

Name –

## Year 10 BTEC Engineering Practice Exam revision

Use this sheet to help you track your revision for the Practice exam. Make sure you use the revision notes to help you.

Please make sure you bring to the exam all normal writing and drawing pens and pencils, and a ruler. If you forget these, you will not be able to answer the questions on the exam paper.

You will have a Mock exam for **1 Hour** for **60 Marks**

Task 1. You will be given an **Engineering Brief** with a drawing of a product with all the Design and Manufacturing details of the products.

### **Activity 1: Evaluation**

Your task is to Evaluate and Explain how the product works.

What are the **issues** with the design? What problems can you see when it is used?

How can you improve the design and function of the product?

You must annotate the diagram and add notes and sketches to your answer.

Justify and give reasons for each statement

**Use ACCESS FM to annotate emphasizing the material and function**

### **Activity 2: Redesigning**

You will be asked to redesign and manufacture the product in a different way.

You must **sketch** and **annotate** your new design idea.

You must **write notes and justify** why and how the design idea is an improvement.

### **Activity 3: Review an Engineering drawing and Analysing data on a Graph**

You must be able to understand an Engineering Drawing

Inspect a graph and analyse the measurements

**Explain** what the issues are and **suggest how to solve** the issue.

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Exam Revision			
As you revise use this traffic light to see where your gaps in understanding are	Red	Amber	Green
<ul style="list-style-type: none"> <li>Know different <u>types of metals</u> Ferrous, Non Ferrous and alloys with examples.</li> </ul>			
<ul style="list-style-type: none"> <li>Know Basic <u>Metal processes</u> like</li> <li>Drilling</li> <li>Bending</li> </ul>			
<ul style="list-style-type: none"> <li>Know different <u>types of Plastics ( Polymers)</u> , advantages &amp; disadvantage with examples.</li> </ul>			
<ul style="list-style-type: none"> <li>Know <u>plastic processes</u> like- its advantages and disadvantages and where it is used</li> <li>➤ Vacuum Forming,</li> <li>➤ Injection moulding,</li> <li>➤ Strip Heating</li> <li>➤ Blow moulding,</li> </ul>			
<ul style="list-style-type: none"> <li>Know the different <b>scales of production</b></li> <li>➤ One –Off Production</li> <li>➤ Batch Production</li> <li>➤ Mass Production</li> </ul>			
<ul style="list-style-type: none"> <li>Understand the different Types <b>of Engineering Drawings</b> and <b>symbols</b></li> <li>• Orthographic Drawing</li> <li>• Isometric Drawing</li> </ul>			
Know how to read an Engineering Drawing and understand			
Understand the different <b>types of Graphs</b> and how to read them Line Graphs Bar Graphs etc... Scatter			
Understand what is <b>Tolerance</b>			
<ul style="list-style-type: none"> <li>Understand the need for use of Accurate <b>Measuring Tools</b></li> <li>Micrometer,</li> <li>Vernier Calliper</li> <li>Gauges</li> </ul>			