Criterion A

**(i) Describes an appropriate problem**

* The design problem should be clearly stated using supporting materials.
	+ Supporting materials can/should include, photographs, summarised results of a comprehensive interviews/questionnaires,  with potential clients, extracts from letters, magazines (consumer report magazines could be useful) or news, statistics (such an injuries, performance, etc), existing example (showing how it doesn’t fit the needs of the client), etc.
	+ Establish why it is a problem i.e. prove there is a need.
	+ Establish where it is occurring.
* Describes an appropriate problem that leads to a design opportunity.
* Lifestyle or [image board](http://www.ruthtrumpold.id.au/designtech/pmwiki.php?n=Main.ImageBoards)
* Concluding summary of the problem

Marketing Specification – Explained

This should be on approximately two A4 (letter) pages or equivalent.

**(ii) Explains the key findings from relevant market and user research**

The key findings should be  as a summary that shows evidence of:

* Carry out [market research](http://www.ruthtrumpold.id.au/destech/?page_id=1020) and user research.
	+ Have a research plan that you follow
	+ This research will/should help you to develop your [marketing and design specifications](http://www.ruthtrumpold.id.au/destech/?page_id=818)
	+ The feasibility of the project should be researched.
* Quantitative and qualitative data collected using a range of techniques and appropriate primary and secondary sources
* An analysis of competing or similar products.
	+ Surveying potential users regarding existing products
	+ Types of shops the product is sold in.
	+ Types of customers
	+ Key features such as dimensions, cost, etc
* Key findings are summarised
	+ Establish why the research data (information) is relevant and useful for the development of the solution

This should be on approximately two A4 (letter) pages or equivalent.

**(iii) The Design Brief**

A detailed design brief comprises the expected outcome and broad requirements *determined from the market and user research*. The feasibility of the project should also be considered.

The design brief is the formal starting point for a new design. Occurs when the designer presents the design to the client. It is a statement of the expectations of the design.

The brief does not provide the design solution, but is a statement that sets out:

* the design goal (for example, a working prototype to be evaluated in terms of its feasibility for volume production)
* the target Audience for the product. For example for children, disabled adults, etc.
* the target market for the product. for example, market sector (a broad way of categorizing the kinds of markets a company is aiming for) or market segment (markets divided up into smaller segments where the consumers have similar characteristics and tastes).
* the major constraints/parameters (these have to be in such as legislation or food safety regulations). For example, should comply with new legislation, have fewer working parts, be cheaper to manufacture) within which it must be achieved
* the criteria (these are wishes, it would be great if??) by which a good design proposal may be achieved (for example, increased value for money and/or cost-effectiveness for manufacturer).
* The feasibility of the project
* Scale of production.

This should on approximately one A4 (letter) page or equivalent.

**(iv) Marketing specifications**

[Marketing specifications](http://www.ruthtrumpold.id.au/destech/?page_id=818) relate to market and user characteristics of the proposed design.

* Target market—Consideration only needs to be given to market sectors and segments.
* Target audience—Differentiate between the target market and the target audience. Characteristics of the users should be established.
* Market analysis—A summary is required of the important information gathered about:  potential users and the market.  An appraisal of economic viability of the proposed design from a market perspective is important taking into account [fixed and variable costs](http://www.ruthtrumpold.id.au/destech/?page_id=162) and pricing. Analysed the market in terms of potential users, size and economic viability
* User need—Specifications should identify the essential requirements that the product must satisfy in relation to market and user need.
* Competition—A thorough analysis of competing designs is required to establish the market need. The marketing specification must be developed from the design brief and research.

[Marketing Specifications](http://www.ruthtrumpold.id.au/destech/?page_id=1507) Explained

This should be on approximately one A4 (letter) page or equivalent.

**(v) Design Specifications**

A [design specification](http://www.ruthtrumpold.id.au/destech/?page_id=818) relates to the precise set of requirements of a product:

The requirements should include:

* aesthetic requirements
* cost constraints
* customer requirements
* environmental requirements
* size constraints
* safety considerations
* performance requirements and constraints
* materials requirements
* manufacturing requirements
* any other you can think off …

All of the requirements and constraints need to be:

* justified
* specific (exactly what it has to be),
* feasible
* measurable (so think of tests that you may perform).
* evidence that the design specification are drawn from the research (your research plan would help outline your specifications).
* The design specification must be developed from the design brief.

Here is an old [set of specifications](http://www.ruthtrumpold.id.au/designtech/pmwiki.php?n=Main.ChildsToy) that can help guide you. This is not split into Design and marketing.

This should be  on approximately one A4 (letter) page or equivalent.