



Cambridge IGCSE™

GEOGRAPHY**0460/43**

Paper 4 Alternative to Coursework

May/June 2020

INSERT

1 hour 30 minutes

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.



This document has **8** pages. Blank pages are indicated.

Fig. 1.1 for Question 1

Employee questionnaire

I am a student at Rivington School. Please answer the following questions for my IGCSE Geography fieldwork.

What type of work do you do?

Research and Development

Component Assembly

1. In which part of the urban area do you live?

Wirral

Prescot

Liverpool

Huyton

Crosby

Rainford

Formby

St Helens

Southport

Whiston

West Lancashire

Haydock

Kirkby

2. What are the **two** main disadvantages of living in your chosen area?

1. _____

2. _____

Thank you for your help.

Fig. 1.2 for Question 1

Part of a student's recording sheet

| Part of the urban area | Research and development employees | Assembly work employees |
|------------------------|------------------------------------|-------------------------|
| Wirral | III | |
| Liverpool | | |
| Crosby | I | |
| Formby | | I |
| Southport | I | I |
| West Lancashire | II | |

Table 1.1 for Question 1

Answers to Question 1 in the questionnaire:

In which part of the urban area do you live?

| Part of the urban area | Research and development employees | Assembly work employees |
|------------------------|------------------------------------|-------------------------|
| Wirral | 8 | 3 |
| Liverpool | 5 | 23 |
| Crosby | 6 | 4 |
| Formby | 10 | 1 |
| Southport | 16 | 1 |
| West Lancashire | 7 | 4 |
| Kirkby | 2 | 16 |
| Prescot | 7 | 15 |
| Huyton | 3 | 19 |
| Rainford | 9 | 2 |
| St Helens | 9 | 7 |
| Whiston | 8 | 3 |
| Haydock | 10 | 2 |
| Total | 100 | 100 |

Table 1.2 for Question 1

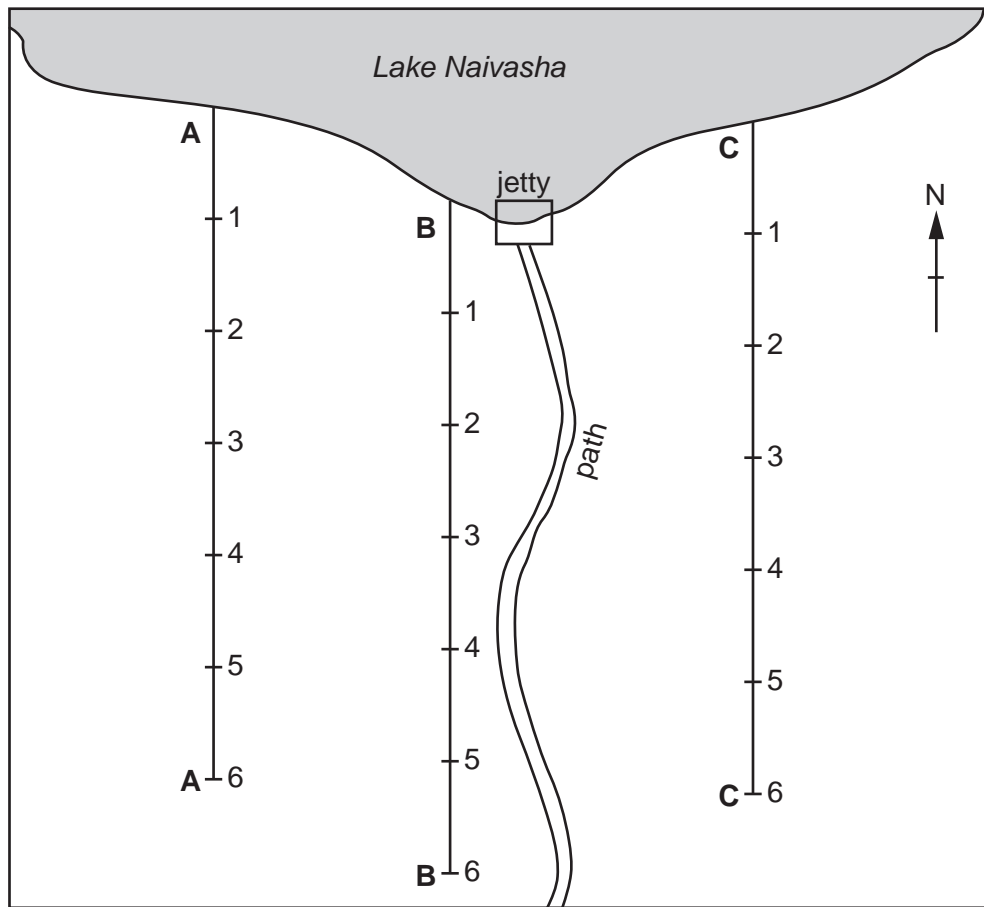
Answers to Question 2 in the questionnaire:

What are the two main disadvantages of living in your chosen area?

| Disadvantage | Research and development employees | Assembly work employees |
|--|------------------------------------|-------------------------|
| The journey to work takes a long time | 36 | 2 |
| Congested roads on the journey to work | 32 | 5 |
| Overcrowded trains on the journey to work | 18 | 6 |
| Noise from traffic and aircraft | 8 | 12 |
| Social disorder, e.g. gangs, graffiti, vandalism | 3 | 34 |
| No open spaces for recreation | 1 | 23 |
| Poor schools | 2 | 18 |
| Total | 100 | 100 |

Fig. 2.1 for Question 2

Fieldwork sites



Key

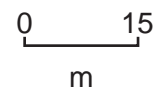
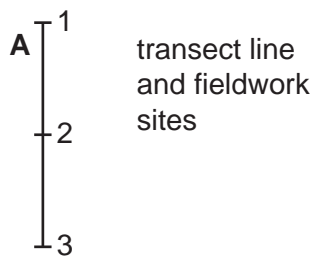


Fig. 2.2 for Question 2

Measuring infiltration

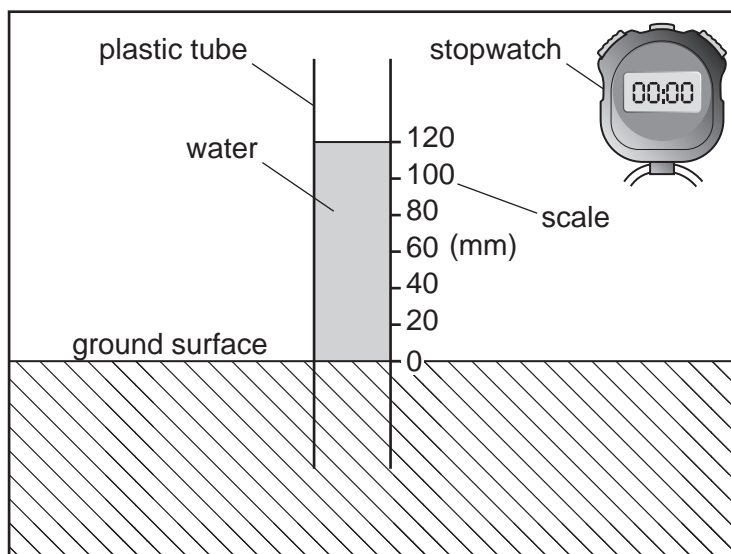


Table 2.1 for Question 2

Results of students' measurements of water level along transect A

| Time of measurement (min) | Water level in plastic tube (mm) | | | | | |
|---------------------------|----------------------------------|--------|--------|-----------|--------|--------|
| | Transect A | | | | | |
| | site 1 | site 2 | site 3 | site 4 | site 5 | site 6 |
| 0 | 120 | 120 | 120 | 120 | 120 | 120 |
| 1 | 119 | 115 | 115 | 115 | 111 | 118 |
| 2 | 117 | 109 | 109 | 106 | 98 | 115 |
| 3 | 115 | 100 | 74 | 99 | 80 | 113 |
| 4 | 110 | 95 | 45 | 88 | 70 | 111 |
| 5 | 108 | 84 | 34 | 81 | 62 | 108 |
| 6 | 105 | 76 | 18 | 76 | 50 | 106 |
| 7 | 102 | 63 | 10 | 69 | 35 | 103 |
| 8 | 100 | 55 | 5 | 63 | 24 | 96 |
| 9 | 98 | 53 | 2 | 58 | 16 | 92 |
| 10 | 95 | 48 | 0 | 55 | 2 | 85 |

Table 2.2 for Question 2

Infiltration rate at sites away from lake

| Site number | Distance from lake (m) | Infiltration rate (mm per min) | | |
|-------------|------------------------|--------------------------------|------------|-------------|
| | | Transect A | Transect B | Transect C |
| 1 | 15 | 2.5 | 1.5 | 18.2 |
| 2 | 30 | 7.2 | 2.0 | 20.0 |
| 3 | 45 | 12.0 | 5.1 | 13.3 |
| 4 | 60 | 6.5 | 11.3 | 17.1 |
| 5 | 75 | 11.8 | 13.3 | 13.3 |
| 6 | 90 | 3.5 | 17.1 | 15.0 |

Table 2.3 for Question 2

Gradient results at sites on transect C

| Site number | Slope gradient (°) | Infiltration rate (mm per min) |
|-------------|--------------------|--------------------------------|
| 1 | 7 | 18.2 |
| 2 | 4 | 20.0 |
| 3 | 2 | 13.3 |
| 4 | 6 | 17.1 |
| 5 | 10 | 13.3 |
| 6 | 9 | 15.0 |

Table 2.4 for Question 2

Vegetation at each fieldwork site

Transect A

| | site 1 | site 2 | site 3 | site 4 | site 5 | site 6 |
|--------------------------------|-------------|--------|-------------|--------|-------------|--------------|
| Infiltration rate (mm per min) | 2.5 | 7.2 | 12.0 | 6.5 | 11.8 | 3.5 |
| Type of vegetation | scrub grass | grass | dense grass | grass | dense grass | patchy grass |

Transect B

| | site 1 | site 2 | site 3 | site 4 | site 5 | site 6 |
|--------------------------------|-----------|-------------|--------|-------------|-------------|----------------------|
| Infiltration rate (mm per min) | 1.5 | 2.0 | 5.1 | 11.3 | 13.3 | 17.1 |
| Type of vegetation | bare soil | scrub grass | grass | dense grass | dense grass | dense grass & bushes |

Transect C

| | site 1 | site 2 | site 3 | site 4 | site 5 | site 6 |
|--------------------------------|-----------------------------|-----------------------------|-------------|-------------|-------------|-------------|
| Infiltration rate (mm per min) | 18.2 | 20.0 | 13.3 | 17.1 | 13.3 | 15.0 |
| Type of vegetation | dense grass & papyrus grass | dense grass & papyrus grass | dense grass | dense grass | dense grass | dense grass |

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