## Year 10 Design and Technology Mock Revision Guidance

Evene Decards AOA
Exam Board: AQA
SUMMER Mock Exam Paper
There are 3 topics that you will be examined on:
Section A – Core and Technical Principles - Multiple choice (20 marks)
Section B – Specialist technical principles - (30 marks)
Section C - Designing and making principles - (50 marks)
Areas to focus on are:
Section A
Composite materials.
<ul> <li>Renewable energy sources and how the impact the environment.</li> </ul>
<ul> <li>Recycling materials.</li> </ul>
<ul> <li>Thermoforming polymers and properties of materials.</li> </ul>
<ul> <li>Scales of manufacture.</li> </ul>
<ul> <li>Types of motion.</li> </ul>
Smart Materials and their uses.
<ul> <li>Manufactured boards and their uses.</li> </ul>
<ul> <li>Planned obsolescence</li> </ul>
Crowd funding
<ul> <li>Cams and gears used in products.</li> </ul>
• Cams and gears used in products.
Section B
<ul> <li>Calculating costs on materials to be used in products.</li> </ul>
Why do designers use prototypes?
<ul> <li>Why are aesthetics important when designing products?</li> </ul>
<ul> <li>Percentages and plotting graphs</li> </ul>
Metal casting processes
Health and Safety in the workplace.
Section C
<ul> <li>Analysing and evaluating similar products looking at ergonomics, functionality and innovation?</li> </ul>
Calculating dimensions of products.
<ul> <li>How to work out the area of a circle when calculating the amount of material is required when making a product?</li> </ul>

- Why user-centred design is important?
- Orthographic drawings.
- One point perspective drawings.

There are 100 marks available. Multiple choice questions are worth 20 marks. Longer answer questions, worth another 80 marks.

Exam Length: 2 hours

Exam Weighting: In the real exam it is /100 and worth 50% of overall grade

Useful revision resources: AQA Design and Technology revision textbook. <u>www.technologystudent.com</u> GCSEPod Design and Technology.