

Subject	D&T Materials	Year Group	11		
	Term 1	Term 2	Term 3	Term 4	Term 5
Scheme title	NEA	NEA	NEA	NEA	Revisiting Component 1 content (Examination preparation)
Purpose of scheme					Pupils will now continue to prepare for the exam element of the course by revisiting the content already covered. Deeper learning concepts in relation to the topics covered in year 10 will now be explored with the addition of practice examination questions and independent study.
Knowledge in sequence					New and emerging technologies - Pupils will study a range of new and emerging technologies which are being used in industry. This include VR, Robotics, AI, biometrics and CAD/CAM. Energy generation and storage - Pupils will study the generation of energy through fossil fuels, renewables and nuclear. Pupils will study the environmental impact of each energy type and where and how it's used. Development in new materials - Pupils will explore a range of smart and modern materials and be able to explain their properties and provide practical applications for their use. Electronic systems - Pupils will explore electronic products, electronic components and microcontroller and microprocessors. Mechanical devices - Pupils will explore gears, pulleys, levers, linkages, forces, motion. With mechanical devices, pupils will also learn some mathematical formulas which may be applied when calculating force and speed. Material categories - This includes polymers, metals, fibres, wood and manufactured board.
Skills					Independent learning, exam technique, interpreting marking schemes
Key words					Sustainability, planned obsolescence, market pull, technology push, anthropometric data, ergonomics, Biometrics, social footprint, carbon footprint, renewables, finite, automation, microcontrollers, compression, tension, torsion, velocity, gear ratio, fulcrum, pivot, idle, nuclear, consumer, lifecycle, landfill, biodegradable, robotics.
End point					Pupils will have recovered the content of the core technical principles ready for the GCSE exam.
Assessment Methods					Past exam papers