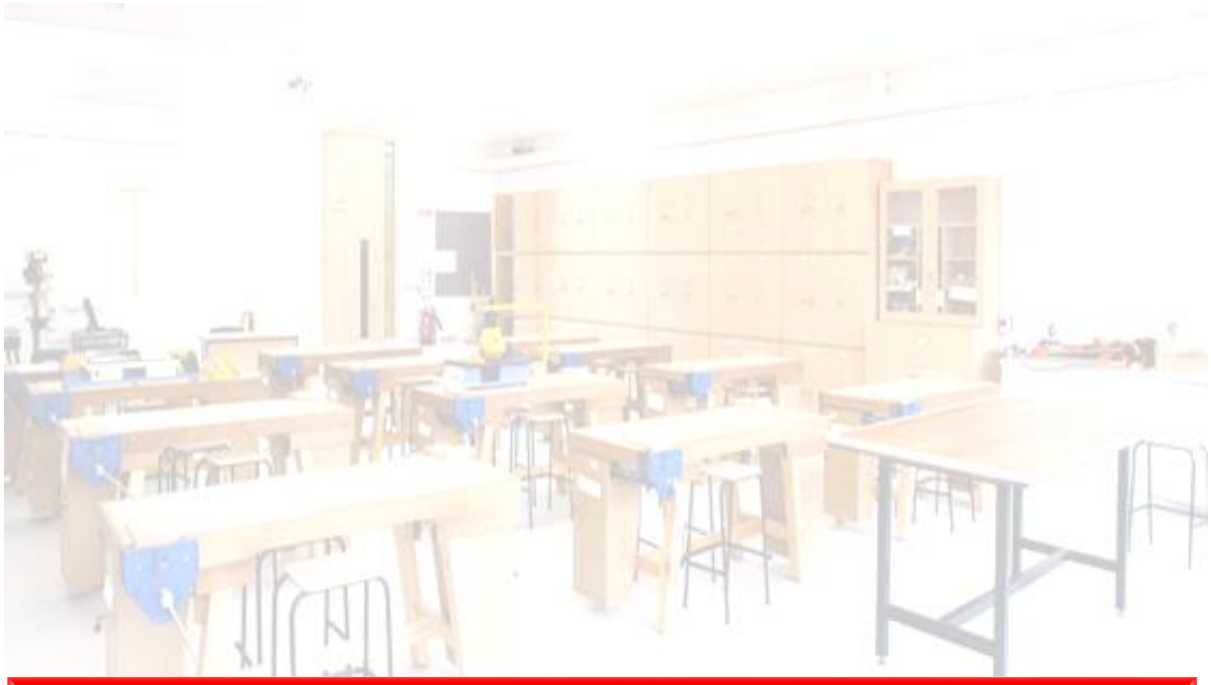
Materials Technology Wood

Design Folio 2020



On your title page include the following;

1. Higher/Ordinary Level
2. Design Brief No. 1, 2 or 3
3. Your Name and Exam No.
4. A photo of your finished project used as a watermark or central image looks good.
5. Decide on a text style and sizing to use and keep these consistent throughout the folio
6. Keep things clear, easy to read.

Table of Contents sample

CONTENTS

		Page
1	ANALYSIS OF BRIEF	
	• ANALYSIS OF BRIEF	2
2	INVESTIGATION / RESEARCH	
	• RESEARCH	5
3	DESIGN IDEAS / SOLUTION	
	• DESIGN IDEAS / SOLUTION	10
4	SKETCHES / WORKING DRAWINGS	
	• SKETCHES / WORKING DRAWINGS	16
5	EVALUATION	
	• EVALUATION	31

1. Analysis of Brief

Opening statement;

"It is often difficult to store clothes overnight in a bedroom in a tidy manner"

Brief;

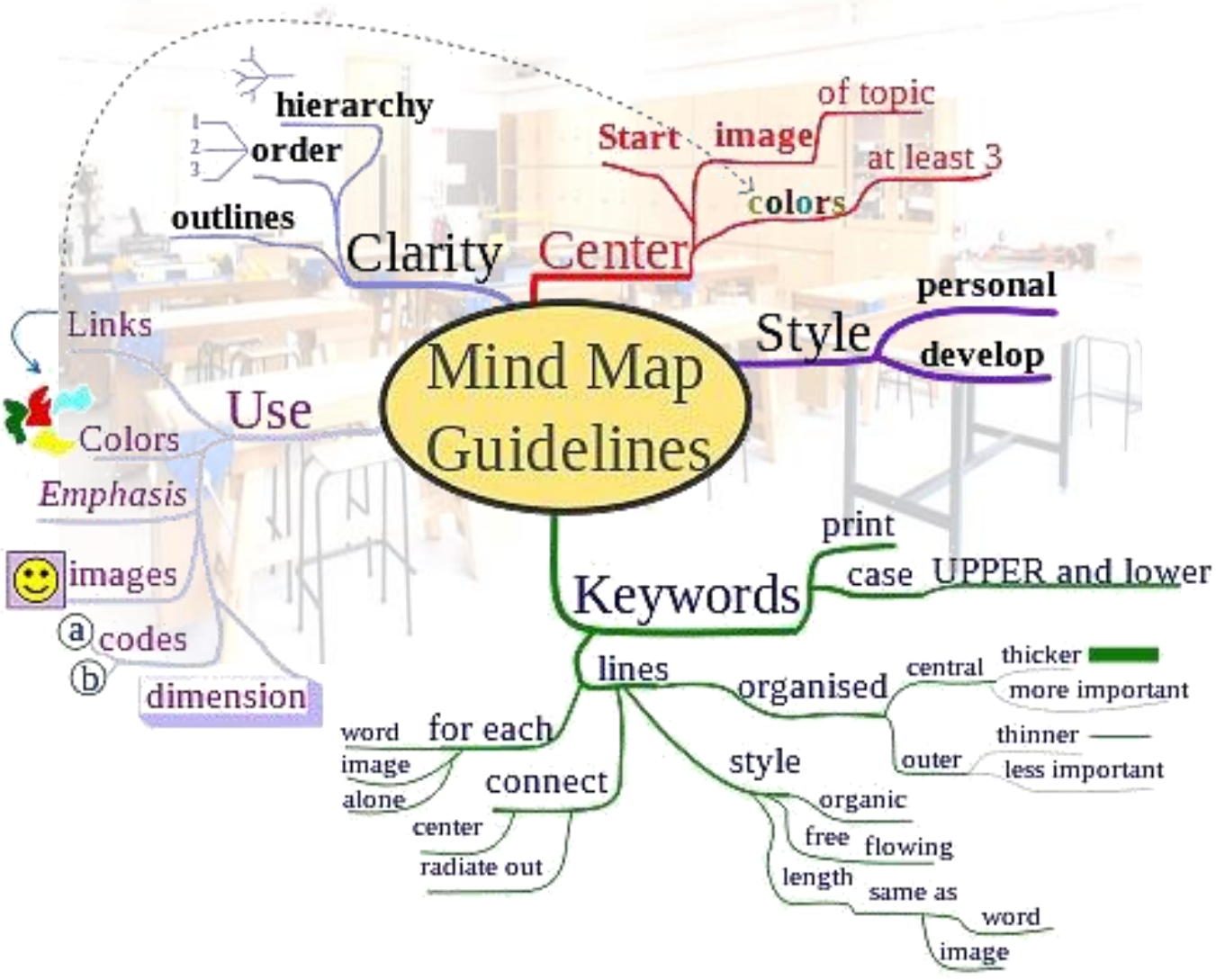
Design and make an artefact on which items of clothing can be hung. The artefact should be well finished, pleasing to look at and should suggest a theme that is easily recognisable and of interest to you.

Include the selected design brief and the following;

- *Highlight the key words.*
- *Describe how each influence the design of your project and what you need to consider.*
- *List what the project must do / the key requirements and key considerations.*
- *Clearly state the function of the project.*
- *Who will use it? Where will it be used? How will it be used? Ergonomics.*
- *List factors which will affect the size, shape and design of the project. Make sure to estimate a size of the project if a maximum size isn't given.*
- *A description of how you imagine the project will be used is often useful.*
- *Always consider ease of use and safety.*
- *Consider your own level of woodworking skills and any challenges the brief may pose to you.*

- *A mind map or spider diagram can be included.*
- *No one should know at analysis stage what they are going to make. Everything here should be about you showing that you understand what the brief is asking you to do.*
- *If you have done a good analysis you should be very clear about what to look up and research.*
- *A word bank to use in a google search can be useful too.*

Sample mind map



You can create a spider diagram / mind map using word or with any other programme you wish.

Quite a few apps exist for creating mind maps for example,

- *iMindMap*
- *inspiration Maps*
- *Mind Mapping*
- *Mind Maps*
- *iThoughts*

These are just a few of what's available. The benefits of using a mind map are that you can share ideas with others and it's a great start point before putting your analysis in a text format.

Visually it looks great and breaks up a text heavy section and creates interest. Don't be worried that you are repeating some of the same points.

Too much colour and it feels like the Circus just hit Town.

***Don't** write walls of text. It's not interesting and laborious to read.*

***Do** break text up with headings, bullet points and even a few images*

2.Investigation Research

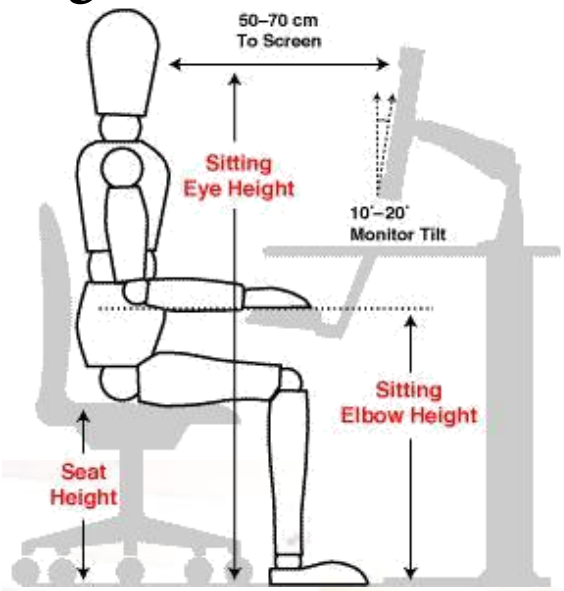
Gather information that will help you come up with a possible design solution/design idea.

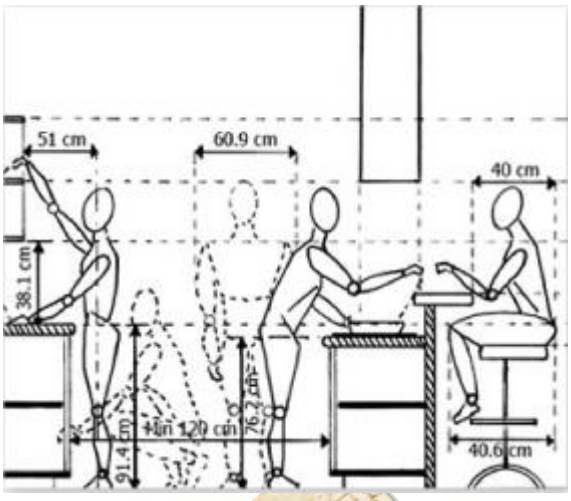
Look for ideas, and study similar artefacts.

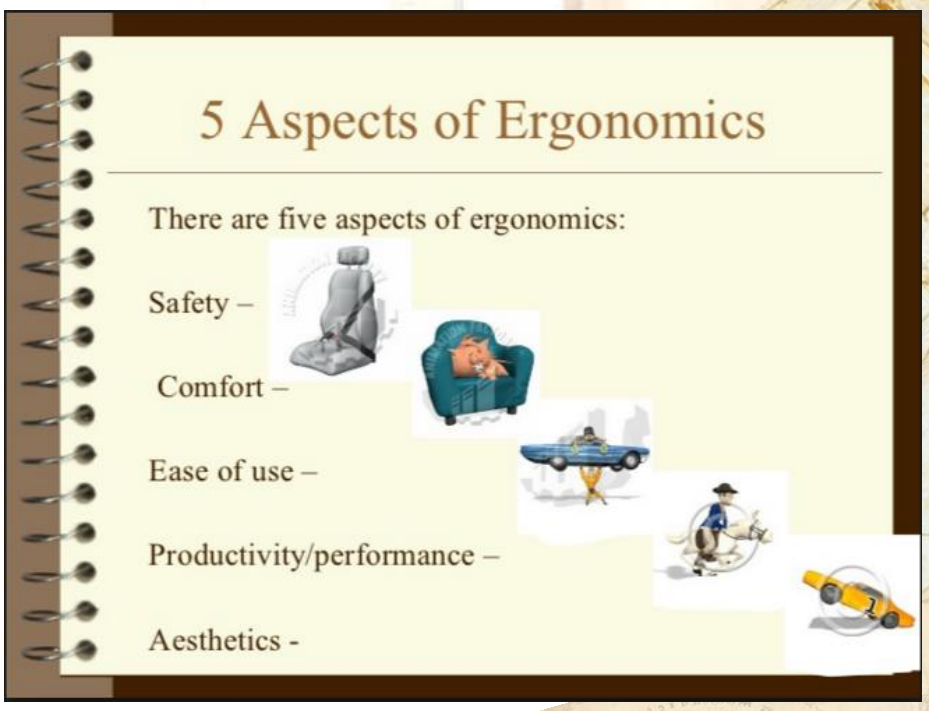
This is all about showing evidence of what you looked at. If you don't show it here how can anyone tell what you considered ?

- *What design features here do you like ?*
- *What materials are used ?*
- *Is there an idea of size / dimensions ?*
- *Is there something here you could use or would like to use ?*

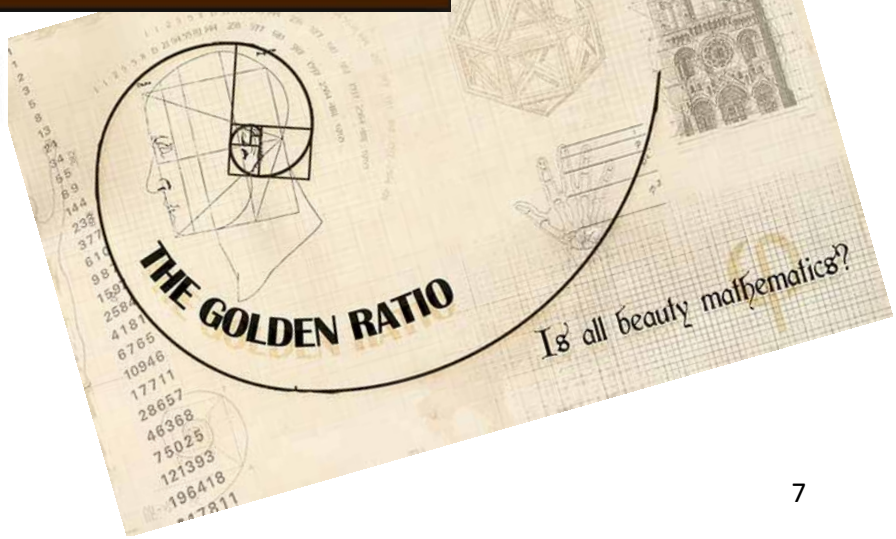
Ergonomics


50–70 cm
To Screen
Sitting
Eye Height
10°–20°
Monitor Tilt
Sitting
Elbow Height
Seat
Height


51 cm
60.9 cm
40 cm
38.1 cm
91.4 cm
76.2 cm
40.6 cm


5 Aspects of Ergonomics
There are five aspects of ergonomics:
Safety –
Comfort –
Ease of use –
Productivity/performance –
Aesthetics -

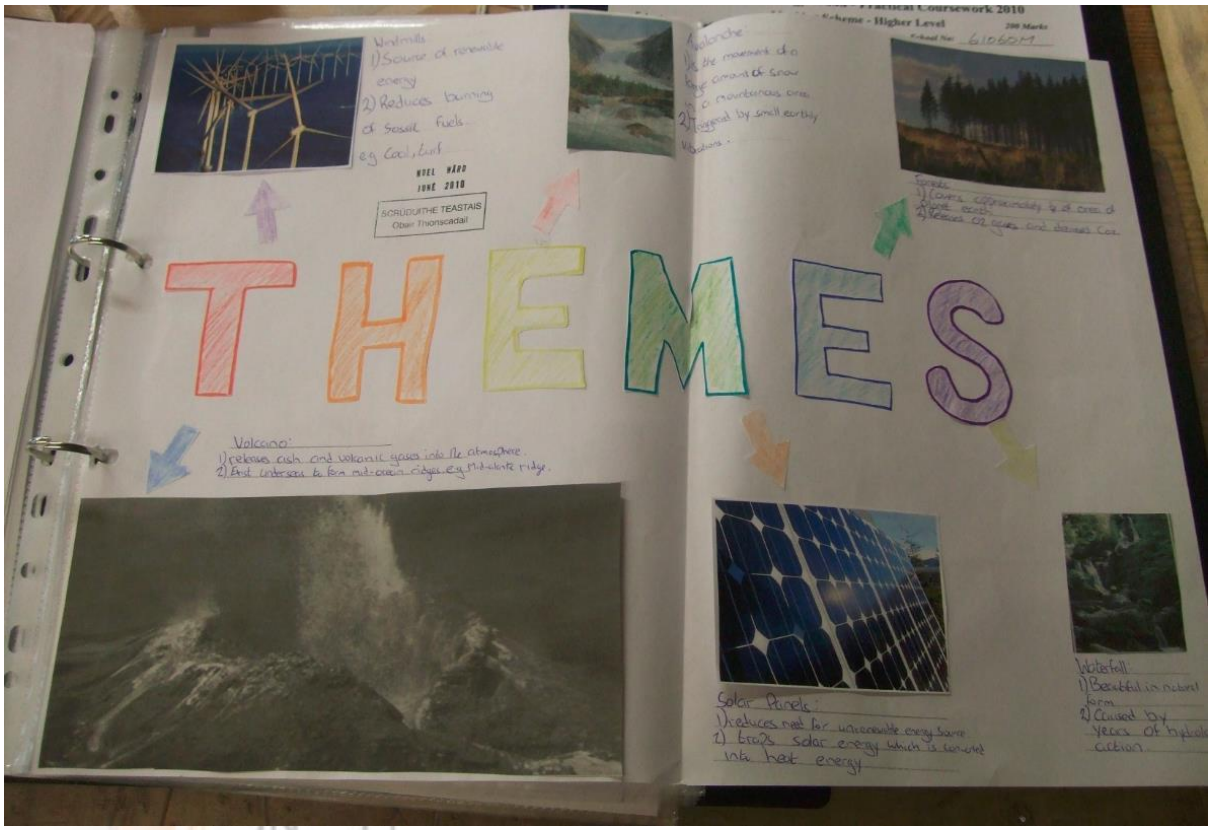
SIZE
matters


THE GOLDEN RATIO
Is all beauty mathematics?

Any item intended to be used with the project should be included in picture form with sizes included.

Theme

If a theme is part of the brief here is the perfect opportunity to explore it.

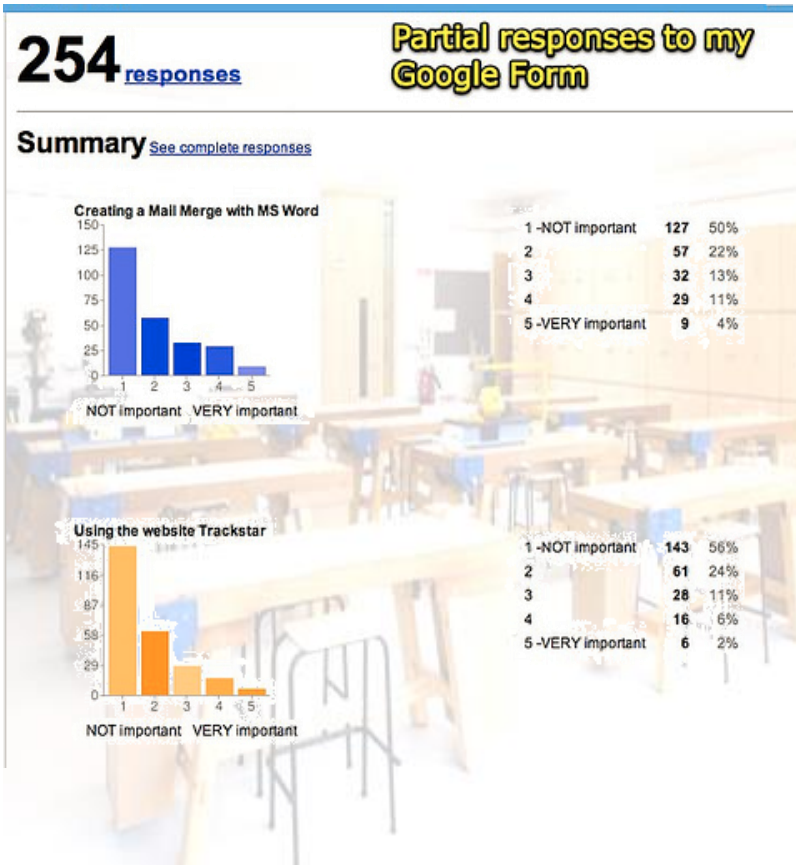


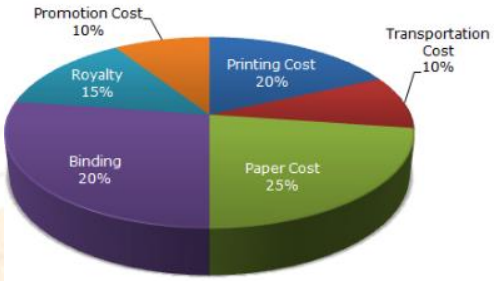
An A3 page in landscape is ideal for displaying evidence of how you worked through your theme. A traditional cut and paste style can give a nice effect and adds variety to the presentation of your folder.

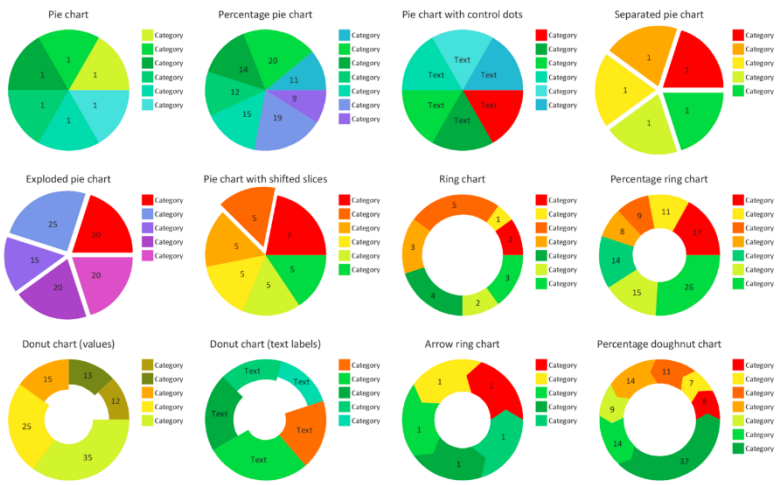
This can still be done electronically but I would still choose A3 landscape as it offers a nice working space and still fits in to the folder as displayed above.

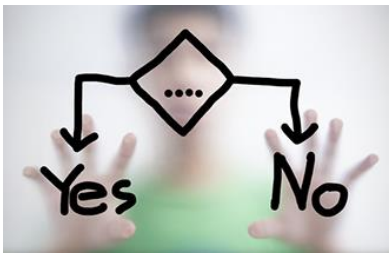
Survey / Questionaire

A survey or questionnaire can be used to gather information which may influence your decision making when choosing influencing a design. While it isn't absolutely necessary, it can be both informative and visually interesting in presentation of your folio





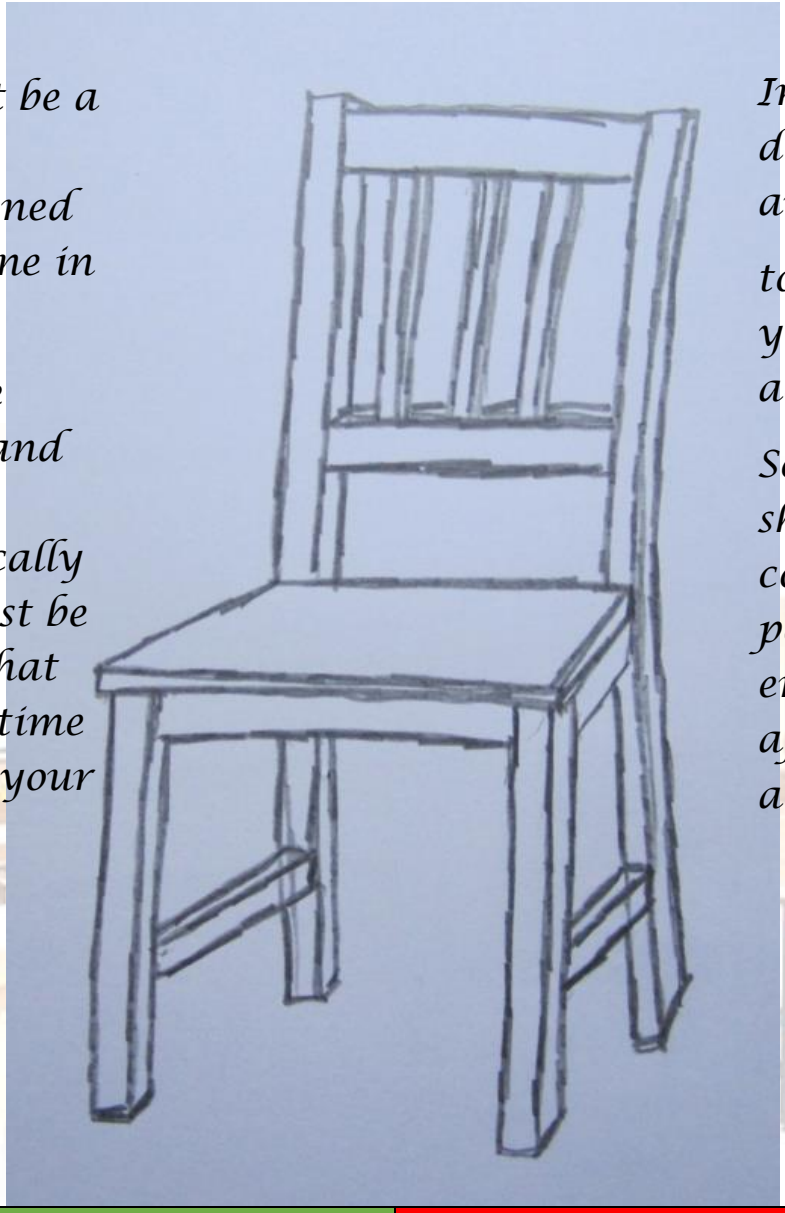




3. Design Ideas (Design Idea No. 1/2/3)

This must be a well proportioned sketch done in pencil.

It may be scanned and placed in electronically but it must be obvious that you took time to sketch your idea.



Include dimensions and notes

to help get your idea across.

Some light shading using colouring pencils enhance the appearance of a sketch too.

Good Points	Bad Points
1. The design meets the brief. 2. Within my ability to make. 3. Has nice design features	1. Could better address the brief 2. Looks complicated and time consuming. 3. Lacks nice design features.

- There must be three design ideas.
- These can be entirely different designs but they must be the same brief.
- A developmental approach can be taken where you have a design you start with and gradually change and modify it until you arrive at a final design you are happy with.
- One of these must be your chosen design which you intend to make.
- You should give reasons why you picked your chosen design.
- If your design is modified along the way while you are making it there is no need to alter your chosen design. This can be referred to in the evaluation.

4.Sketches / Working Drawings

Must include enough detail to make the project.

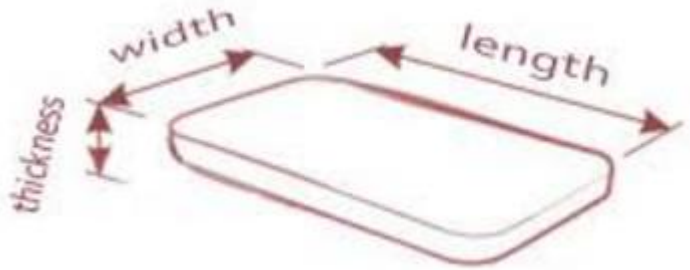
Use solidworks or pencil drawing. Other methods such as google sketch up can also be used. Make sure to include sketches of jointing detail.

A **Cutting list** must also be included

Sample Cutting List

Name	Qty.	L.	W.	T.	Type
Base	1	300	70	18	Pine

Qty. = Quantity / How many pieces
L. = Length, Longest dimension
W. = Width, Next longest
T. = Thickness, usually the smallest sometimes referred to as height.
All dimensions in millimetres, mm.


width
length
thickness