## WJEC Eduqas GCSE (9-1) in

## DESIGN AND TECHNOLOGY

ACCREDITED BY OFQUAL

## SPECIFICATION

Teaching from 2017 For award from 2019







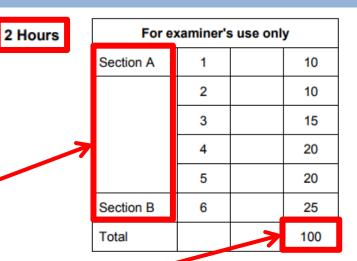
The following lessons have been created to ensure you are all ready for the mock exam and have a clear idea of the layout of the paper and what to expect.





## To start with, let's start with the basics. Just to start!

- The exam is 2 hours long
  - There are two sections; Section A and section B
  - The exam is out of 100 marks
  - You must have a calculator



### **ADDITIONAL MATERIALS**

You will need basic drawing equipment, coloured pencils and a calculator for this examination.

### INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer questions 1 to 5 and any one question 6.

Write your answers in the spaces provided in this booklet.

### INFORMATION FOR CANDIDATES

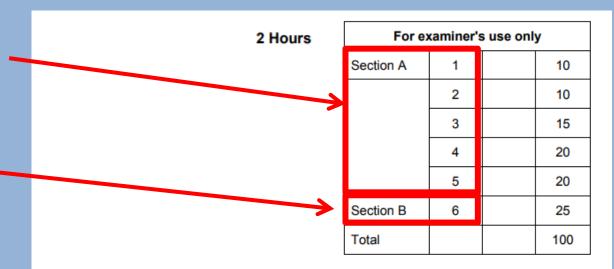
The number of marks is given in brackets at the end of each question or part-question.



You must answer all of the questions in section A / Questions 1 to 5.

When it comes to Section B / Question 6 you must only answer one of the sections; either:

- Electronic systems and Mechanical devices
  - Paper & Boards
- Natural & Manufactured
   Timber
- Ferrous & Non Ferrous Metals
  - Thermosetting & Thermoforming Plastics
  - Fibres & Textiles



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# This is all there is to warn you in the exam paper that you must only answer one of the questions!

### Section B

Answer **one** of the questions in this section

If you take RM then you answer the Natural and manufactured timber questions from section B:

6. Natural and manufactured timber

If you take Graphics then you answer the Papers and Boards questions from section B:

6. Papers and Boards

## The Different types of Questions



All of the questions will start with a specific word depending on what is expected:

Give	1	These questions are designed to ease the learner into
State	mark	the question. They need a simple statement, a short phrase, tick line etc.
Name		principo, non into oto.
Place		

Describe	2	These questions ask the learner to describe something in
Outline	marks	detail. The answer will be in sentences and/or in a list.
Explain		There is a need for detail in the answer with elaboration of the answer.
Justify		Sometimes the question will ask the learner to use notes and sketches; this means that a clearly labelled sketch or diagram will of course gain the marks.

### The Different types of Questions



## Evaluate Analyse

# Extended marked questions

- Evaluate could imply involve assessing or appraising a situation or product or material giving reasons to support their answers.
- Analyse means examining and dissecting a situation or product giving thoughtful appropriate reasons to support the answer. It could include finding logical chains of reasoning.
- These questions are designed to test, stretch and challenge the more able learner.
- The question requires the learner to make a well-balanced argument involving both advantages and disadvantages.
- A paragraph or a number of sentences extended writing will be required



(a) Study the pictures of the two cushions shown below and answer the questions that follow.





Floor cushion

Bolster cushion

(i) State the name of the edge finish that has been used on both cushions and give a reason for its use.

Edge finish:	[1]
Reason:	
	[1]

(ii) The main material used for both cushions is woven cotton. Give **one** reason why a material with a woven construction is the most suitable choice for these products. [1]

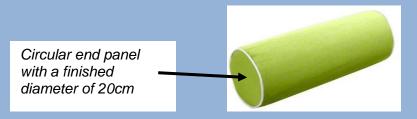
'State' is the keyword.

One word answer is acceptable- edge finish.

Reason needs an explanation (i) and (ii).



(b) The finished diameter of the circular ends on the bolster cushion is 20cm as shown below.



Calculate what the circumference of the circular template would need to be in order to achieve the finished measurement.

A seam allowance of 1.5cm will need to be included in your calculation.

The student could use a different method, which is totally acceptable PLEASE, PLEASE, PLEASE, get them to write down the processes.

### <u>Calculate</u> is the key word.

[5] - more marks than normal! therefore more stages to show.

### 5 dotted lines

Method 1 based on: πd (1 mark)
Diameter plus seam allowance

(1 mark)

20cm + 3cm (1.5cm + 1.5cm)

= 23cm (1mark)

3.142 (π) x 23cm (1 mark)

= 72.3 cm (1 mark)

Candidates might take  $\pi$  as 22/7 look for same stages with correct final answer.



c) 7	The cushions are to be sold under the fair trade logo. Analyse the impact on		Analyse is the keyword.
. ,	· · · · · · · · · · · · · · · · · · ·	[5] 	[6] - extended writing increased dotted lines.
			Looking for 6 different reasons or/and extended answer justifying the reason.
			Reduction in poverty[1]; workers receive a fair wage for their products[1].
			Helps improve the lives of people and communities in developing countries.[1]



(d)	It is important that designers consider the world we live in and the needs of future generations.	Evaluate is the keyword.
	Evaluate how designers can lessen the impact on our environment when designing new textile products made from natural materials. [6]	[6] - extended writing increased dotted lines.
		Looking for 6 different reasons or/and extended answer
		justifying the reason.
		Recyclability of materials
		component parts[1]
		Selection of materials before
		designing and its life expectancy
		[1]and the effect on reducing the

sites[1]