

D&T- RESISTANT MATERIALS - YEAR PLANNER (LTP) – YEAR 10

Term	Learning content/skills	Assessment Schedule* NEA and Exams style	Home Learning Support (How students can extend learning in addition to homework)
September-December	<p><u>Plywood Boxes Knowledge/make</u> Manufactured boards, Timbers- stock forms and seasoning, tools and equipment, isometric drawing, 3rd angle orthographic, BSI dimensioning, exploded diagrams surface area, volume, Ratios, wood joints, wasting processes (drilling, cutting, filing) knock down fittings, types of paint, hazards and symbols, Composites, Socio and economic impacts of materials, Source material exam questions, Look through examples of AQA papers and learn how to complete multiple choice sections B then A style questions</p>	<p>Mid Term assessment section B style questions – 30 minute long assessment October 2023</p> <p>Assessment of drawing skills- 3D/Third angle</p> <p>End of module assessment section A and B style with maths 1 hour</p> <p>And assessment of final practical outcome.</p>	<p>Seneca learning topics set via SMHW. Technologystudnet.com Mr d&t website GCSE bitesize AQA DT section.</p>
January - March	<p><u>Architectural Clock project- Norman Foster Research/Design</u> Advantages and disadvantages of CAD/CAM, Use of 2D and 3D drawing software. Forces and stresses, 1&2 point perspective, Testing and modelling using Cardboard and MDF, work of others. New and emerging technologies, smart and modern materials. Polymer processes (injection moulding, vac forming, line bending, laser cutting) Design specifications. Iterative design. Papers and boards, Textiles, Inputs, outputs, and processes. sections B/C style questions.</p>	<p>End of unit test– short questions/GCSE exam style Section C- style question</p> <p>Investigation of the work of others.</p> <p>Section B style questions with maths</p> <p>Generating design ideas.</p>	<p>Seneca learning topics set via SMHW. Letters distributed to students regarding revision guides. Topics for Mock exam given for Easter break to prepare for Mocks.</p>
April- June	<p><u>Jewellery project- Elsie Owusu Knowledge/make</u> Culture and fashion, Work of others, Metals, redistribution methods, (casting, filing, polishing) isometric drawing, rendering techniques. Using heat to shape and form metals. Energy generation and storage, Six's, sustainability, metal tools/equipment and finishes. Analyse and evaluate question focus. 3D printer (addition processes) Look through examples of AQA papers and learn how to complete multiple choice sections C style questions. Full 2 hour mock will be broken into sections A.B and C and preparation for each will form part of this terms consolidation of learning.</p>	<p>Section C style questions</p> <p>Writing a design brief and specification</p> <p>Year 10 mock exams date TBC- 2 hour full paper.</p> <p>Evaluation</p>	<p>Revision guides will have been given or purchased by students by this point to use at home.</p>
June-July	<p><u>NEA & Knowledge Gaps</u> June 1st NEA briefs are released from AQA. Teachers will begin investigation of the contexts and students will use the summer term to begin researching and designing their chosen contexts. Mocks will be used to target students not on target and use termly assessments to address knowledge gaps.</p>	<p>Section A-C with maths</p>	<p>At home research tasks will be set for NEA e.g. client interviews and primary/secondary research. Use of school websites/revision pages for home learning.</p>

*All assessments may be subject to alteration to best suit the learning needs of students.