A2 PRODUCT DESIGN
2 year course

Assessments 3 Units in year 13.

Paper 1
Technical principles
Written exam: 2 hours 30 minutes—120 marks
30% of A-level.

Paper 2
Design & make principles.
Written exam: 1hour 30 minutes
20% of A-level

Non-exam assessment (NEA)
Practical application of technical principles, designing and making principles and specialist knowledge.
Substantial design and make task
45 hours—100 marks
50% of A-level
Digital design portfolio

Design & Technology
SKILLS FOR LIFE

WHAT KIND OF DESIGNER ARE YOU

https://www.vam.ac.uk/used/art-design/creative-careers-what-type-of-designer-are-you/?srsltid=AfmBOor9afKf0wosOhfR6JPxHKi0puXn9wqz9qCCP3YCyPU18hZjBnA2

https://contributor.freepik.com/blog/test-what-type-of-designer-are-you/

WHY PRODUCT DESIGN ?

Students are encouraged to:

Develop and sustain their own innovation, creativity and design and technology capability, to recognise constraints and to produce high quality products.

Develop a critical understanding of the influences of the processes and products of design and technological activity form a historical perspective and in current practice.

Apply essential knowledge of understanding and skills of design production processes to a range of technological activities and develop an understanding of industrial practices.

Use information and communications technology (ICT) to enhance their design and technological capability.

Recognise the social, moral, spiritual and cultural values inherent in design and technological activity, and develop critical evaluation skills in technical, aesthetic, ethical, economic, environmental, social and cultural contexts.

Develop as discerning consumers able to make informed choices.

Develop positive attitudes of cooperation and citizenship working collaboratively.

Entry Requirements:

This course is suited to candidates who have studied any Design and Technology course at GCSE, but is most appropriate for those who have studied Graphics, Resistant Materials and Product Design. Students need to have gained a B grade or above at GCSE to study this course successfully.

Higher Education:

There are a wide range of courses and careers available to students who have studied Product Design. Universities such as Loughborough offer courses in Product Design, Automotive Design and Engineering.

For further information contact Mr S Goodall, Subject Leader.

St. Joseph's College

Design Technology Resources

A LEVEL PRODUCT DESIGN - 2019.

In the Design and Technology Department we follow the AQA Product Design specification. It has been designed to encourage candidates to take a broad view of technology and design, to develop their capacity to design and make products and to appreciate the complex relations between design, materials, manufacture and marketing.

3D Design is intended to reflect the wide-ranging activities of professional designers and covers a wide range of materials. Candidates are encouraged to manufacture products in wood, metal and plastic, but other materials such as ceramics and textiles and other areas such as electronics and mechanisms can be incorporated to produce exciting coursework. Graphics are an integral part of any Design and Technology work and candidates learn to communicate their thinking clearly and represent their ideas graphically.

Design and Technology offers candidates the opportunity to gain personal satisfaction and a positive experience from working with a variety of materials. The practical problem solving processes will encourage independent learning, creativity and innovation.

Assessments 3 Units in year 13.

Paper 1
Core technical principles and core designing and making principles.
Written exam: 2 hours—100 marks
25% of A-level.

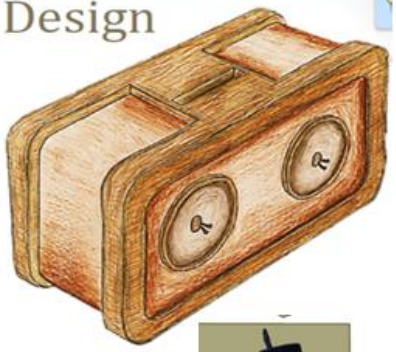
Paper 2
Specialist knowledge, technical and designing and making principles.
Written exam: 2 hours
25% of A-level

Non-exam assessment (NEA)
Practical application of technical principles, designing and making principles and specialist knowledge.
Substantial design and make task
45 hours—100 marks
50% of A-level
Digital design portfolio

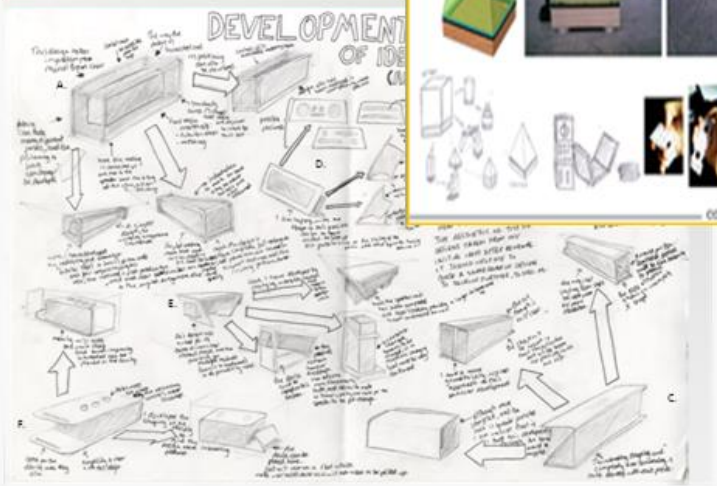
Design & Technology
SKILLS FOR LIFE

PRACTICALS

Final Rendered Design



AS Product Design -:-



DIGITAL PORTFOLIO

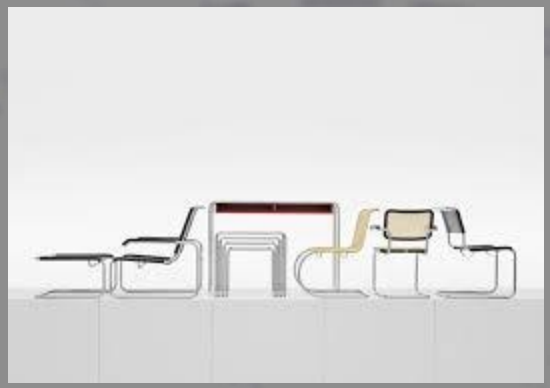
A LEVEL COURSEWORK EXAMPLES

Design & Technology
SKILLS FOR LIFE

Problem: portable speakers are very popular and people are will to pay a premium for bespoke one off products.

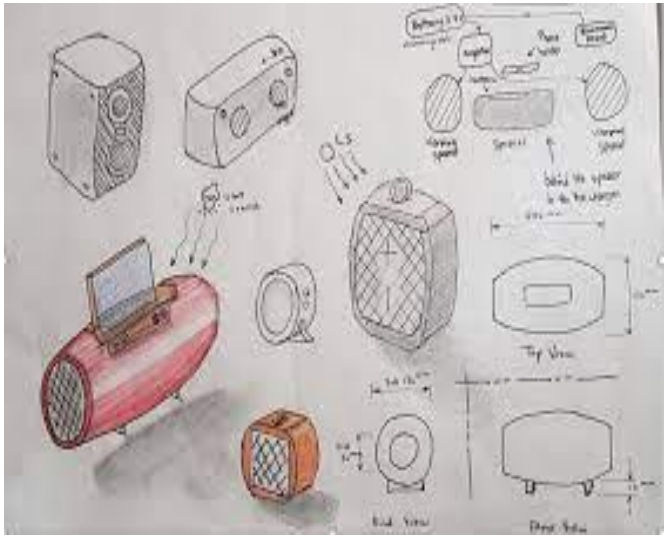
Target Market: young adults aged 16 to 20

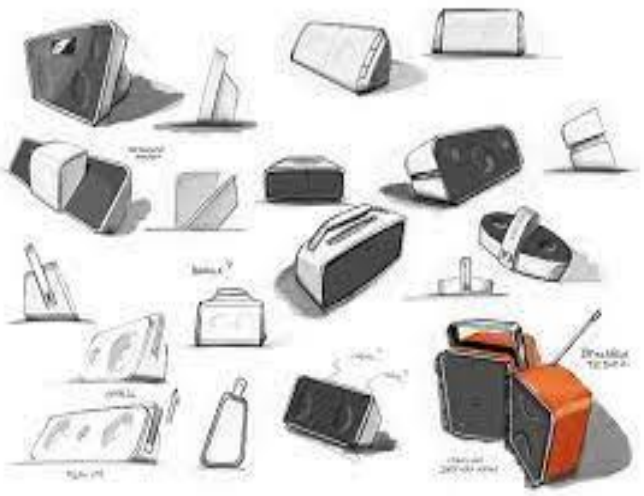
Product design – RE DESIGN

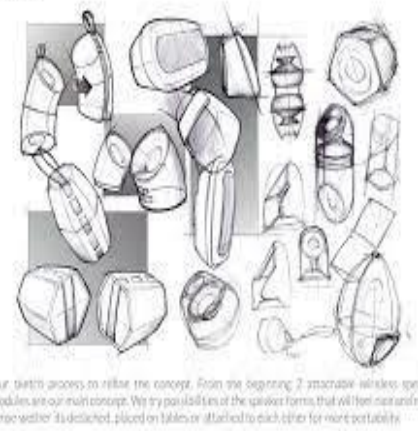


Product design – inspiration

FUNCTION	
USER	Must appeal to a young adult 16 to 20
WANTS	Must fit into a room with a modern theme Must be portable
NEEDS	Must have Bauhaus, Dieter Rams styling. Must have a sustainable approach
RE USE	Must re use some item.
COST	Must cost a maximum of £30
SIZE	Must be a maximum 300x300x300 mm
MATERIALS	Must incorporate sustainable materials.

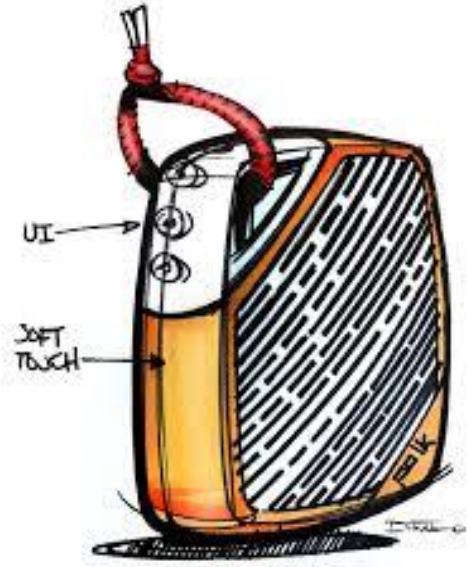


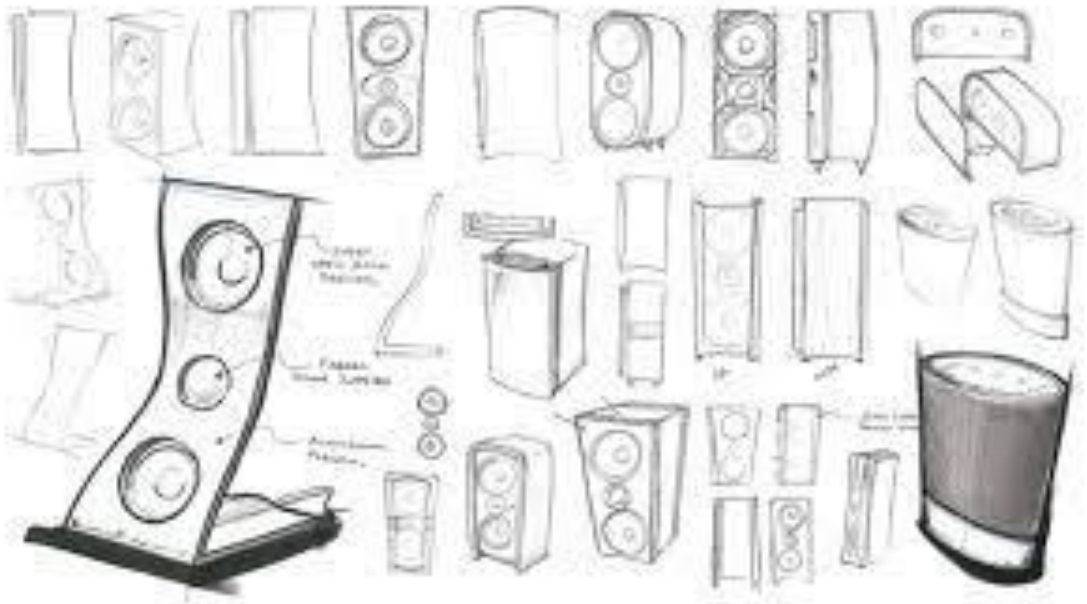


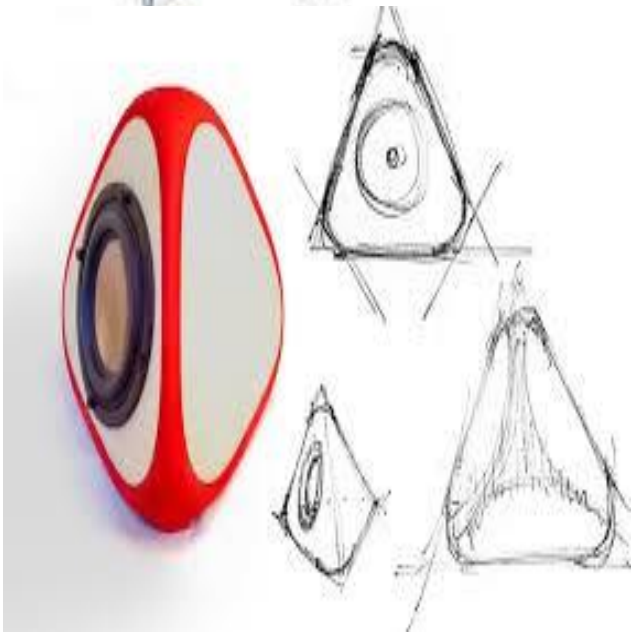


Our sketch process to refine the concept. From the beginning 2 detachable wireless speaker modules are our main concept. We try possibilities of the speaker forms, that will feel cool and make sense whether it's detached, placed on tables or attached to each other for more portability.

Product design – design ideas

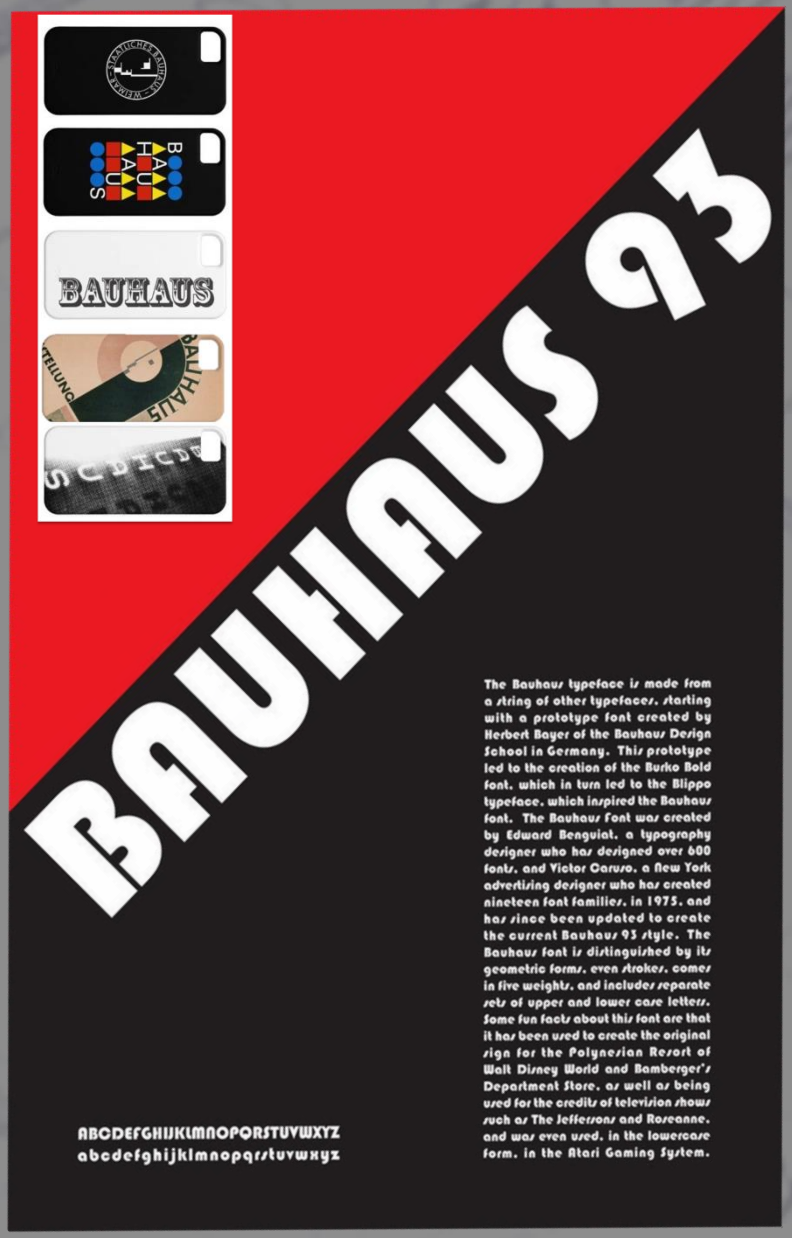






Product design – development

Product design – prototype model



You should be aware of, and be able to discuss, the work of influential designers and how their work represents the principles of different design movements. Investigate the following designers find examples of their work and produce a PowerPoint presentation that highlights the style and influences of their work.

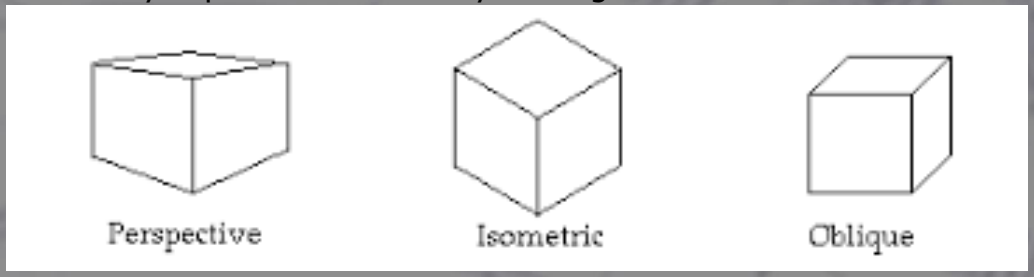
- Phillipe Starck
- James Dyson
- Margaret Calvert
- Dieter Rams
- Charles and Ray Eames
- Marianne Brandt.

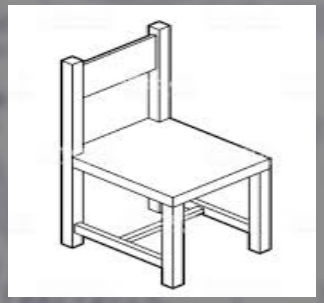
Select 1 designer that inspires you and produce a detailed presentation of their work. What do you like about their style? Why do they inspire you?

You are required to deliver a 5 minute presentation of this work to the Yr12 group in September at the start of the course.

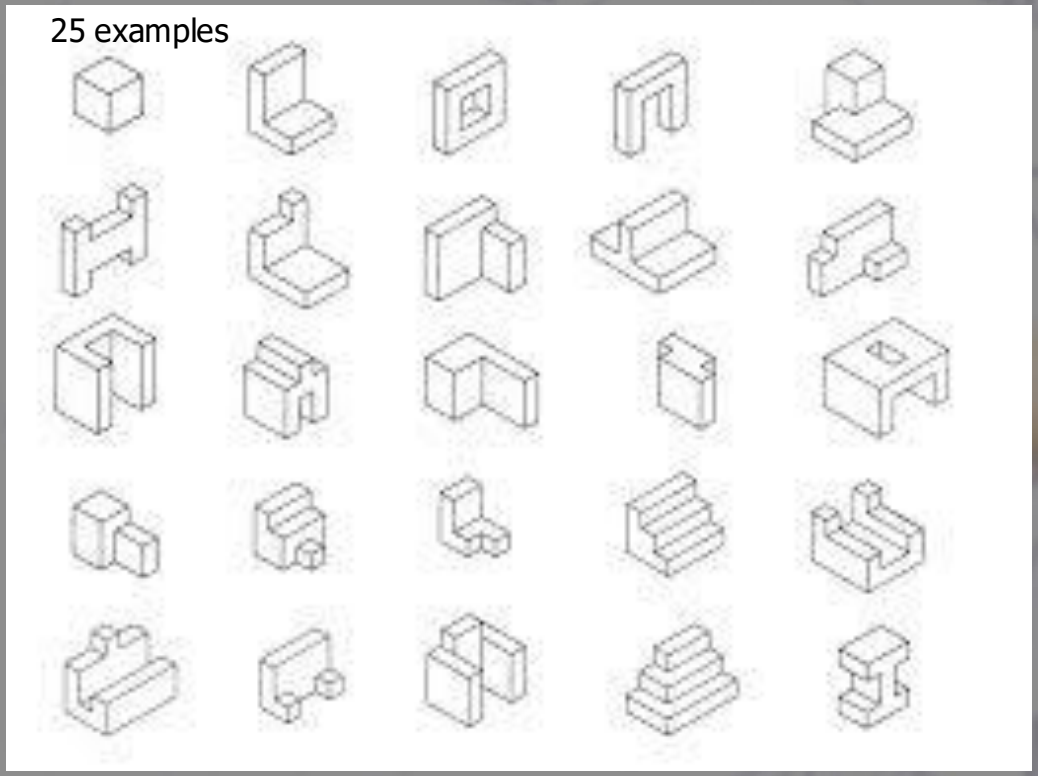
Product design - Design history - Task 1.

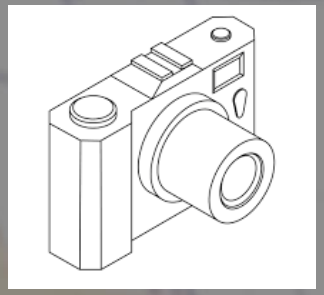
In order to become a competent designer you need to develop you ability to sketch your ideas accurately with good attention to detail. This next exercise will help develop your drawing skills. Sketch the 25 examples using OBLIQUE perspective, ISOMETRIC perspective, 1 POINT perspective and 2 POINT perspective. You could use YouTube drawing tutorials to help. Then when you have mastered the techniques have a go at drawing a range of everyday objects using these techniques, remember the more you practice the better you will get.





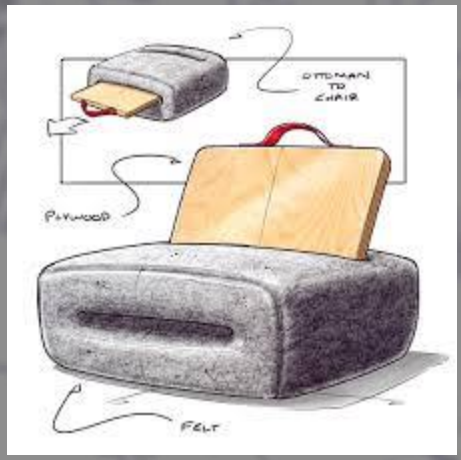
25 examples

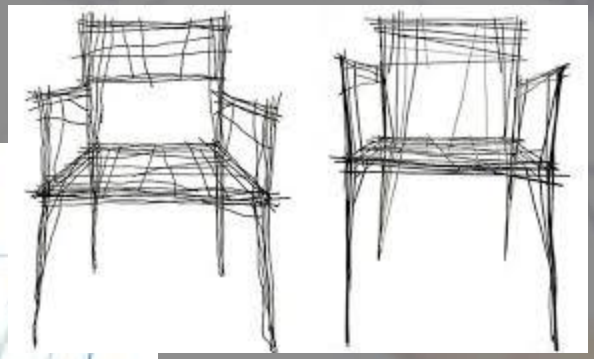




Product design – Drawing practice -Task 2.

Produce a range of high quality initial design ideas for a chair in the style of an influential designer or design movement. The designs should mirror the style of the designer or movement. Your design ideas should show imagination and flair. They should also be well presented, neat and include detailed annotation. This work should be done on one to two sides of A3 paper.

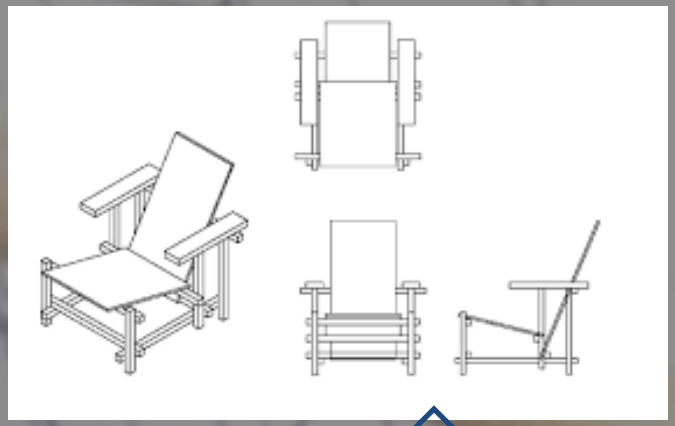




Present you ideas in different ways & be creative. I want to see how good you are at designing.

Product design – Design and modelling -Task 3.

Produce an A3 final presentation drawing of the chair that you would manufacture. Here are some examples of different layouts to inspire you.



You could include an orthographic projection if you can

Product design – Design and modelling -Task 3.

Produce a model of one of your ideas. You can make your model from any materials of your choice. You should produce a page of photographs of your model showing it in as much detail as possible.

Product design – Design and modelling -Task 4.

Plastics in a Modern Society

Plastic products play an important role within modern society. Investigate the current problems caused by the use of plastic and explain, the need to modify designs to make them more efficient to manufacture, including:

- reducing the number of manufacturing Processes
- how the choice of materials affects the use, care and disposal of products:
- labelling of materials to aid separation for Recycling
- making products easy to disassemble or Separate
- application of the six Rs of sustainability:
- reduce the quantity of materials, of toxic materials, of damaging materials and associated energy use
- reuse components and parts
- rethink by using eco friendly alternative Materials

Product design – Extension Task.