



# Cambridge O Level

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## GEOGRAPHY

2230/01

Paper 1 Geographical Themes

May/June 2021

2 hours



You must answer on the enclosed answer booklet.

You will need:    Answer booklet (enclosed)                      Ruler  
                         Insert (enclosed)  
                         Calculator

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### INSTRUCTIONS

- Answer **three** questions in total, **each** from a different theme.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

### INFORMATION

- The total mark for this paper is 75.
- The number of marks for each question or part question is shown in brackets [ ].
- The insert contains additional resources referred to in the questions.

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This document has **12** pages. Any blank pages are indicated.

**Theme 1: Population and settlement**

Answer **one** question from this theme.

**EITHER**

- 1 (a) Describe how the birth rate of a country is calculated. [2]
- (b) (i) Study Fig. 1.1, which is an extract from a newspaper in Japan.

**Birth rates and death rates in Japan**

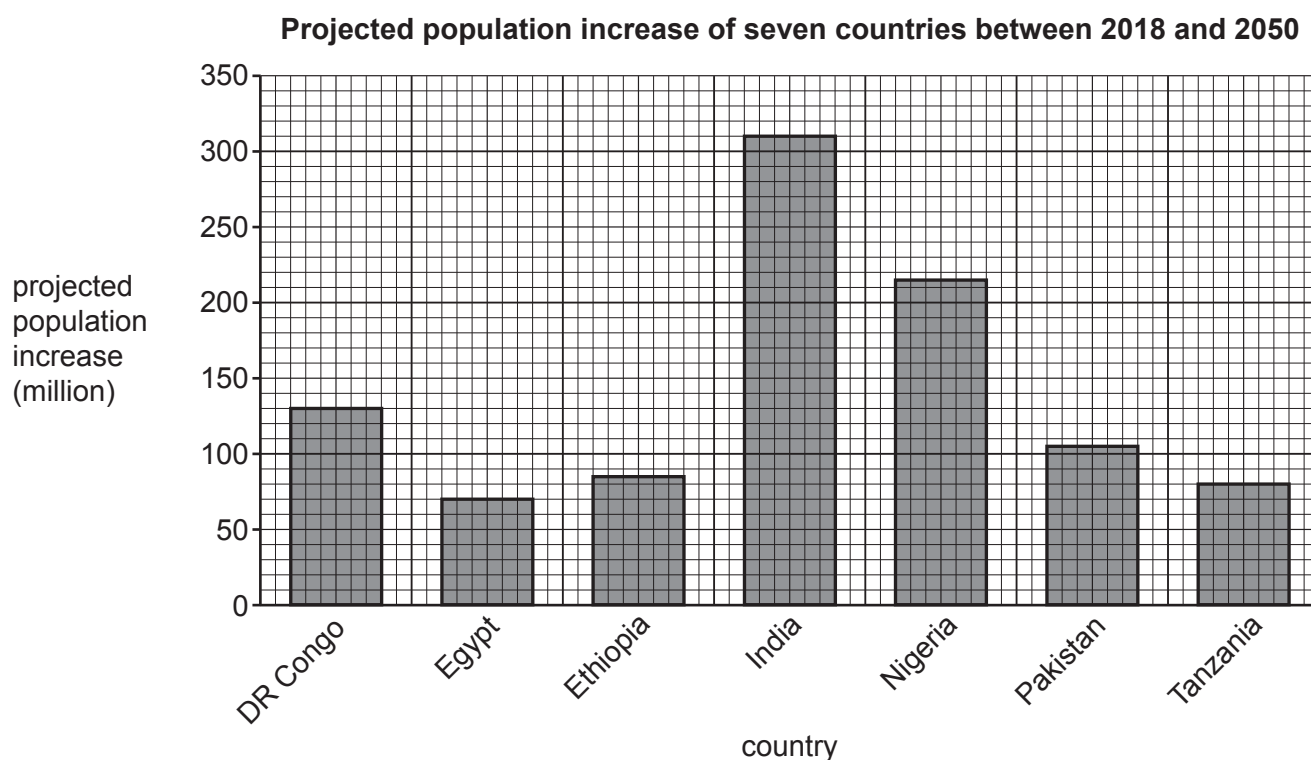
In 2018 there were 0.9 million births and 1.3 million deaths. Government efforts are failing to encourage families to have more children.

**Fig. 1.1**

Calculate the difference between the births and deaths in Japan in 2018 and state the impact that this is having on the overall population. [2]

- (ii) Give **three** reasons to suggest why government efforts in Japan are failing to encourage higher birth rates in the country. [3]

- (c) (i) Study Fig. 1.2, which shows the projected population increase of seven countries between 2018 and 2050.



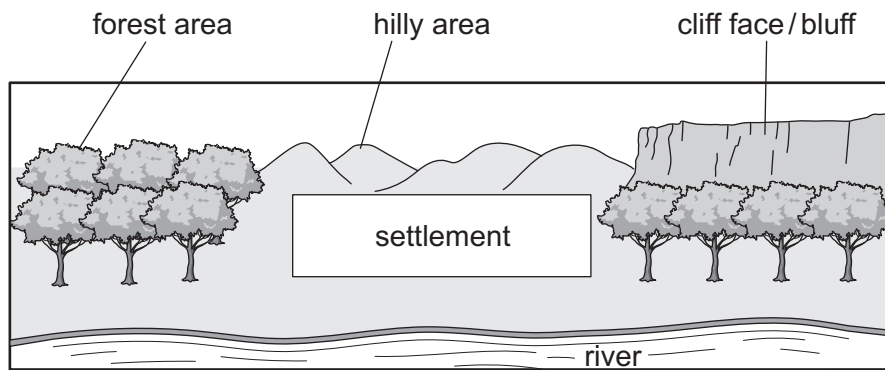
**Fig. 1.2**

- State the highest projected population increase shown in Fig. 1.2. [1]
- (ii) Suggest the consequences of large population increases for these countries. [3]
- (iii) Sketch an expansive population pyramid. Label the key population features on the pyramid. [4]
- (d) (i) Study Fig. 1.3 (Insert), which shows the quality of life in countries around the world.
- Describe the pattern of very high quality of life in countries around the world shown in Fig. 1.3. [3]
- (ii) Describe the strategies used to improve the quality of life in LICs (low income countries). With reference to examples, evaluate how effective these strategies have been. [7]

[Total: 25]

OR

- 2 (a) (i) Study Fig. 2.1, which shows a rural area.



**Fig. 2.1**

State **two** reasons why the site shown in Fig. 2.1 would be a good location for the growth of a settlement. [2]

- (ii) Suggest **one** factor limiting the future growth of the settlement in Fig. 2.1. [1]

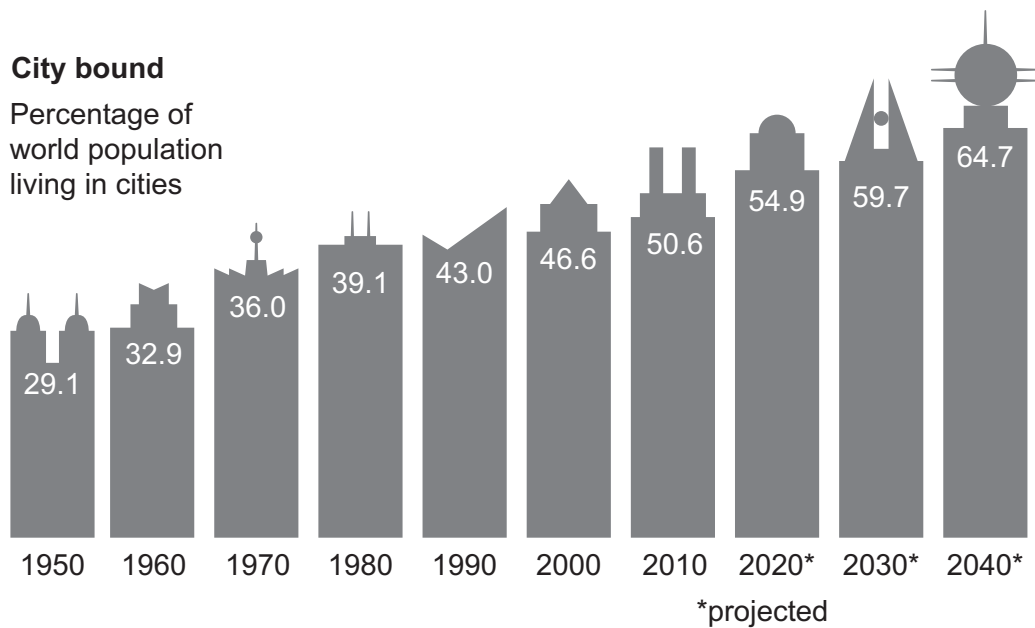
- (b) (i) Study Fig. 2.2 (Insert), a photograph which shows a brownfield site.

Define the term *brownfield site*. [2]

- (ii) Suggest why there is a warning sign and fence around the brownfield site shown in Fig. 2.2. [3]

- (iii) Explain why governments are keen to build on brownfield sites. [4]

- (c) (i) Study Fig. 2.3, which shows the percentage of world population living in cities from 1950 to 2040 (projected).



**Fig. 2.3**

Describe the overall change in the percentage of world population living in cities from 1950 to 2040. [2]

- (ii) Explain how the quality of life of a family can be improved by moving from a rural area to an urban area in an LIC (low income country). [4]
- (d) With reference to a rapidly growing city in Southeast Asia, evaluate the effect of this growth on the people and the environment within the city. [7]

[Total: 25]

## Theme 2: The natural environment

Answer **one** question from this theme.

### EITHER

- 3 (a) (i) Study Fig. 3.1 (Insert), which shows the effects of a recent earthquake.

Suggest the short-term and long-term help that the people in the area will need to recover from the effects of the earthquake. [4]

- (ii) Study Table 3.1, which shows information about two earthquakes.

**Table 3.1**

### Information about two earthquakes

	earthquake in China (MIC – middle income country)	earthquake in Japan (HIC – high income country)
Richter scale	7.9	7.2
time of day	14:28	05:46
number of deaths	87 000	5000
number of people made homeless	5 million	500 000

Using the information in Table 3.1, state why both areas experienced losses during the earthquakes. [1]

- (iii) Suggest why the effects in China were so much more devastating than those in Japan. [3]

- (b) Explain how earthquakes are caused at transform/conservative plate boundaries. [4]

- (c) (i) Explain how the following building features help to reduce the impact from earthquakes:

**A** shock absorbers

**B** flexible structure

**C** automatic shut-off valves. [3]

- (ii) Apart from earthquake-proof buildings, describe other strategies that can be used to prepare people living in areas prone to earthquakes. [3]

- (d) With reference to a named earthquake, describe the impacts of the earthquake on the environment. Evaluate the effectiveness of the management strategies used to reduce the damage from the earthquake. [7]

[Total: 25]

OR

4 (a) (i) Describe the difference between weathering and erosion. [2]

(ii) Name the type of weathering which will be most active in the following areas:

**A** rocks in a tropical rainforest

**B** rocks in a mountainous area

**C** rocks in a desert.

[3]

(iii) Explain **two** factors which affect the type and rate of weathering.

[4]

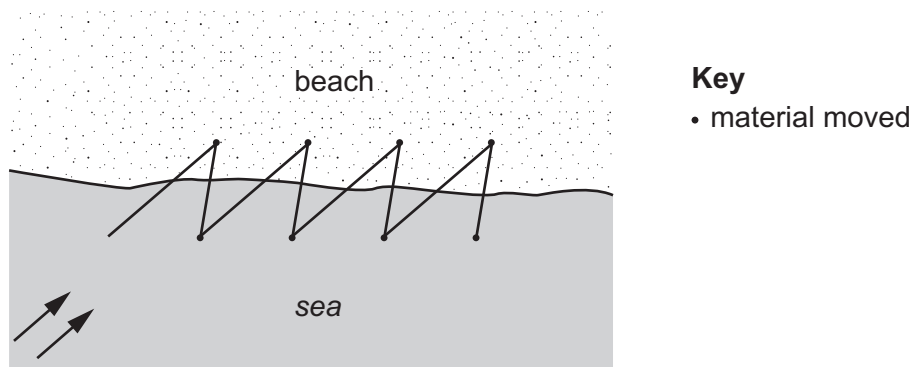
(b) Study Fig. 4.1 (Insert), a photograph which shows an area of coastline.

Describe and explain how a coastline like that in Fig. 4.1 is formed over time.

[5]

(c) Study Fig. 4.2, which shows how material is moved along the coastline.

**How material is moved along the coastline**



**Fig. 4.2**

Name and describe the process taking place.

[4]

(d) Describe **two** factors which cause coastal flooding. Which of these factors is more important? Give examples to support your answer. [7]

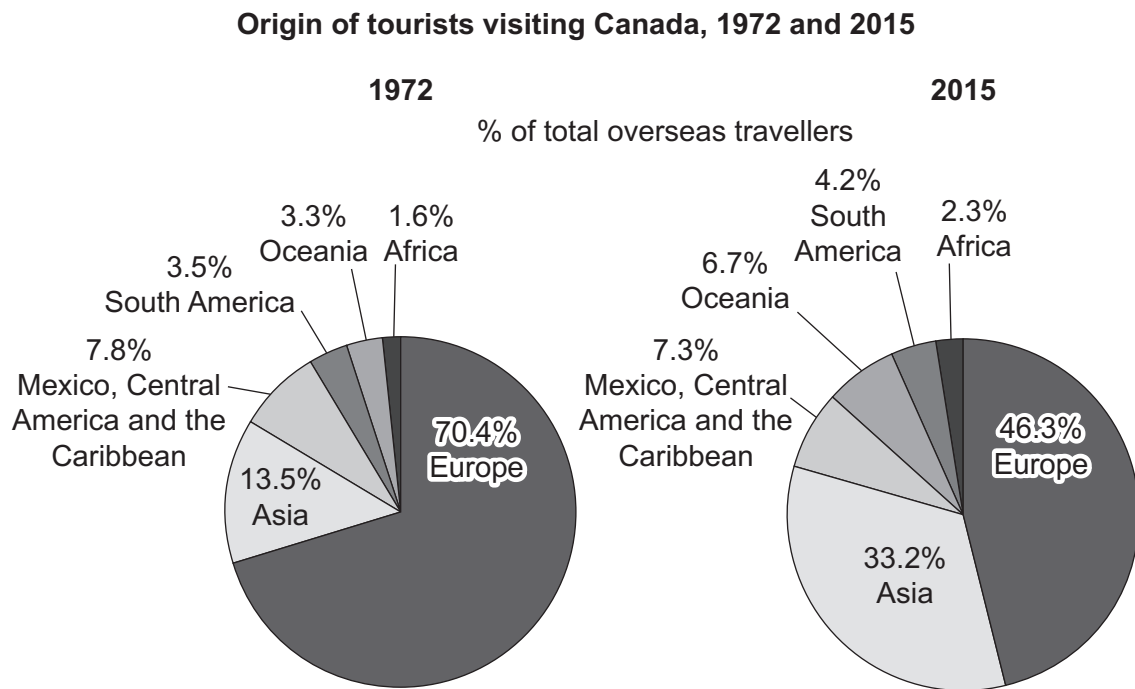
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### Theme 3: Economic development

Answer **one** question from this theme.

**EITHER**

- 5 (a) Study Fig. 5.1, which shows the origin of tourists visiting Canada in 1972 and 2015.



**Fig. 5.1**

- Describe how the origin of tourists visiting Canada changed from 1972 to 2015. [4]
- (b) Explain how the following factors can increase the growth of global tourism:
- (i) higher disposable income [1]
  - (ii) accessibility. [1]
- (c) (i) Describe the difference between natural and cultural tourist attractions. [2]
- (ii) Explain the advantages that tourism can bring to a country. [4]
- (iii) Study Fig. 5.2 (Insert), a photograph which shows a tourist destination in the UK.
- Suggest problems that tourism may cause to the local people and the environment in this area. [4]
- (d) (i) Define the term *sustainable tourism*. [2]
- (ii) Describe the strategies that can be used to encourage and develop sustainable tourism. Evaluate how successful these strategies have been in ensuring tourism is sustainable. Give examples to support your answer. [7]

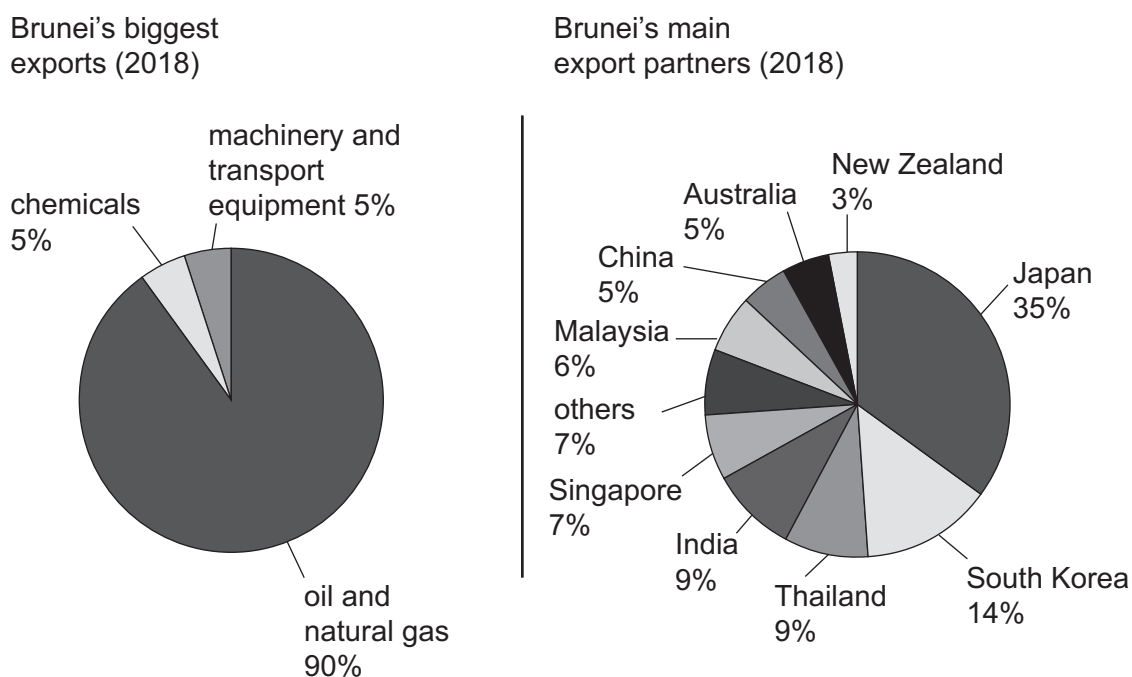
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OR

- 6 (a) Study Fig. 6.1, which shows Brunei's biggest exports and main export partners in 2018.

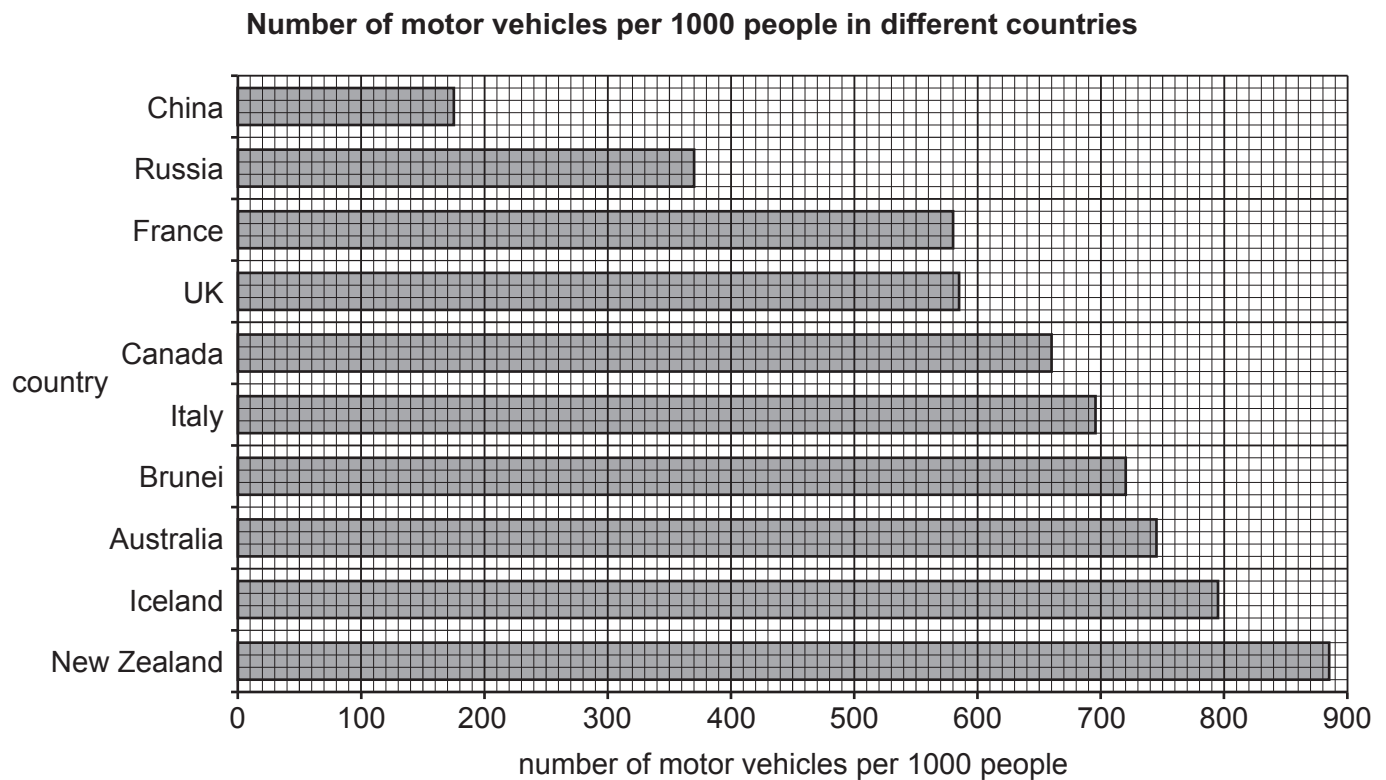
**Brunei's biggest exports and main export partners, 2018**



**Fig. 6.1**

- (i) Suggest **one** reason why the countries shown in Fig. 6.1 are the main export partners of Brunei. [1]
- (ii) Using information from Fig. 6.1, describe the importance of the oil and natural gas industry to Brunei. [1]
- (iii) Explain how the oil and natural gas industry benefits the social and economic development of Brunei. [5]

- (b) (i) Study Fig. 6.2, which shows the number of motor vehicles per 1000 people in different countries.



**Fig. 6.2**

State how many more motor vehicles per 1000 people Brunei has compared to France. [1]

- (ii) The total number of motor vehicles in China is the highest in the world. However, China has the lowest number of motor vehicles per 1000 people shown in Fig. 6.2. Suggest **one** reason why. [1]
- (iii) Explain the consequences of an increase in car ownership within a country. [4]
- (iv) Describe the strategies that can be used to reduce pollution from cars and factories. [5]
- (c) 'Alternative sources of energy can never replace fossil fuels.' How far do you agree with this statement? Give examples to support your answer. [7]

[Total: 25]



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