Cambridge Assessment International Education

Cambridge IGCSE™

GEOGRAPHY **0460/41**

Paper 4 Alternative to Coursework **May/June 2022**

INSERT **1 hour 30 minutes**

0277791244-I

INFORMATION

- This insert contains additional resources referred to in the questions.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.

DC (LK/CB) 304234/3
© UCLES 2022

Table 1.1 for Question 1

Vegetation cover at each site

site	1	2	3	4	5	6	7
bare soil (%)	5	35	70	100	55	**30**	45
vegetation (%)	95	65	30	0	45	**70**	55

© UCLES 2022

Fig. 1.2 for Question 1

Method to measure infiltration

The students used a **bottomless cylinder** which they pushed into the ground to the same depth at each site. The students put a **ruler** which measured in centimetres inside the cylinder. At each measuring site the students poured water into the cylinder up to a height of 120 mm. They recorded the water height in the cylinder at the end of every minute timed by a **stopwatch**, for ten minutes or until all the water had infiltrated into the ground.



Table 1.2 for Question 1

Results of students' measurements of water level

time of measurement (mins)	water level in cylinder (mm)						
	site 1	site 2	site 3	site 4	site 5	site 6	site 7
0	120	120	120	120	120	120	120
1	101	105	109	114	108	103	107
2	85	91	100	108	98	88	94
3	70	78	92	103	89	74	82
4	54	64	83	97	77	58	71
5	36	51	73	91	67	44	57
6	17	39	65	85	56	29	45
7	0	25	57	80	45	13	34
8		13	47	74	35	0	24
9		0	38	69	26		12
10			29	65	15		5

© UCLES 2022

Fig. 1.4 for Question 1

Method to investigate 'footpath erosion'

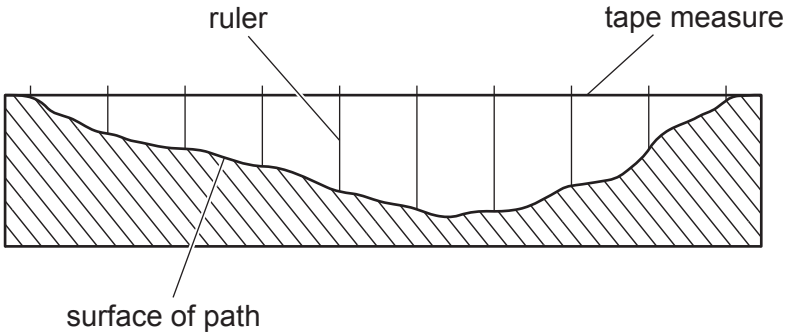


Table 1.5 for Question 1

Results of students' measurements

distance across the path (m)	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5
depth of the path (cm)	0	2	3	5	5	9	9	**6**	**3**	0

© UCLES 2022

Fig. 2.1 for Question 2

Student questionnaire for people shopping

Shopping area: ……

Date: …… Time: ……

Excuse me; I am a student at Manchester Academy. Please could you answer these questions to help me with my geography fieldwork?

1. How often do you come to the shopping centre?

☐ every day ☐ every two or three days ☐ once a week

☐ once a month ☐ less than once a month

2. How did you travel to the shopping centre today?

☐ bus ☐ car / van / motor bike ☐ train

☐ walk / bicycle

3. Why did you decide to come to this shopping centre today?

☐ near home ☐ near work

☐ good access by public transport ☐ good value for money

☐ wide range of shops ☐ convenient parking

4. What are the main items you are buying here today?

☐ food and drink ☐ gifts

☐ furniture / electrical goods ☐ clothes / jewellery

☐ other

Thank you for answering my questions.

Table 2.1 for Question 2

Answers to question 1: How often do you come to the shopping centre?

frequency	CBD (%)	local neighbourhood shopping centre (%)	out-of-town shopping mall (%)
every day	5	28	0
every two or three days	10	35	4
once a week	37	32	18
once a month	29	5	**56**
less than once a month	19	0	**22**

Table 2.2 for Question 2

Answers to question 2: How did you travel to the shopping centre today?

method of transport	CBD (%)	local neighbourhood shopping centre (%)	out-of-town shopping mall (%)
bus	39	15	17
car / van / motor bike	43	12	83
train	10	0	0
walk / bicycle	8	73	0

Table 2.3 for Question 2

Answers to question 3: Why did you decide to come to this shopping centre today?

reason for visit	CBD (%)	local neighbourhood shopping centre (%)	out-of-town shopping mall (%)
near home	6	79	0
near work	7	11	0
good access by public transport	32	5	8
good value for money	4	0	11
wide range of shops	38	0	**39**
convenient parking	13	5	**42**

© UCLES 2022

Table 2.4 for Question 2

Answers to question 4: What are the main items you are buying here today?

main item	CBD (%)	local neighbourhood shopping centre (%)	out-of-town shopping mall (%)
food and drink	10	74	15
gifts	37	0	18
furniture / electrical goods	12	0	27
clothes / jewellery	**31**	5	37
other	**10**	21	3

Fig. 2.5 for Question 2

Local neighbourhood shopping centre



Fig. 2.6 for Question 2

Out-of-town shopping mall



© UCLES 2022

BLANK PAGE

The boundaries and names shown, the designations used and the presentation of material on any maps contained in this question paper/insert do not imply official endorsement or acceptance by Cambridge Assessment International Education concerning the legal status of any country, territory, or area or any of its authorities, or of the delimitation of its frontiers or boundaries.

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of Cambridge Assessment. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which is a department of the University of Cambridge.

© UCLES 2022