Knowledge Mat: D & T – Year 10

Key Knowledge for Year 10

Term 1

- To use Jigs, templates and tolerancing, to assemble a 1:10 scale ergonome.
- To have an understanding of Anthropometrics and Ergonomics,
- To be able to work at scale in CAD.

Term 2

- To understand different design strategies like user centred design
- To be able to identify what design movements individual designs are from.
- To understand scales of production and the use of KD fittings in flat pack furniture

Term 3

- To be able to produce Isometric and orthographic drawings of designs
- To be able to research a design problem and to know the difference between primary and secondary research.
- To be able to identify problems that need a solution designing for them.

Wider Experiences / Try To Do...

- Look for knock-down fittings in flat pack furniture at home.
- Help a parent/guardian to assemble a piece of flat pack furniture.
- Watch an antiques programme and look for Art Nouveau and Art Deco products.

The **big** questions:

- What considerations about people do designers need to take into consideration?
- **How** do designers communicate their ideas to other people?
- What changes when a product is made in large quantities,

Vocabulary

Ergonomics Ergonome Jigs Templates Gauges Anthropometrics Percentile Gender Mean Stature Scale Tolerance Interference Bespoke **Batch production** Mass production **Continuous production** Just In Time (JIT) Flat pack **Knock Down fittings** Cam lock Dowel Isometric Orthographic **Construction lines** Centre line **User-centred design** End user **Primary research** Secondary research