

For some of our students, formal exams have been something they have not completed regularly or at all. We are aware that all students have had significant disruption over the last two years. In order to support you to support them effectively at home, we would like to give you the following information:

The Topics your child will be tested on are:

Section A – Core Technical principles

Multiple choice questions – there are 10 questions, covering any topic from Core Materials 1.1 - 1.1.6

- Organising the workplace
- Composite materials
- Maths – volume
- Mechanical devices – levers
- Materials and their working properties – fibres and fabrics, thermoforming polymers,
- Sources of Renewable Energy
- Materials and their working properties – timber
- Materials and their working properties – packaging
- A systems approach – input, process, output

Section B - Specialist Technical Principles

- Maths – area
- Properties of materials
- Commercial processes - stock form
- Maths – percentages
- Surface treatment / finishes
- Environmental Impact – analysis and evaluation fossil fuels

Section C - Designing and Making Principles

- Analysis and evaluation – user needs
- Innovation
- Anthropometrics
- Ergonomics
- Materials management - Nesting / tessellation
- Safety – tools and equipment
- Communication of designs – orthographic projection
- Maths – calculation
- Design fixation
- Tolerance
- Quality control
- Research – work of others
- Design development – focus group

***MATHS* Multiplication, Percentages, Area**

Suggested Revision Focus:

Week commencing	Focus
Week 1 - 09/12/2024	<ul style="list-style-type: none">• Page 20, 21 and 23 Paper, Board and Timber• Metals, Alloys and Polymers
Week 2 - 16/12/2024	<ul style="list-style-type: none">• Page 24 and 25 Textiles• Page 26 and 27 Textiles and Manufactured Boards
Week 3 - 06/01/2025	<ul style="list-style-type: none">• Page 30, 32 and 33 Electronic Systems• Page 34 and 35 Mechanical Systems
Week 4 - 13/01/2025	<ul style="list-style-type: none">• Page 49 Quality Control• Page 58 Production of Materials• Page 68 and 69 Printing Techniques
Week 5 - 20/01/2025	<ul style="list-style-type: none">• Page 70 and 71 Paper and Board Finishes• Page 119 PCB Production and Surface Treatments
Week 6 - 27/01/2025	<ul style="list-style-type: none">• Page 123 Work of Designers• Page 125 Understanding user needs• Page 136 Design Strategies
Week 7 - 03/02/2025	<ul style="list-style-type: none">• Page 140 and 142 Drawing Techniques• Page 150 Using Materials Efficiently• Page 151 Working safely

Recommended revision sites/resources:

- Theory file from class
- GCSE BBC Bitesize AQA GCSE D&T Core Technical Principles : <https://www.bbc.co.uk/bitesize/topics/zkcpkmm>
- [DT - Product Design](#)
- [Textiles](#)

Hints and Tips:

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- Use a range of techniques
- Make mind maps
- Make flashcards
- Carryout independent research
- Read through work and make notes
- Read through text and write down as much as you can remember
- Start revising early!!!

All Y11 mock exams will take place between Wednesday 5th February and Friday 21st February 2025