then refining.	The unit broadens students' understanding of materials while transferring existing knowledge to a new design and production task.	Maths – fractions and measurements Science – Ores, Metals and their properties Geography/PSHE – Ethical extraction of metals English/Oracy – precise D & T vocabulary
LC3-Top-Building Spaces for nature	**Summer One**	Students will interpret a specification and implement a brief to devise a product that will help a teacher to teach their class about ecology	Students learn enterprise skills and how to use materials more sustainably. They do this by repurposing reclaimed materials to make a product that they then market.	Maths – Finance Enterprise – Marketing technqiues English/Oracy – precise D & T vocabulary
	Summer Two	Students will build on their knowledge of how to use hand tools and construction methods accurately by following a brief. They will be reminded of health and safety measures around using tools and equipment appropriately.		Maths – Finance Enterprise – Marketing technqiues English/Oracy – precise D & T vocabulary