**A Level Design and Technology – Revision List June 2023**

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?