

## GCSE Design & Technology revision check list

### Section A – Core Technical Principles

key word definitions revision

- Innovation
- Design evolution
- Automation
- Enterprise
- Fairtrade
- Sustainable waste
- Product miles
- Lab grown diamonds
- Carbon off-setting
- Market Pull
- Modern materials
- Functionality
- Polymers – High Density Polyethylene (purpose of)
- Types of mechanical motion
- Linkages (purpose of)

### Section B – Specialist technical principles

Diagrams of tools/actions:

- Measuring and marking out
- Drilling
- Sanding and filing
- Sawing or material subtraction

Advantages/Disadvantages of CAD

CAM Machine types

Purpose of a template

Calculations/formulas related to a hexagonal: side lengths and interior angles

Name of one influential designer

Name of an innovative product or product range

Name of an innovative/sustainable structure

Name of a controversial design or engineered construction

Material availability

Mini essay: problems with environmental waste

## **Section C: Designing & Manufacturing Principles**

Analysis of ergonomics, aesthetics and functionality upon a specific product design

Deforestation

Calculations related to material length and width from sheet material

Planned obsolescence

Forming and deforming material

Material protection

Seasoning

Exploded diagrams in isometric

Definition of orthographic drawing techniques

Just in time production

Vacuum forming

Quality control checking

Renewable sources of energy