



PRIOR LEARNING

- PROJECT SKILLS IN YEAR 12
- NEA AT GCSE
- PRACTICAL SKILLS IN YEAR 12

FUTURE LEARNING

- UNIVERSITY COURSES EG PRODUCT DESIGN, ENGINEERING ETC
- APPRENTICESHIPS
- CAREERS

DESIGN & TECHNOLOGY: A LEVEL NEA

AO1- IDENTIFY & INVESTIGATE DESIGN POSSIBILITIES

- ☐ Introduction
- ☐ Disassembly
- ☐ Client interview
 - ☐ Site visit
 - ☐ Measuring products
 - ☐ Mood board
 - ☐ Initial sketches
 - ☐ Existing products



AO3- ANALYSE & EVALUATE

- ☐ Investigation summary
- ☐ Design idea review
- ☐ Testing in developments
- ☐ Testing of final prototype
- ☐ Critical analysis of final prototype
- ☐ Spec review of final prototype
- ☐ Modifications/ improvements for the final prototype
- ☐ Commercial consideration of final prototype



AO2- DESIGN BRIEF & SPECIFICATION

- ☐ Design brief
- ☐ Specification
- ☐ Gantt chart



AO2- DEVELOPMENT OF DESIGN PROPOSALS

- ☐ More detailed design ideas- detailed, justified annotation (SPECIFICATION)
- ☐ Client feedback- throughout
- ☐ Review of designs
- ☐ Design strategy
- ☐ Developments
- ☐ Modelling
- ☐ Testing
- ☐ Further investigations
- ☐ Manufacturing specification
- ☐ Production plan

A LEVEL NEA

AO2- DEVELOPING OF DESIGN PROTOTYPES

- ☐ Material and process justification
- ☐ Final prototype
- ☐ Diary of making
- ☐ Modifications to prototype based on client feedback



CROSS CURRICULAR LINKS:

- SCIENCE OF MATERIALS
- SUSTAINABILITY IN GEOGRAPHY
- COSTS FROM ECONOMICS & BUSINESS

TOOLS, EQUIPMENT & PROCESSES

- HAND TOOLS
- 2D DESIGN
- SOLIDWORKS
- LASER CUTTER
- 3D PRINTER
- POWER TOOLS
- WOOD LATHE

CAREER LINKS, INDEPENDENT STUDY IDEAS

- PRACTISE SOLIDWORKS
- PRACTISE PHOTOSHOP
- PRACTISE PRACTICAL SKILLS
- USE INDEPENDENT STUDY LESSONS TO WORK ON NEA
- ENGINEERING, PRODUCT DESIGN ETC

DESIGN & TECHNOLOGY: A LEVEL NEA



NEA PAGE	WHAT TO INCLUDE	NEA PAGE	WHAT TO INCLUDE
INTRODUCTION	Introduce your client and the initial situation. A task analysis exploring all the possibilities linked to your client. Research plan and initial brief.	REFINED DESIGNS	These are more formal designs, annotated to show how they match the design specification. Client feedback is useful here.
GANTT CHART	Product a Gantt chart to plan how you intend to spend your time. Update to show actual time taken.	REVIEW DESIGNS	Check your ideas against your specification. Give them a score, say what you might need to change. Feedback from client.
CLIENT INTERVIEW	Interview with your client, identifying the wants and needs that link with the context.	DESIGN STRATEGY	Identify which design you intend to develop, what you need to work out in order to make your prototype eg materials, processes, finishes etc.
PRODUCT ANALYSIS	Look at existing products on the market, similar to what you intend to design and make. Analyse using ACCESS FM, identify what you could use in your work.	DEVELOPMENTS	Further investigation, sketch, model, test and use CAD to help work out how to make your prototype. Make any improvements needed. Document all your decisions.
SITE VISIT	Visit the proposed site, if appropriate. Photos and sizes that are relevant. Identify what restrictions you might have.	MANUFACTURE SPECIFICATION	The final design to give a third party enough information to make your prototype. This should include a measured drawing, plan of making, material & process justification, parts list, review using the specification and client feedback.
INITIAL CONCEPT SKETCHES	Your first thoughts on what to design. Ideally done with your client. These could be thumbnails with client, using scruffiti/ jack straws, inspirational images etc. These could be parts of the idea, not the whole thing.	FINAL PROTOTYPE	Practical evidence of your final prototype. This can be to scale, doesn't have to function or be the correct materials. Make any adjustments as needed, ideally with client feedback.
INVESTIGATION SUMMARY	Sum up what you have found out from your investigations. How is it useful to you? How will it move your project forward?	DIARY OF MAKING	This documents your making process and should identify health & safety, quality control, materials, equipment & processes used. If you make changes, make this clear.
DESIGN BRIEF	Clearly say what you plan to design and make, linking to your clients wants & needs and how it solves their problem.	FINAL EVALUATION	Check your prototype against your design specification, test with the client, get an expert opinion. Suggest areas that could be further improved, based on this feedback. Look at how your design would need to be adapted for commercial manufacture. If time, make improvements.
DESIGN SPECIFICATION	List of success criteria, using ACCESS FM+ headings. These should be justified with reference to your investigations so far.		