Surname

Centre Number

First name(s)

wjec

GCSE

3310U30-1

FRIDAY, 20 MAY 2022 - MORNING

## MATHEMATICS – NUMERACY UNIT 1: NON-CALCULATOR INTERMEDIATE TIER

1 hour 35 minutes

## ADDITIONAL MATERIALS

The use of a calculator is not permitted in this examination. A ruler, a protractor and a pair of compasses may be required.

## INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

You may use a pencil for graphs and diagrams only.

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

Answer **all** the questions in the spaces provided.

If you run out of space, use the additional page at the back of the booklet. Question numbers must be given for the work written on the additional page.

Take  $\pi$  as 3.14.

## **INFORMATION FOR CANDIDATES**

You should give details of your method of solution when appropriate.

Unless stated, diagrams are not drawn to scale.

Scale drawing solutions will not be acceptable where you are asked to calculate.

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

In question **2**, the assessment will take into account the quality of your linguistic and mathematical organisation, communication and accuracy in writing.



For Examiner's use only					
Question	Maximum Mark	Mark Awarded			
1.	4				
2.	5				
3.	3				
4.	6				
5.	8				
6.	3				
7.	8				
8.	6				
9.	5				
10.	2				
11.	6				
12.	4				
13.	10				
Total	70				



1. **Castell Car Park** Parking charges £3 for the first 2 hours, or part of the first 2 hours AND after that 40p for every further 20 minutes, or part of each 20 minutes Maximum stay is 24 hours Dewi parks his car in Castell Car Park. He parks for 2 hours 30 minutes. (a) How much should Dewi pay? Circle your answer. [1] £3.60 £3.40 £3.20 £3.80 £6.00 (b) Elin paid £5.80 to park her car in Castell Car Park. What is the maximum length of time that Elin has paid for? Give your answer in hours and minutes. You must show all your working. [3] Maximum length of time is ...... hours ...... minutes

3



Examiner only

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tion, communication and	O
as 1·8 cm.	
nean daily rainfall for the	
[3 + 2 OCW]	]
	-
[3]	
	ion, communication and Is 1.8 cm. Is an daily rainfall for the [3 + 2 OCW] [3







	Cost of small bag (400g) = 80p	Cost of large bag (1000g) = £1.80	
(a)	The pie chart shows information about taken to a should be a set to a short the set of t	the number of bags of frozen peas that v	vere sold
	Number of small bags	Number of large bags	
	A total of 720 bags of frozen peas were Calculate the total cost of the sales of th	sold last month. ne frozen peas.	[6]
•••••			
	Which of the two sizes of bags of peas You must show all your working.	offers the better value for money?	[2]
(b)			
(b)			









<ul> <li>(e) Use the scatter diagram to estimate the wingspan of a bird with a mass of 12g. [1]</li> <li>Wingspan is cm</li> <li>People travel by bus or by train from Hiraddug Station.</li> <li>On Tuesday, 420 people travelled by bus from the station, 35% had a travel pass.</li> <li>Calculate the number of people who travelled by bus and did not have a travel pass.</li> <li>(3) On Tuesday, the ratio of the number of people travelling by bus to the number of people travelling by train was 20:17.</li> <li>Calculate the number of people who travelled by train from the station on Tuesday.</li> <li>(3) On Tuesday, the ratio of the number of people travelled by train from the station on Tuesday.</li> <li>(4) On Tuesday, the ratio of the number of people travelled by train from the station on Tuesday.</li> <li>(5) On Tuesday, the ratio of the number of people travelled by train from the station on Tuesday.</li> <li>(6) On Tuesday, the ratio of the number of people travelled by train from the station on Tuesday.</li> <li>(7) Tuesday the ratio of people who travelled by train from the station on Tuesday.</li> <li>(8) On Tuesday the ratio of people who travelled by train from the station on Tuesday.</li> <li>(9) On Tuesday the ratio of people who travelled by train from the station on Tuesday.</li> <li>(9) Tuesday the ratio of people who travelled by train from the station on Tuesday.</li> <li>(9) On Tuesday the ratio of people who travelled by train from the station on Tuesday.</li> <li>(9) On Tuesday the ratio of people travelled by train from the station on Tuesday.</li> <li>(9) On Tuesday train was 20:17.</li> <li>(1) On Tuesday the ratio of people travelled by train from the station on Tuesday.</li> <li>(1) On Tuesday train travelled by train from the station on Tuesday.</li> <li>(1) On Tuesday train travelled by train from the station on Tuesday.</li> </ul>	(d) What type of correlation does this scatter diagram show?	[1]
Wingspan is	(e) Use the scatter diagram to estimate the wingspan of a bird with a mass of 12g.	[1]
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• (	some boxes that contain 25 washers each	h.	
Gwyn packs,	wants to buy the <b>least possible numbe</b> he uses <b>all</b> of the nuts, bolts and washe	<b>r of boxes</b> so that, in making up the rs he has bought.	
Compl to buy	lete the table below to show the number of .	of boxes of each item that Gwyn nee	ds נצו
Tou III	ust snow all your working.		[5]
		······	
		Number of boxes needed	_
	Nuts (30 in each box)	boxes	
	Bolts (5 in each box)	boxes	
C	Washers (25 in each box)	boxes	
b) Each y	washer has a thickness of 2mm, correct	to the nearest 0.5 mm	_
Calcul	ate the greatest possible thickness of a s	stack of 6 washers.	[2]

			Examine		
10.	The surface area of the Earth is 510 million $km^2$ .				
	vvrite this area in standard form.	[2]			
	11 © WJEC CBAC Ltd. (3310U30-1)	Turn over.			



	(b)	One day, Ore Calculate the	nVit produces cost of produc	1750 <b>pints</b> c cing this quar	of orange juice in htity of orange jui	one-litre bottles. ce. [3	Exar or 3]
12.	Rectangular stickers with warnings written on them are often placed near water taps.						
	It has	s a length of 14	cm and an ar	ea of 42 cm². This water	is hot	Diagram not drawn to scale	
	The s It is a	sticker below is an enlargement	mathematica of the first sti	lly similar to t cker, with sca	he first sticker. Ile factor 4.		
		This	wate	er is	hot	Diagram not drawn to scale	
	Calci You r	ulate the length must show all y	i and the width our working.	າ of the larger	sticker.	[4	1]
	······						
	·····						





![](_page_14_Figure_0.jpeg)

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Turn over.

Question number	Additional page, if required. Write the question number(s) in the left-hand margin.	Examiner only
		1
		1

![](_page_15_Picture_1.jpeg)

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