

A Level Design and Technology – Product Design Revision List

Topics to revise are as follows:

Paper 1 – Technical Principles – 2 hours 30 minutes

- Smart and new materials
- Malleability and elasticity
- Sustainability throughout manufacture
- High speed steel
- Percentages
- Ergonomics and Anthropometrics
- Properties of materials
- Sustainability in manufacturing
- High speed steel
- Calculating percentages?
- Injection moulding
- Soft soldering
- Analysing Data from Electronic point of sale (EPOS system) can be used
- Silicone
- Phosphorescent pigment
- Risk assessments
- Concrete
- Histogram
- Bio-batch polymer
- Danish oil
- Prototypes
- Calculating angles
- Beech v ABS toys
- Polypropylene
- Vehicle signage – digital printing or vinyl cutter
- Architectural models

Paper 2 – Designing and making Principles – 1 hour 30 minutes

1. Comparing materials, processes and power sources of a product
2. Packaging
3. Phillipe Starck
4. Designing for all users
5. Direct current motor
6. Torque
7. Calculating torque
8. Volume
9. X-ray testing
10. Bauhaus
11. Project management systems to benefit designers and manufacturers
12. Iterative design process

13. Zinc alloy
14. Die casting- design modifications, machinery preparation and quality assurance
15. Cantilever chair made from laminated veneers
16. Calculating dimensions from circular arcs and straight lines
17. Analysing and evaluating data
18. Product life cycles
19. Target market pull and technological push
20. International Standards Organisation (ISO) standards