



## MAGHULL HIGH SCHOOL – CURRICULUM MAP

HALF TERM 1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
<b>TOPIC (S)</b>	<b>OBJECTIVE.</b> Completion of Component 1 Learning Aim B due to the pandemic.	Completion of Component 1 Learning Aim B due to the pandemic.	<b>Revision of Component 3 as preparation for assessment component 3 learning aim c.</b> Due to the pandemic we need to be sure all pupils are ready to begin practical work.  <b>Learning aim C: Plan the manufacture and safely reproduce/inspect/test an engineered component</b> Teaching content C1: Engineering make process.  Component 2, C1, Engineering make process – making using engineering processes.  Component 2, C1, Engineering make process – inspecting and testing chosen solution, evaluating outcome of project.	Component 2, C2, Developing a production plan.  Component 2, C2, Awareness of risks and hazards for making processes.  Component 2, C2, Safe preparation, good housekeeping and close down of the work area; Making skills associated with the product to be produced – appropriate set-up of the work area/machine, adaptation according to inspected outcomes.  Component 2, C2, Making skills associated with the product to be produced – choosing suitable tools	Choosing suitable tools.  Component 2, C2, Skills in observing and recording techniques.  Component 2, C1, C2, Plan the manufacture and safely reproduce/inspect/test a given engineered component.  <b>COMPONENT 3. LEARNING AIM C ASSESSMENT.</b>  <b>DEADLINE: 20/5/2022</b>	<b>COMPONENT 3. LEARNING AIM C ASSESSMENT.</b>  <b>DEADLINE: 20/5/2022</b>

	Pupils will engage in a variety of appropriate practical activities to enable the teacher to make a judgement on when to begin the assessment.
	Pupils to complete 'Do Nows' based on Component 2 knowledge. Homework based on Component 2 knowledge.
<b>Knowledge &amp; Skills development</b>	<ul style="list-style-type: none"> <li>Pupils working on Component 1 Learning Aim B assignment.</li> <li>A1 Materials • Engineering material categories: o ferrous, e.g. mild steel, wrought iron, stainless steel o non-ferrous, e.g. aluminium, titanium, copper, silver, zinc o thermosetting polymers, e.g. phenol-formaldehyde, polyimides, polyurethane o thermoforming polymers, e.g. polyethylene, polypropylene, acrylic. • Properties of engineering materials: o strength o hardness o toughness. • Characteristics of engineering materials, such as: o machinability o workability o durability. A2 Components • Types of components, such as: o proprietary, e.g. rivet, nut and bolt, screw, key, mechanical fixings, electronic components, such as resistors, capacitors, fuses, diodes o product specific, e.g. bush, flange, printed circuit board (PCB). • Characteristics of components, e.g. permanent/semi-permanent, sizes/dimensions, surface roughness, values, fixing methods. A3 Processes Types of engineering processes: • cutting, e.g. drilling, sawing, filing, shearing • shaping, e.g. turning, milling • forming, e.g. forging, casting, extruding, moulding, folding, bending • joining, e.g. fastening, bonding, soldering, brazing</li> </ul>
<b>Assessment / Feedback Opportunities</b>	<ul style="list-style-type: none"> <li>Summative assessment at the end of the assessment.</li> <li>Teacher can only guide pupils to the assignment brief if they require assistance.</li> </ul>
<b>Cultural Capital</b>	
<b>SMSC / Promoting British Values</b> (Democracy, Liberty, Rule of Law, Tolerance & Respect)	. Group working will help promote tolerance and respect for each other.
<b>Reading opportunities</b>	
<b>Key Vocabulary</b>	Assembly, disassembly, Personal Protective Equipment (PPE),
<b>Digital Literacy</b>	Use of internet to complete research.