

AQA A-Level Coursework (NEA) Guide

Split into 5 parts (Sections A – E) this piece of work is worth 50% of your grade and is crucial to getting a good grade in Design & Technology.

General Advice for AQA DT Coursework (NEA)

- **Keep the mark scheme open at all times** → The NEA is assessed against specific criteria. If you don't have the mark scheme in front of you, it's easy to miss marks. Constantly check: *"Have I shown evidence for this?"*. Start by looking at the top-band description and think: *"Have I covered all of these points?"*
- **Don't fall behind deadlines** → Catching up is much harder than staying on track. Break the NEA into smaller milestones and stick to them. Little and often is better than last-minute panics.
- **Back up your work** → Keep a copy on cloud storage (Google Drive, OneDrive, Dropbox, etc.). Never rely only on a USB or school computer. A regular backup could save your grade.
- **Work in PowerPoint (A3 page size)** → PowerPoint is easy to use for layout, images, and text boxes. Set the slide size to A3 (420mm × 297mm) from the start so pages export neatly for printing.

Advice - Section A: Identify and investigate design possibilities (20 marks)

- **Back up your design contexts with *numbers (quantitative data)*, not just words**
 - Instead of saying: *"Lots of elderly people struggle with arthritis."*, say: *"Arthritis affects over 10 million people in the UK (Arthritis Research UK, 2023). This highlights the need to design kitchen utensils with larger, ergonomic grips to support those with reduced dexterity."*
- **Triangulate your research (use multiple methods)**
 - Combine **primary research** (surveys, interviews, user testing, measuring existing products) with **secondary research** (market trends, sustainability reports, government standards).
- **Do real testing & disassembly**
 - Take apart an old product, test joints, measure wall thickness, weigh components.
 - This gives you practical data that's *gold dust* compared to generic internet research.
- **Link research back to user & constraints**
 - After each research point, write one line: *"This means my product must..."*.
 - E.g. *"Survey data shows 65% prefer eco-friendly materials → my design must prioritise recyclable or biodegradable options."*

Example Page Checklist:

- ✓ Initial design contexts (3 different ones usually set by teacher)
- ✓ Mind maps (use LucidSpark software)
- ✓ Initial client interview
- ✓ Survey (10 questions asked)
- ✓ Anthropometrics and Ergonomics research
- ✓ Site Investigation & Measurements
- ✓ Existing products (investigate 4 minimum usually)
- ✓ Disassembly (try find real life products)
- ✓ Product specific research
- ✓ Concept ideas (10 initial sketches / ideas / concepts)

Advice - Section B: Producing a design brief and specification (10 marks)

- **Design brief is often lacking**
 - Design briefs should be technical, try to cover the following when creating one:
 - **Overview** (what is your project / what is the scope)
 - **Objectives** (why is this project important / what are you trying to achieve)
 - **Target audience** (who is this for? Be specific with age range)
 - **Budget** (don't say cheap, based on research set a target budget)
 - **Deliverables** (what are you creating -> final prototype, technical drawings etc)
 - **Timeline** (project management technique should go here)
- **Specification points must be measurable**
 - e.g. "The product should be lightweight." (what does lightweight mean? 1kg? 10kg?). Be specific!

Example Page Checklist:

- ✓ Design brief
- ✓ Project management (Gantt chart / CPA or similar)
- ✓ Specification (usually 1.5 pages)

*Top tip – code your specification so you can easily refer to it in further sections (e.g. Form point 1 is FM1)

Advice - Section C: Development of design proposals (25 marks)

- **Creativity is often lacking**
 - Students play it safe with boxy, basic designs. To score top marks, show risk-taking and originality:
 - Explore *radically different* concepts before refining.
 - Use inspiration (biomimicry, architecture, other products) to push creativity.
 - Try features like **moving parts, folding, adjustability, modularity**.
 - Document even failed risky ideas → shows experimentation.

- **Annotations often lack reference to specification**
 - Students annotate sketches/models but don't explain *why* design decisions were made in relation to their spec:
 - Always link every annotation to the **design brief or specification**.
 - Example: *"I've increased the handle diameter to 35mm to match ergonomic data in spec point 3, making it easier for users with reduced grip strength."*
 - Explain material, size, mechanism, or form choices in context of measurable spec points.
 - This justifies design thinking and scores higher marks for reasoning.
 - Use spec coding if you have it when annotating

Example Page Checklist:

- ✓ Design idea pages (5 design ideas out of initial 10 in Section A)
- ✓ Design idea developments
- ✓ Modelling pages (3 minimum)
- ✓ Final design idea in isometric
- ✓ Orthographic and exploded drawings
- ✓ Manufacturing specification with QC checks
- ✓ Project management page (including a Gantt Chart or CPA)

Advice - Section D: Development of design prototypes (25 marks)

- This is the fun section – the making.
- For this section, all I recommend is to record the following with images:
 - Record of **modifications made** following **user testing, third-party feedback, or evaluation**.
 - Record evidence of **Quality Control (QC) checks** applied throughout the process.
 - Record evidence of **Health & Safety (H&S) precautions** being considered and used.

Example Page Checklist:

- ✓ 10 – 20 making pages with clear chronological shown (as well as images / QC Checks / H&S considerations)

Advice - Section E: Analysing and evaluating (20 marks)

- **Evaluations often lack depth and reference to specification/brief**
 - Students sometimes describe their prototype instead of analysing it:
 - Always link evaluations back to the **design brief** and **specification points**.
 - Example: *"Prototype weighs 6.2 kg which is above spec point 4 (<5 kg), meaning it fails the portability requirement. A lighter frame material such as aluminium should be considered."*
 - Be critical — it's **prototype 1**, mistakes and limitations are expected.
 - Justify what **works well**, what **doesn't**, and how it could be improved.
 - Discuss how the prototype could be **developed for batch/industrial manufacture**.
- **Lack of testing or weak testing evidence**
 - Testing must be **planned, focused and measurable**:
 - Example: *"Stress test showed the hinge failed after 250 cycles. Spec point 7 requires 500 cycles → redesign hinge using stainless steel pin."*
 - Use **user trials and third-party feedback**, not just personal opinion.
 - Document **how test results changed your design**.
- **Not being critical enough of mistakes**
 - Students often write evaluations that are too positive:
 - Admit flaws honestly and suggest **realistic modifications**.
 - Example: *"The joints misaligned during manufacture due to inaccurate jig setup. Next iteration should use CNC-cut jig for higher precision."*
 - Critical reflection shows maturity and scores higher.

Example Page Checklist:

- ✓ Critical analysis of final prototype and client feedback
- ✓ Testing against specification (minimum 2 pages)
- ✓ Modifications to be made
- ✓ Production method details ("full consideration provided for how the prototype could be developed for different production methods")

Finally, if you are stuck or need advice, please reach out to us (designtechbase@gmail.com). We will be **happy to help!**