Cambridge IGCSE™

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GEOGRAPHY **0460/22**

Paper 2 Geographical Skills **October/November 2021**

1 hour 30 minutes

You must answer on the question paper.

You will need: Insert (enclosed) Plain paper
1:25 000 survey map (enclosed) Protractor
Calculator Ruler

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- If additional space is needed, you should use the lined pages at the end of this booklet; the question number or numbers must be clearly shown.

INFORMATION

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [ ].
- The insert contains additional resources referred to in the questions.

This document has **24** pages. Any blank pages are indicated.

1 Study the map extract for Pluneret, France. The scale is 1:25 000.

(a) Fig. 1.1 shows some of the features in the south west of the map extract. Study Fig. 1.1 and the map extract, and answer the questions below.
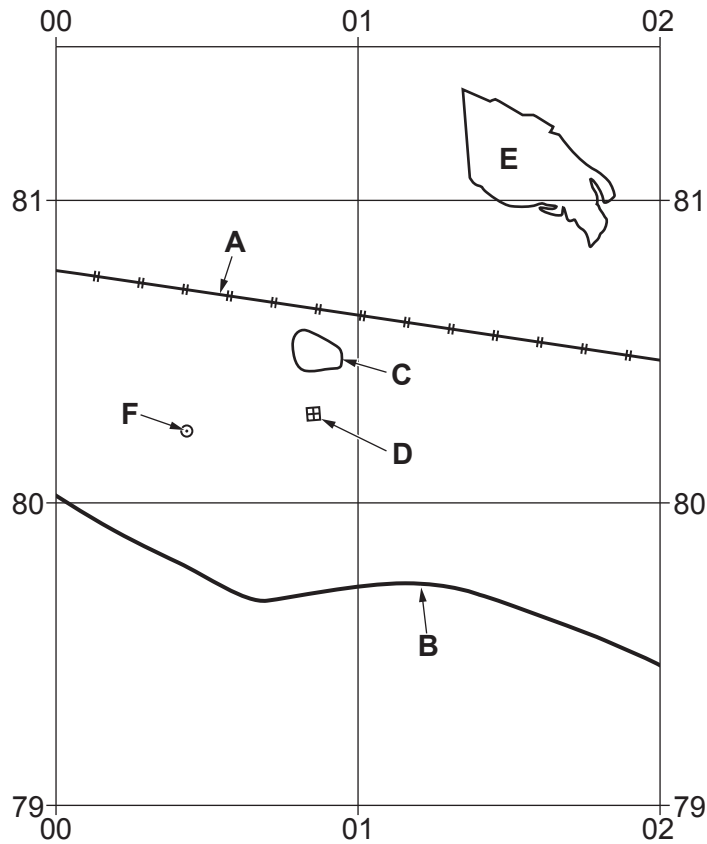

Fig. 1.1

Using the map extract, identify the following features shown in Fig. 1.1:

(i) feature **A**

.... [1]

(ii) the type of road at **B**

.... [1]

(iii) the height above sea level of the contour at **C**

.... metres [1]

(iv) feature **D**

.... [1]

(v) the land use at **E**.

.... [1]

(b) Give the six-figure grid reference of the traffic roundabout (circle) at **F**, shown in Fig. 1.1.

.... [1]

(c) Identify **two** services provided for tourists within 1 km of the centre of Ste-Anne-d'Auray.

1..

2.. [2]

(d) Look at the part of the D19 road that runs from the north edge of the map extract to the junction with the D102 road at Ste-Anne-d'Auray (032834).

(i) What is the distance along this section of road? Tick (✓) **one** box below.

	tick (✓)
2250 metres	
2450 metres	
2650 metres	
2850 metres	

[1]

(ii) What is the compass direction **from** the point where the D19 road meets the north edge of the map **to** the junction with the D102 road at Ste-Anne-d'Auray?
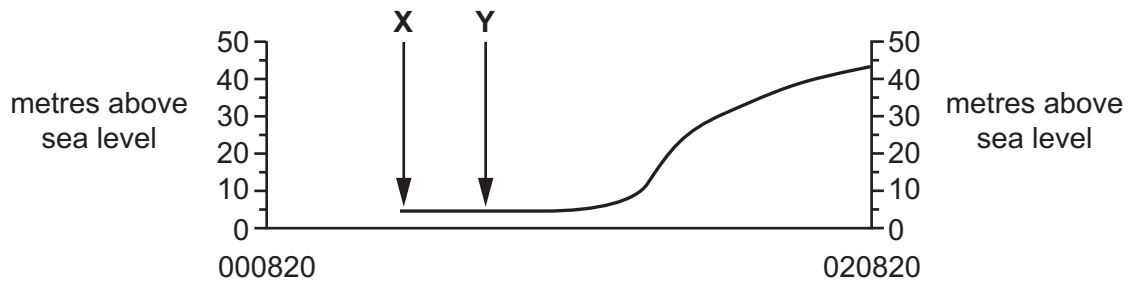
.... [1]

(iii) Measure the bearing **from** the point where the D19 road meets the north edge of the map **to** the junction with the D102 road at Ste-Anne-d'Auray.

.... degrees [1]

(e) Fig. 1.2 is a cross-section along northing 82 from 000820 to 020820.

Fig. 1.2

(i) Identify the feature at **X**.

.... [1]

(ii) Identify the feature at **Y**.

.... [1]

(iii) The cross-section shown on Fig. 1.2 is incomplete. Using information from the map extract, draw a line on Fig. 1.2 to **complete the cross-section**. [1]

(f) Look at the main river which crosses the map extract and passes through the town of Pluneret.

Describe the physical (natural) features of the river and its valley. Do **not** refer to land use beside the river.

River

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Valley

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....

.... [6]

[Total: 20]

2 **(a)** Table 2.1 gives information about the population of the nine provinces of South Africa.

Which type of graph would be most suitable to show the information about population in Table 2.1?

.... [1]

Table 2.1

province	% of South Africa's population
Eastern Cape (EC)	14.6
Free State (FS)	6.2
Gauteng (GP)	20.1
KwaZulu-Natal (KZN)	20.9
Limpopo (LP)	11.3
Mpumalanga (MP)	7.4
Northern Cape (NC)	2.3
North West (NW)	7.1
Western Cape (WC)	10.1
Total	100.0

(b) Table 2.2 gives information about estimates of migration between the provinces from 2016 to 2021.

Table 2.2

province	in-migrants	out-migrants	net migration
Eastern Cape (EC)	191 435	515 648	–324 213
Free State (FS)	147 246	160 107	–12 861
Gauteng (GP)	1 595 106	544 875	1 050 231
KwaZulu-Natal (KZN)	307 123	360 830	–53 707
Limpopo (LP)	278 847	417 453	–138 606
Mpumalanga (MP)	285 678	212 271	73 407
Northern Cape (NC)	82 502	76 832	
North West (NW)	317 261	207 662	109 599
Western Cape (WC)	485 560	175 831	309 729

(i) Which **one** of the nine provinces has the largest number of people arriving and the largest number of people leaving?

.... [1]

(ii) Calculate the net migration of Northern Cape province.

.... [1]

(c) Fig. 2.1 shows the location of the nine provinces and their GDP per capita. GDP is a measure of wealth.

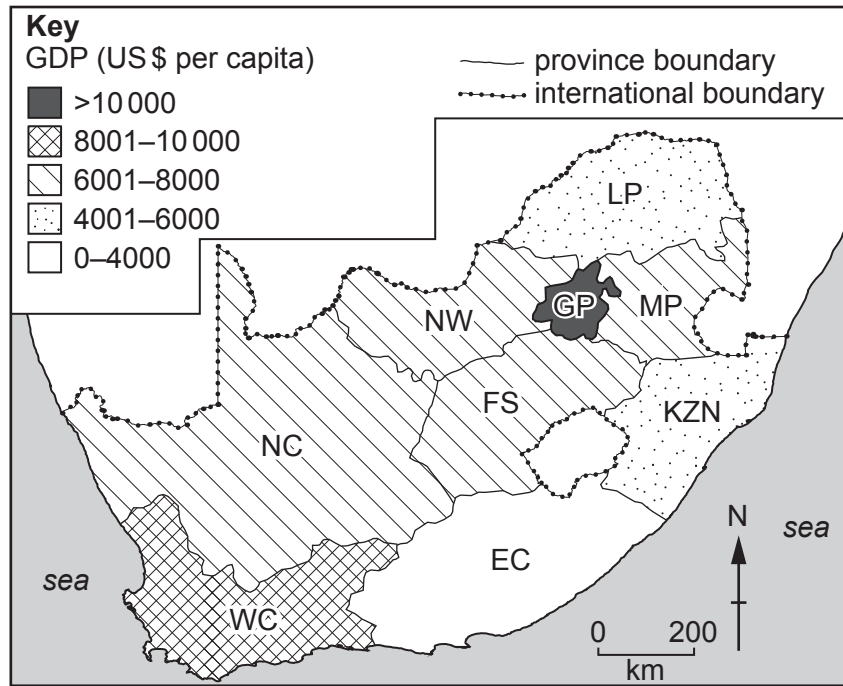**Fig. 2.1**

Describe the distribution of the provinces with a GDP per capita between US$ 0 and 6000.

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.... [2]

(d) Using Table 2.2 and Fig. 2.1, describe the link between **net migration** and GDP per capita in South Africa.

....

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....

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.... [3]

[Total: 8]

3   Urbanisation is the increase in the percentage of the population living in towns and cities. Fig. 3.1 shows urbanisation in 2006 and in 2017 in countries with different incomes.

Fig. 3.1

(a)   Describe the changes in the urban population shown in Fig. 3.1. Do **not** use statistics in your answer.

....

....

....

....

....

....

....

.... [3]

(b) Urbanisation can lead to urban sprawl and rapid development in the rural-urban fringe. Figs. 3.2 and 3.3 (Insert) show parts of the rural-urban fringe of an urban area in Africa.

Give evidence from Figs. 3.2 and 3.3 which shows that urban sprawl is taking place.

Fig. 3.2

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Fig. 3.3

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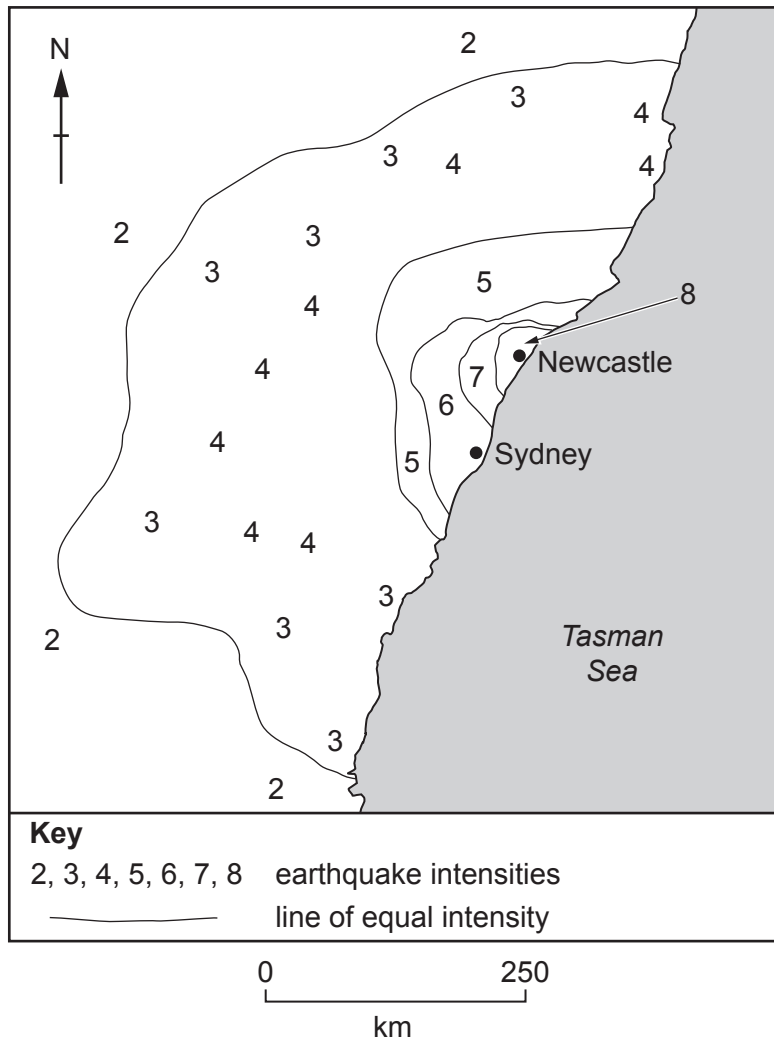... [5]

[Total: 8]

4 Australia's biggest earthquake was at the city of Newcastle in 1989. It measured 5.6 on the Richter scale and killed 13 people.

(a) Fig. 4.1 and Table 4.1 give information about the intensity (strength) of the earthquake and its effects.

Fig. 4.1

Table 4.1

intensity value	description of effects
1	Not normally felt. Birds and animals uneasy.
2	Felt only by a few people at rest.
3	Vibrations like a large truck passing. Felt by people at rest.
4	Felt indoors by many. Cars rock.
5	Sleepers wakened. Some windows broken.
6	Small bells ring. Trees sway. Loose objects fall.
7	Difficult to stand up. People run outdoors. Walls crack.
8	Partial collapse of buildings. Chimneys fall.

(i) On Fig. 4.1, **label the position of the epicentre** with the letter **E**. [1]

(ii) On Fig. 4.1, **draw the missing line** of equal intensity. [1]

(iii) Using Fig. 4.1 and Table 4.1, describe the effects of the earthquake in Australia's largest city, Sydney.

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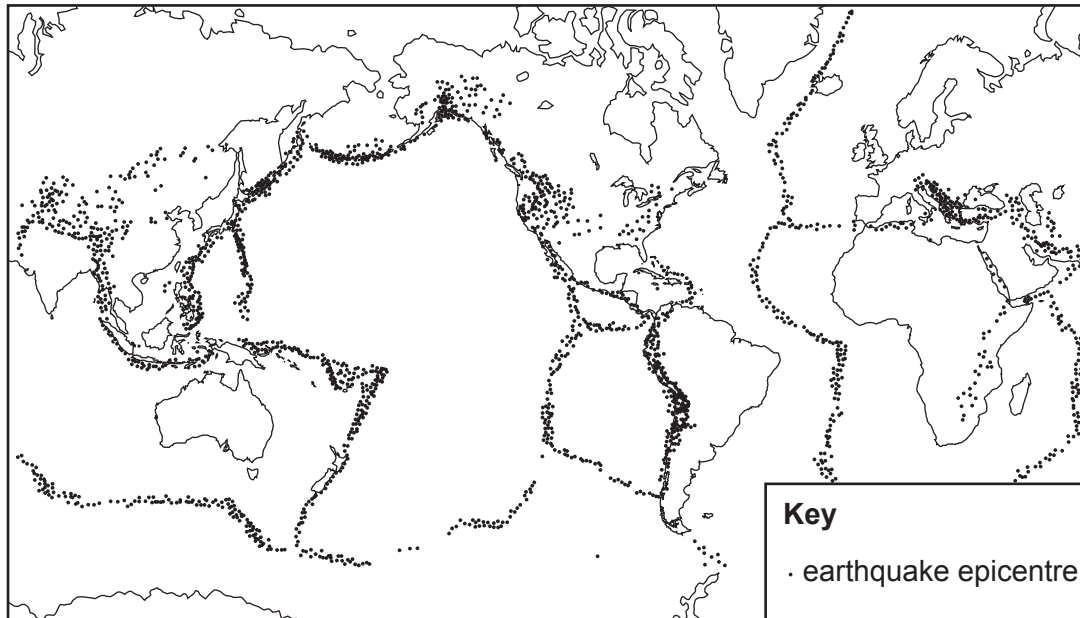.. [2]
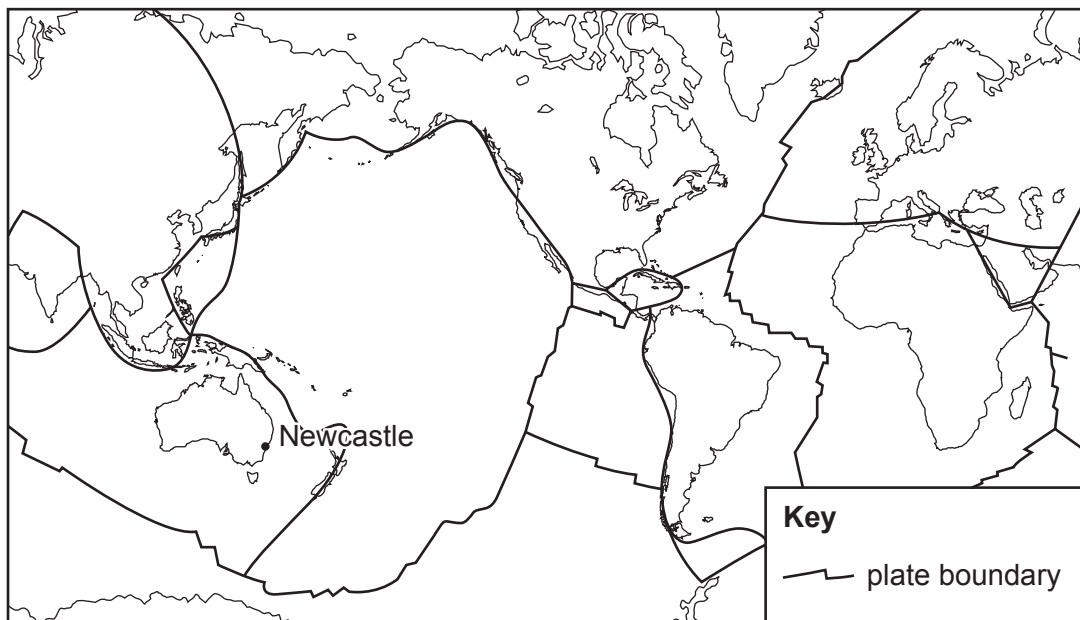
(b) Fig. 4.2 shows the world distribution of earthquakes. Fig. 4.3 shows plate boundaries and the location of Newcastle.

Using Figs. 4.2 and 4.3, what is unusual about the position of the Newcastle earthquake?

....

.... [1]

Fig. 4.2

Fig. 4.3

(c) Explain why many earthquakes occur at destructive (convergent) plate boundaries.

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.... [3]

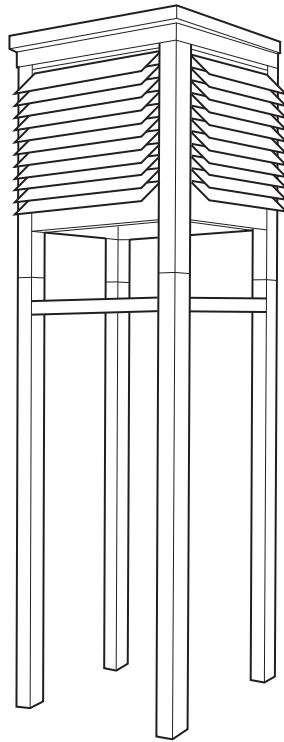[Total: 8]

5 Fig. 5.1 shows part of a weather station.

Fig. 5.1

(a) Name the box shown in Fig. 5.1.

.... [1]

(b) Explain why the box shown in Fig. 5.1:

(i) is painted white

....

.... [1]

(ii) has louvres (slats) in the sides

....

.... [1]

(iii) is on legs 1.25 m above the ground.

....

.... [1]

(c) Fig. 5.2 shows one of the instruments kept inside the box shown in Fig. 5.1.
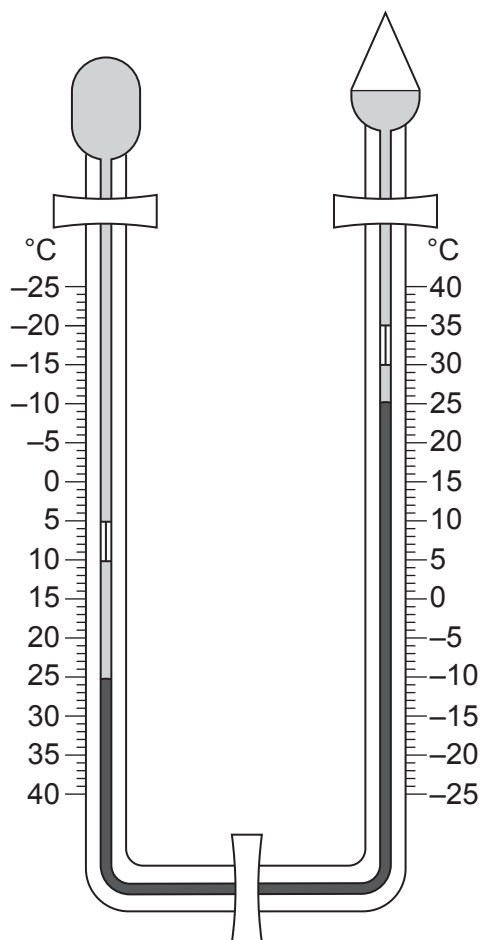
Fig. 5.2

On Fig. 5.2, **use labelled arrows** to show the position of:

(i) alcohol [1]

(ii) mercury. [1]

(d) (i) What was the maximum temperature since the instrument shown in Fig. 5.2 was re-set?

.... [1]

(ii) What was the range of temperature since the instrument was re-set?

.... [1]

[Total: 8]

6 Fig. 6.1 (Insert) shows the north and south of Italy. Figs. 6.2, 6.3 and 6.4 give information about wealth, industry and life expectancy in Italy.

The north of Italy is more developed than the south.

(a) Give evidence for and against this statement using Figs. 6.1, 6.2, 6.3 and 6.4.

GDP per capita (wealth production)
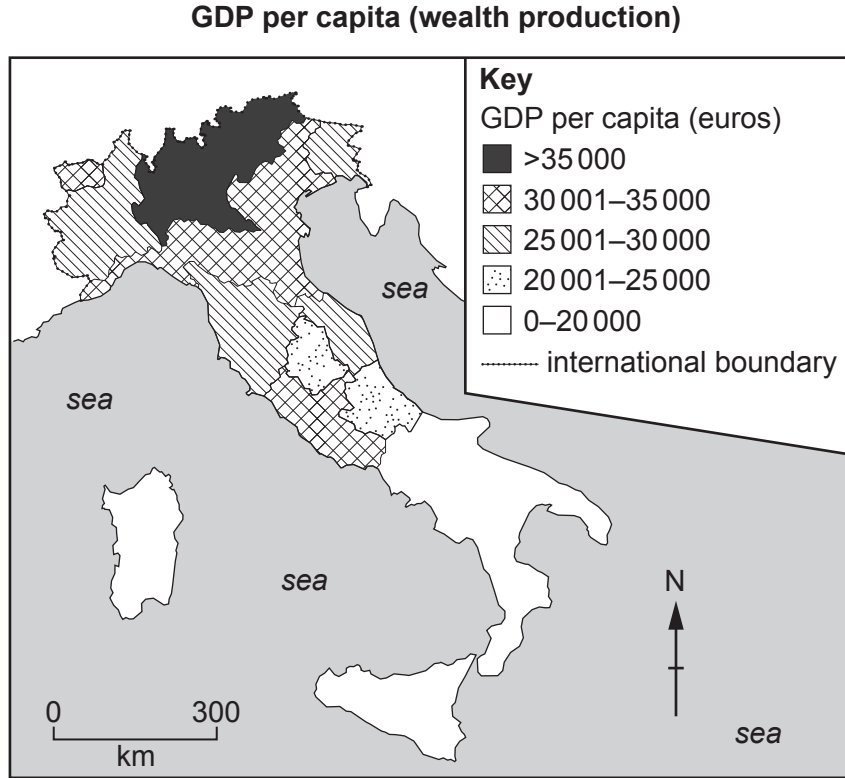
Fig. 6.2

GDP per capita (wealth production)

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....

Industry

Fig. 6.3

Industry

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                                                       [Turn over
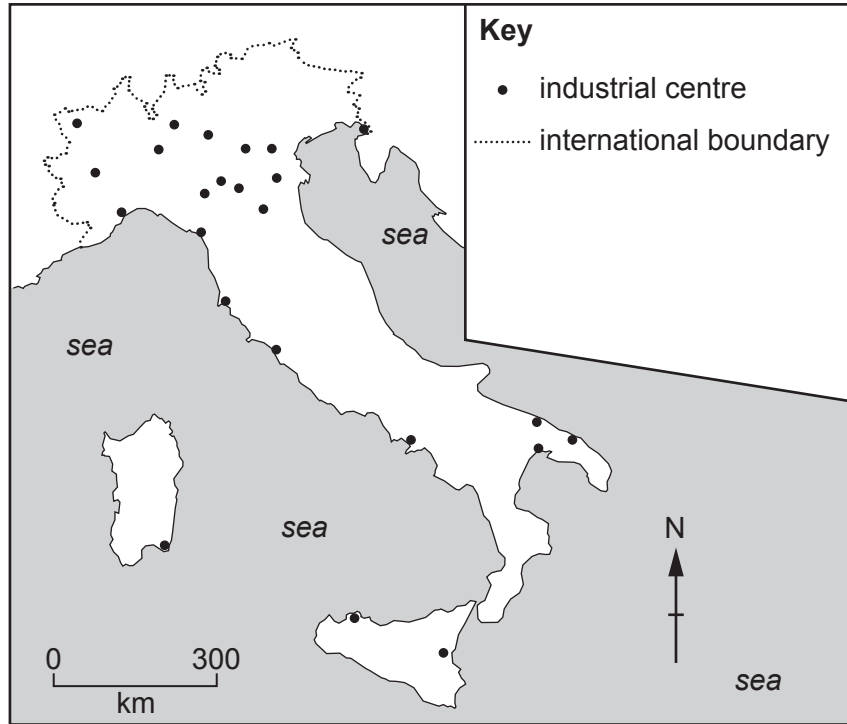
Life expectancy

Fig. 6.4

Life expectancy

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.... [6]
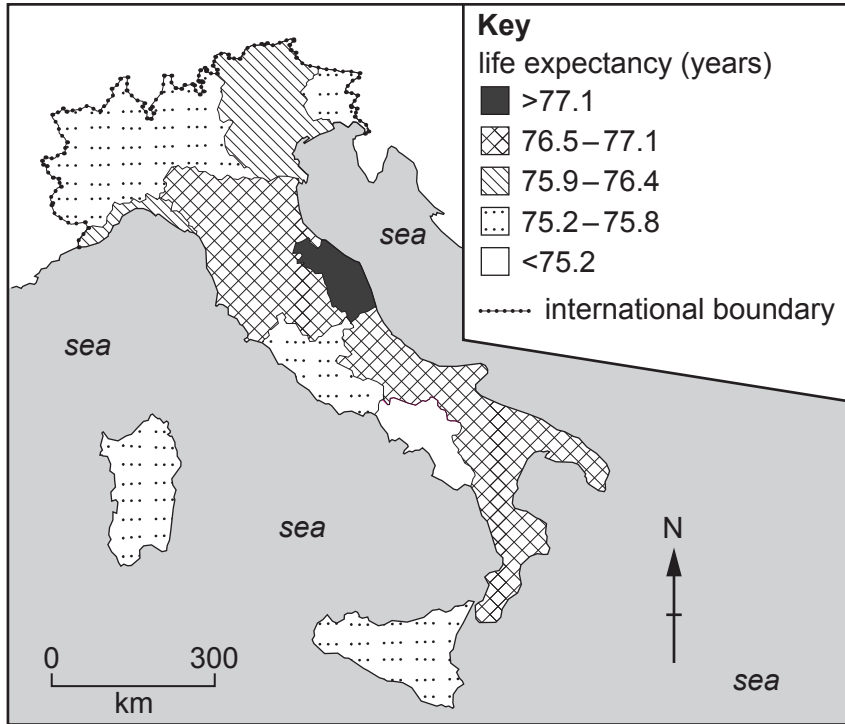
(b) Suggest **two** factors that can cause differences in development between the regions of a country.

1...

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2...

.... [2]

[Total: 8]

Additional Pages

If you use the following lined pages to complete the answer(s) to any question(s), the question number(s) must be clearly shown.

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