

Revision topics

Understanding these terms: Ergonomics, anthropometrics, functionality, innovation, ductile, sourcing materials, ethical factors, bulk buying.

Woven, felted, bonded, knitted fabric

Understand how to read an orthographic drawing and draw a 2pt perspective drawing from it.

Understand how to read a 2pt perspective drawing and draw an orthographic drawing from it.

Understand how to read an orthographic drawing and draw an isometric drawing from it.

Understand how to read an isometric drawing and draw an orthographic drawing from it.

Understand why materials are used (wood, metal, plastic). Properties of materials. Good points and bad points about materials. Uses of materials.

Smart materials and uses.

Materials woods, metals and plastics properties and uses.

Composite materials uses and advantages and disadvantages.

Mechanisms - Cams, gears, pulleys, levers.

Maths- Working out percentages and area

Electronics- Components that are inputs, that are processes and what are outputs.

Commercial manufacturing process- Injection moulding, casting and lamination (timber).

Technology push and technology pull. What are they and what are examples?

Stock form of materials

Atmospheric pollution

Oceanic pollution

Types of production (mass, batch, etc). Methods and examples of each.

The work of others- Alessi. Dyson. Braun

How to analyse products

Renewable energy

Ergonomics and anthropometrics

Forces