

Scheme of Learning: Non Exam Assessment

Topic Sequence: Year 11 Non Exam Assessment (NEA)

1	2	3	4	5
Identifying and investigating design possibilities (AO1)	Developing a design brief and specification(AO1)	Generating and developing design ideas (AO2)	Manufacturing a prototype (AO2)	Analysing and evaluating design decisions and prototypes (AO3)

Topic Overview:

This stage of the project is focussed on the manufacture of a functional prototype. Students must evidence their detailed planning and manufacture a high quality practical outcome, using appropriate tools, equipment and materials.

Students must continue to reflect upon how their design will meet the user needs and specification, and continue to develop the design, should they feel it is necessary.

Lesson Sequence:

The lesson sequence is designed to enable students to meet the requirements of each Assessment Objective (each is presented as a “topic” at the top of this document). As such, the lessons will lead students through the full design and manufacture process, starting with the design contexts presented on the exam paper.

The first stage of manufacturing is to produce a comprehensive and realistic time plan. This should make reference to materials, tools and equipment and also any testing necessary to achieve a high quality, accurate prototype.

Over the next series of lessons, students must work through their plan, selecting materials, manufacturing processes, tools and equipment skilfully to build their prototype. They should refer back to their final design and specification regularly to continue to inform their manufacturing. They may need to manufacture test pieces, to trial a techniques, which they can then apply to their prototype.

This section of the project is largely driven by the students own plans and relies very little on whole class, teacher input. Where there is a need for whole class input, it is designed to suit the needs of each cohort – given that every student is manufacturing something totally unique.

Sequence of Lessons:

1	Manufacturing planning
2	Ensuring quality throughout the manufacturing process
3 - 20	Students working independently to manufacture functional prototypes

Topic Resources:

Knowledge Map:	NEA Marksheet Document	Prescribed Sources:	None
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Assessment:

Knowledge:	NEA Assessment Objectives
Application of Knowledge:	NEA Folder and manufactured prototype

Supportive Reading:

Technology Student	technologystudent.com
Focus Education	Via the Design & Technology Curriculum Zone on the school website.