

# Cambridge IGCSE<sup>™</sup>

GEOGRAPHY 0460/43

Paper 4 Alternative to Coursework

May/June 2023

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.



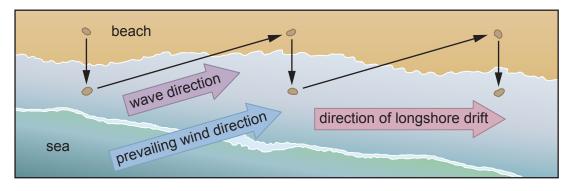
Fig. 1.1 for Question 1

Cliffs at Sheringham



Fig. 1.2 for Question 1

Longshore drift



# Key movement of pebble

Fig. 1.3 for Question 1

Groynes at Sheringham



# Fig. 1.4 for Question 1

## A student's fieldwork notes

# How to investigate longshore drift

- 1. Go along the groyne from the back of the beach to the sea.
- 2. Use a ruler to measure from the top of the groyne to the beach.
- 3. Record the difference in height every two metres along the groyne.
- 4. Repeat this on both sides of the groyne.

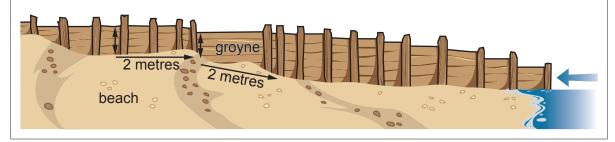


Table 1.2 for Question 1

## Results of students' measurements

|   | difference in height between top of groyne and beach (m) |                     |  |
|---|--|---------------------|--|
| distance along the<br>groyne from top<br>of the beach (m) | west side of<br>groyne                                   | east side of groyne |  |
| 0   | 0.31   | 0.41                |  |
| 2   | 0.29   | 0.48                |  |
| 4   | 0.31   | 0.61                |  |
| 6   | 0.56   | 0.71                |  |
| 8   | 0.45   | 0.90                |  |
| 10  | 0.46   | 1.07                |  |
| 12  | 0.55   | 1.30                |  |

Fig. 1.6 for Question 1

Coastal defences in the local area



Fig. 1.7 for Question 1

# Students' bi-polar survey recording form

Coastal protection method: groyne rip rap sea wall (circle the method)

| disadvantage                               | -2 | -1 | 0 | +1 | +2 | advantage                                 |
|--|----|----|---|----|----|---|
| unattractive                               |    |    |   |    |    | attractive                                |
| does not protect the land                  |    |    |   |    |    | protects the land                         |
| does not stop erosion by waves             |    |    |   |    |    | stops all erosion by waves                |
| danger of accident walking on it           |    |    |   |    |    | safe to walk on                           |
| stops access to beach                      |    |    |   |    |    | allows access to beach                    |
| expensive to construct                     |    |    |   |    |    | cheap to construct                        |
| construction causes<br>lots of disturbance |    |    |   |    |    | construction causes<br>little disturbance |
| total score =                              |    |    |   |    |    |   |

Table 1.3 for Question 1

Results of students' bi-polar survey

| feature being assessed          | students' score |         |          |
|---------------------------------|-----------------|---------|----------|
|                                 | groyne          | rip rap | sea wall |
| attractiveness                  | +1              | -1      | -2       |
| protection of land behind beach | -1              | +2      | +2       |
| stopping wave erosion           | -1              | +2      | +2       |
| safety walking on it            | -1              | -2      | -1       |
| access to the beach             | +1              | -1      | -2       |
| construction costs              | +2              | -1      | -2       |
| disturbance during construction | +2              | -1      | -2       |

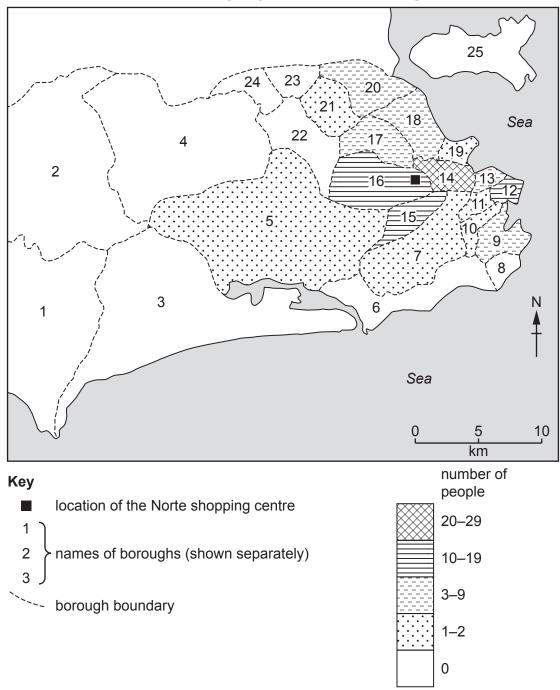
# Fig. 2.1 for Question 2

# Students' shopping questionnaire

| Shopping              | area:   | Barra                               | Norte                       | (circle)                                | )           |           |
|-----------------------|---|-------------------------------------|-----------------------------|---|-------------|-----------|
| Date:                 |   |                                     | Time:                       | • | ••••••      | •••••     |
| Excuse m<br>questions | e, I am a stud<br>to help me wit                  | lent at a local c<br>h my geography | college. Plea<br>fieldwork? | ise could                               | d you answ  | ver these |
| 1. Whic               | . Which borough of Rio de Janeiro do you live in? |                                     |                             |   |             |           |
|                       |   | Following do you<br>✓) your answer. |                             | frequer                                 | ntly when   | you come  |
|                       | food (e.g. gro                                    | ceries, vegetabl                    | les)                        |   |             |           |
|                       | household god                                     | ods (e.g. paint, c                  | leaning mat                 | erials)                                 |             |           |
|                       | personal item                                     | s (e.g. magazine                    | , medicine)                 |   |             |           |
|                       | clothes and shoes                                 |                                     |                             |   |             |           |
|                       | electrical products (e.g. television, freezer)    |                                     |                             |   |             |           |
|                       | electronic goods (e.g. iPad, gaming console)      |                                     |                             |   |             |           |
|                       | furniture   |                                     |                             |   |             |           |
|                       | jewellery   |                                     |                             |   |             |           |
| 3. How I              | ong did your jo                                   | ourney from hon                     | ne to the sh                | opping                                  | centre tak  | e?        |
|                       | less than 30 n                                    | ninutes                             | between                     | 30 minu                                 | utes and 60 | O minutes |
|                       | between 61 m                                      | inutes and 90 m                     | inutes                      | mo                                      | ore than 90 | O minutes |
| 4. How                | did you travel t                                  | o the shopping                      | centre todo                 | ıy?                                     |             |           |
|                       | bus/taxi  |                                     | car/mot                     | orbike                                  |             |           |
|                       | subway train                                      |                                     | walk/bio                    | cycle                                   |             |           |
| Thank you             | ı for answering                                   | my questions.                       |                             |   |             |           |

Fig. 2.3 for Question 2

Number of people going to the Norte shopping centre



**Table 2.1 for Question 2** 

# Answers to question 2 in the questionnaire

Which one of the following do you buy most frequently when you come here to shop?

|                     | Barra<br>(%) | Norte<br>(%) |
|---------------------|--------------|--------------|
| clothes and shoes   | 28           | 27           |
| jewellery           | 22           | 21           |
| electrical products | 20           | 20           |
| electronic goods    | 17           | 15           |
| furniture           | 7            | 9            |
| household goods     | 3            | 2            |
| personal items      | 2            | 4            |
| food                | 1            | 2            |

Table 2.2 for Question 2

# Answers to question 3 in the questionnaire

How long did your journey from home to the shopping centre take?

| time taken                | Barra<br>(%) | Norte<br>(%) |
|---------------------------|--------------|--------------|
| less than 30 minutes      | 14           | 21           |
| between 30 and 60 minutes | 52           | 59           |
| between 61 and 90 minutes | 23           | 16           |
| more than 90 minutes      | 11           | 4            |

**Table 2.3 for Question 2** 

# Answers to question 4 in the questionnaire

How did you travel to the shopping centre today?

|               | Barra<br>(%) | Norte<br>(%) |
|---------------|--------------|--------------|
| bus/taxi      | 42           | 29           |
| car/motorbike | 58           | 11           |
| subway train  | 0            | 55           |
| walk/bicycle  | 0            | 5            |

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