Year 11 Engineering Spring Term 2		MAGHULL HIGH SCHOOL – CURRICULUM MAP				
HALF TERM 1	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
TOPIC (S)	COMPONENT 3. LEARNING AIM C ASSESSMENT.	COMPONENT 3. LEARNING AIM C ASSESSMENT.	COMPONENT 3. LEARNING AIM C ASSESSMENT.	COMPONENT 3. LEARNING AIM C ASSESSMENT.	COMPONENT 3. LEARNING AIM C ASSESSMENT.	COMPONENT 3. LEARNING AIM C ASSESSMENT.
	DEADLINE: 20/5/2022	DEADLINE: 20/5/2022	DEADLINE: 20/5/2022	DEADLINE: 20/5/2022	DEADLINE: 20/5/2022	DEADLINE: 20/5/2022
	-		ve assessment for Comp only be guided to the ass	_		
		Nows' based on Compo omponent 2 knowledge	_			
Knowledge & Skills development	 Pupils working on Component 1 Learning Aim B assignment. 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 					
Assessment / Feedback Opportunities	 Summative assessment at the end of the assessment. Teacher can only guide pupils to the assignment brief if they require assistance. 					
Cultural Capital						
SMSC / Promoting British Values (Democracy, Liberty, Rule of Law, Tolerance & Respect)	. Group working will help promote tolerance and respect for each other.					
Reading opportunities						

Key Vocabulary	Assembly, disassembly, Personal Protective Equipment (PPE),		
Digital Literacy	Use of internet to complete research.		