

# Question Booklet

## australian geography competition 2003

### I N S T R U C T I O N S

- 1 Fill in your **name**, **school code** (your teacher will give you this), school's **post code**, your **gender** and **age**. You need to fill in the ovals as well as write the letters and numbers. For instance, a filled-in post code (for some other school) would look like the sample on the right. The computer reads the ovals, not the letters and numbers, so it is very important to get the ovals right.
- 2 You have 30 minutes to answer the questions. The time to fill in the preliminary information is extra.
- 3 Answer all questions by filling in **only one** oval on the answer sheet corresponding to the most appropriate answer for for each question.
- 4 Do not mark the front or back of the answer sheet in any other way as this can lead to errors in the computerized marking, or to your not getting a result.
- 5 If you are less than 14 years old on 31 August 2003 you may stop at Question 30, or continue to Question 40 to be eligible for major prizes.

#### POST CODE

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**Figure 1.**

© George F Mobley, courtesy of  
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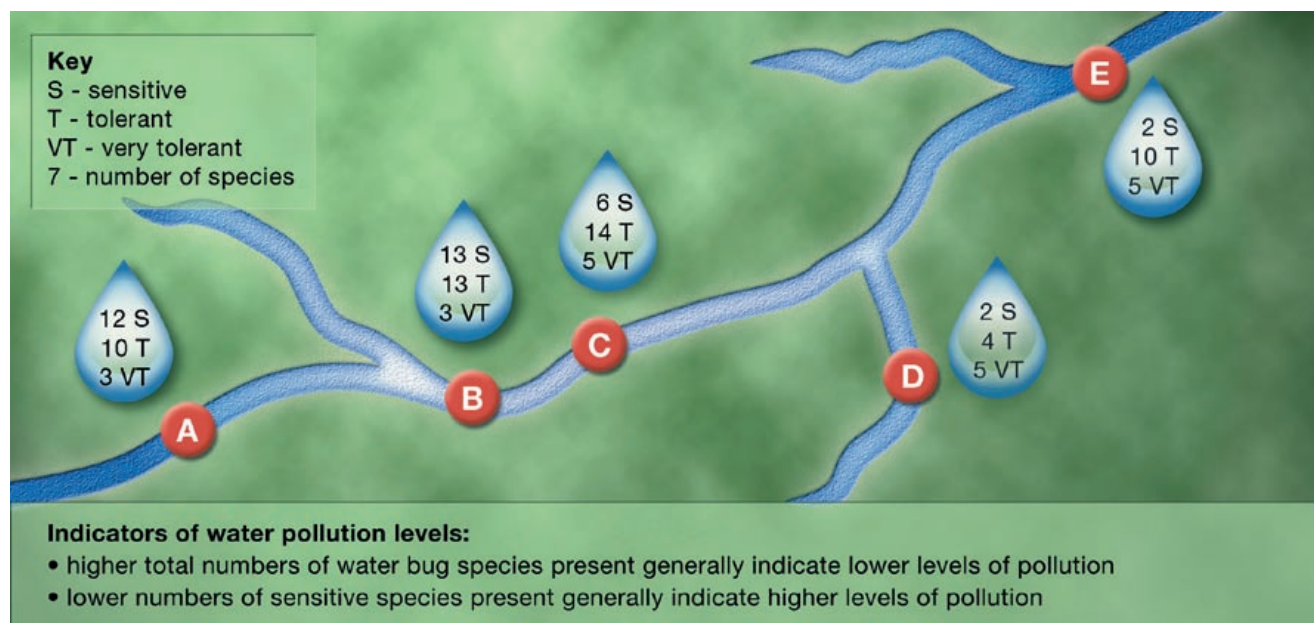
- 1 What is the term for the type of energy featured in Figure 1?  
A biochemical  
B geothermal  
C non-sustainable  
D nuclear  
E wind
- 2 What is the term for the location where a river begins?  
A estuary  
B mouth  
C source  
D tributary  
E waterfall

- 3 The capital of which country is the farthest south?  
A Australia  
B Brazil  
C New Zealand  
D Norway  
E South Africa

- 4 Which type of farming produces only enough to supply the needs of the farmer, with little or no surplus?  
A collective  
B commercial  
C extensive  
D rotational  
E subsistence

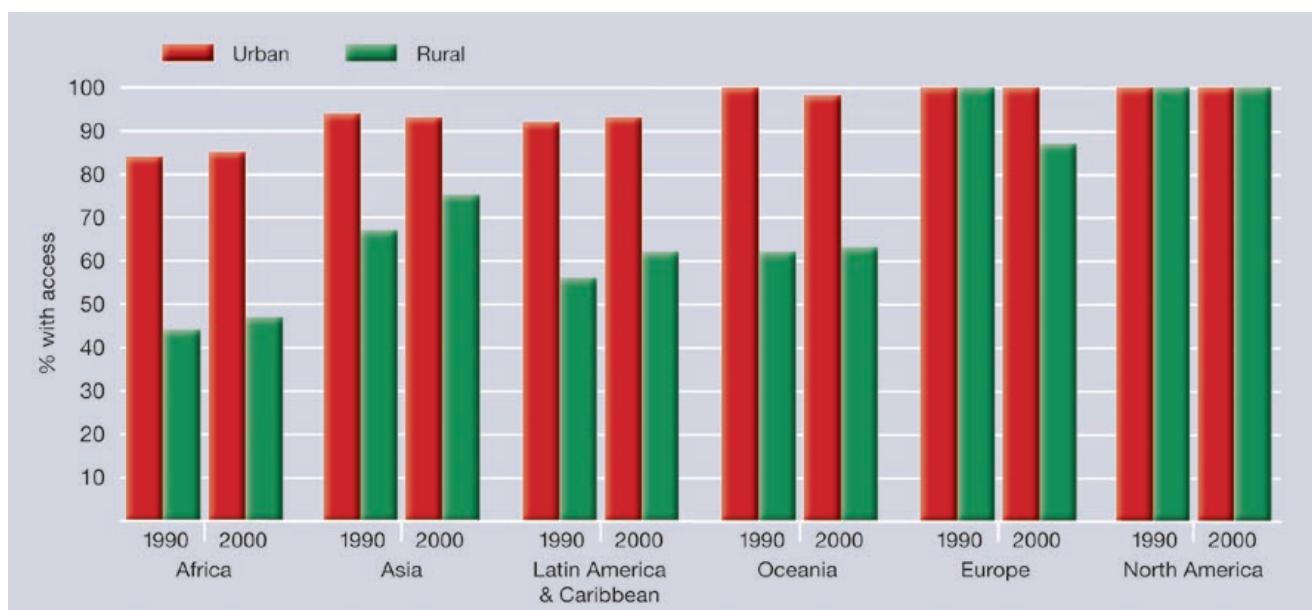
- 5 What is the term for exceptionally high sea levels which may develop rapidly during cyclonic conditions?  
A king tide  
B storm surge  
C tidal bore  
D tidal wave  
E tsunami

- 6 In Figure 2, which site is likely to be the most polluted?  
A Site A  
B Site B  
C Site C  
D Site D  
E Site E



**Figure 2.** Number of species of water bugs (invertebrates) present at selected locations on river system





**Figure 3.** Access to clean water by urban and rural populations, 1990 and 2000

Source: World Health Organisation

**7 Using the data in Figure 3, which group has the least access to clean water?**

- A rural Africans
- B urban Asians
- C rural Latin Americans
- D rural Europeans
- E urban North Americans

**8 Using the data in Figure 3, which group's access to clean water increased most between 1990 and 2000?**

- A urban Africans
- B rural Asians
- C urban Latin Americans
- D urban Europeans
- E rural North Americans

**9 Which of these became an independent country in 2002?**

- A East Timor
- B Hong Kong
- C New Caledonia
- D Solomon Islands
- E West Irian

**10 In which drainage division is the Australian Capital Territory located?**

- A Indian Ocean
- B Lake Eyre
- C Murray-Darling
- D South-West Coast
- E Timor Sea

**11 Which strategy has recently been adopted to improve the condition of the Snowy River?**

- A build a dam to stop flooding
- B chlorinate water to kill algal blooms
- C clear prickly pear from the headwaters
- D increase water flow for ecological benefits
- E remove wild horses trampling the banks

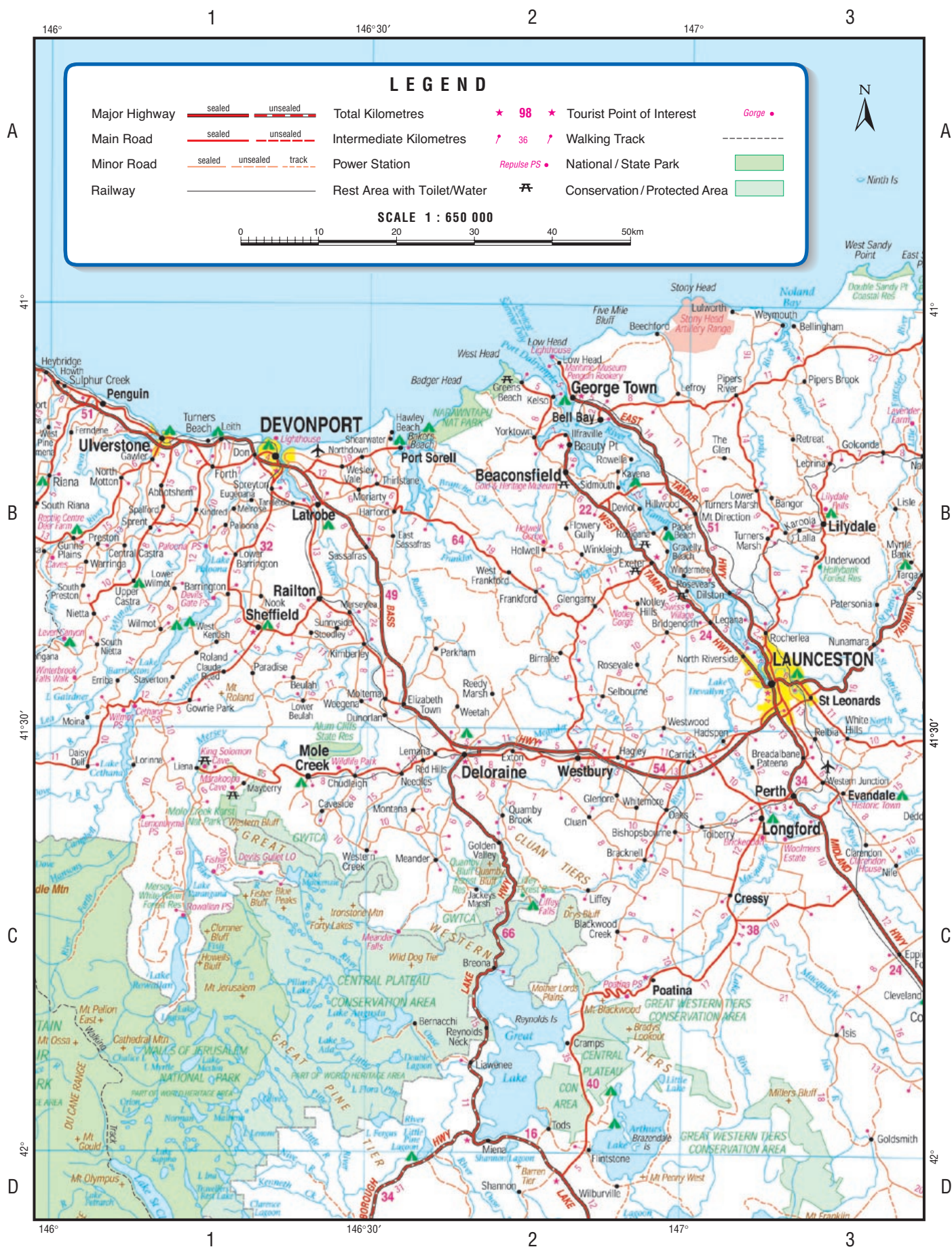
**12 Which type of rock is formed from the process shown in Figure 4?**

- A igneous
- B limestone
- C metamorphic
- D sedimentary
- E stratified



**Figure 4.**

© William L Allen, courtesy of National Geographic Channel



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**13 The map extract in Figure 5 shows a portion of which state or territory?**

- A Australian Capital Territory
- B New South Wales
- C South Australia
- D Tasmania
- E Victoria

**14 Using Figure 5, what is the distance by road from Launceston (B3) to Beaconsfield (B2)?**

- A 24 km
- B 30 km
- C 34 km
- D 40 km
- E 46 km

**15 Using Figure 5, which lake is located at 41°51'S 146°34'E?**

- A Great Lake
- B Lake Ada
- C Lake Augusta
- D Lake Mackenzie
- E Pillans Lake

**16 Using Figure 5, which facility, named for the town, is located just southwest of Poatina (C2)?**

- A bridge
- B police station
- C post office
- D power station
- E public school

**17 Using Figure 5, what is located 65 km directly northwest of Deloraine (C2)?**

- A Great Western Tiers Conservation Area
- B Isis River
- C Penguin
- D Poatina
- E Ulverstone

**18 Which terms best apply to the landform features of grid square C1 in Figure 5?**

- A bars, billabong and braided streams
- B cones, crater lakes and lava fields
- C dunes, mesas and playa lakes
- D glacial lakes, peaks and plateaus
- E harbours, headlands and barrier lakes

**19 Which pair matches a country with one of its indigenous peoples?**

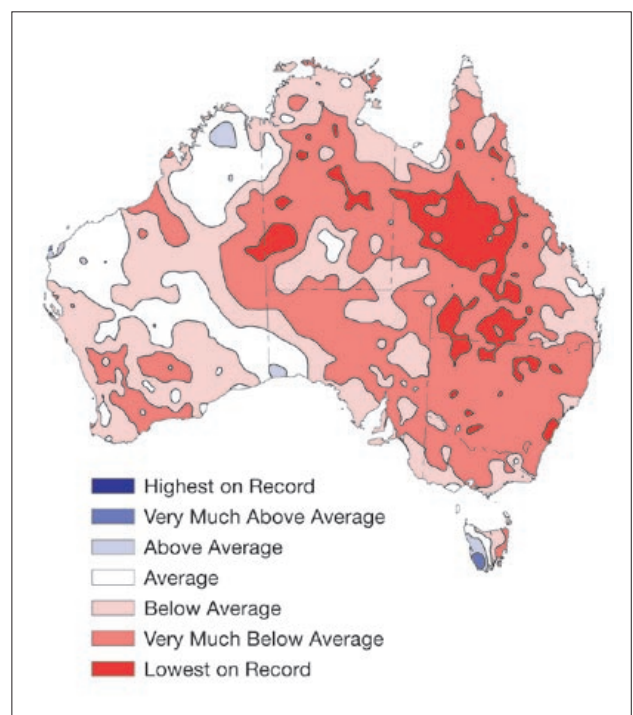
- A Belgium - Lapps
- B Japan - Khmer
- C Nepal - Tamils
- D South Africa - Zulus
- E Venezuela - Maoris

**20 The pampas, a large region of Argentina, consists of:**

- A alpine meadows
- B cold deserts
- C sub-tropical swamps
- D temperate grasslands
- E tropical rainforest

**21 Using the information in Figure 6, from April to December 2002 which state received the lowest rainfall on record over the greatest proportion of its area?**

- A New South Wales
- B Queensland
- C South Australia
- D Victoria
- E Western Australia



**Figure 6.** Australian rainfall, 1 Apr to 31 Dec 2002

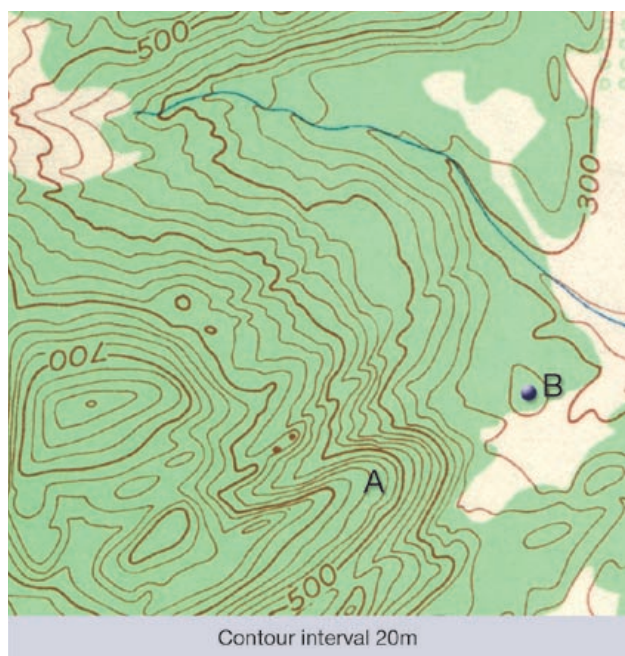
© Bureau of Meteorology

**22 Which of these states or territories has no known coal resources?**

- A New South Wales
- B Northern Territory
- C Queensland
- D Victoria
- E Western Australia

**23 Cape Howe, named by Captain Cook, is on the border between:**

- A New South Wales and Victoria
- B Northern Territory and Queensland
- C South Australia and Western Australia
- D Victoria and South Australia
- E Western Australia and Northern Territory



**Figure 7.**

**24 In Figure 7, what is the approximate height above sea level at point B?**

- A 255 m
- B 275 m
- C 300 m
- D 325 m
- E 345 m

**25 In Figure 7, which type of landform is located at A?**

- A cliff
- B depression
- C saddle
- D spur
- E valley



**Figure 8.**

**26 If a crop requires at least 1000 mm annual rainfall, relatively high temperatures and freedom from frosts, at which location in Figure 8 would it grow most successfully?**

- A Site A
- B Site B
- C Site C
- D Site D
- E Site E

**27 Which language is traditionally spoken at Site B in Figure 8?**

- A Chinese
- B Pitjantjatjara
- C Spanish
- D Tiwi
- E Wik

**28 Which is NOT the second most populous city of its state or territory?**

- A Alice Springs, NT
- B Broome, WA
- C Geelong, Vic
- D Launceston, Tas
- E Newcastle, NSW

**29 By what name is the country Myanmar also known?**

- A Burma
- B Kampuchea
- C Sri Lanka
- D Thailand
- E Vietnam

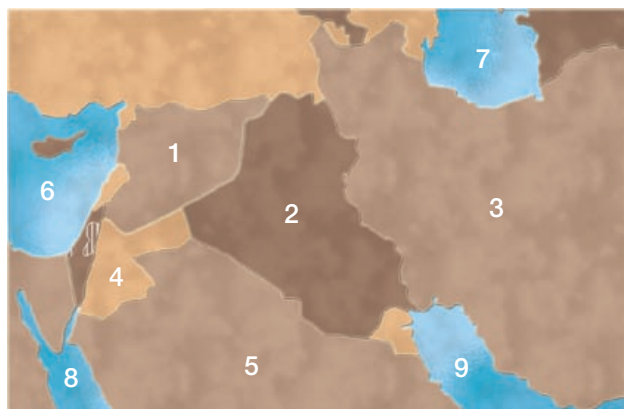
**30 Which pair correctly matches a crop with a major exporter of that crop?**

- A rice - Germany
- B rubber - Uzbekistan
- C sugar cane - Chile
- D tea - India
- E wheat - Thailand

If you are less than **14 years** old on 31 August 2003 you may stop at Question 30, or continue to Question 40 to be eligible for major prizes.

**31 Which of these cities is located on the shore of one of the Great Lakes?**

- A Chicago
- B Dallas
- C Denver
- D New York
- E Vancouver



**Figure 9.**

**32 In Figure 9, which country is Iraq?**

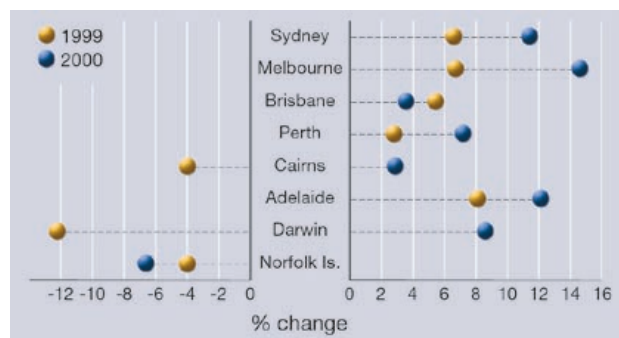
- A country 1
- B country 2
- C country 3
- D country 4
- E country 5

**33 In Figure 9, which water body is the Mediterranean Sea?**

- A water body 6
- B water body 7
- C water body 8
- D water body 9
- E none of the above

**34 Which country shares the longer part of North Korea's northern border?**

- A China
- B Japan
- C Russia
- D South Korea
- E Vietnam



**Figure 10.** Change from previous year in passenger traffic through selected international airports

Source: Commonwealth Dept of Transport and Regional Services

**35 Using the data in Figure 10, which airport experienced the largest percentage decrease in passenger traffic over any one year period?**

- A Cairns
- B Darwin
- C Melbourne
- D Norfolk Island
- E Sydney

**36 Using the data in Figure 10, which statement is correct?**

- A Adelaide experienced less growth than Brisbane.
- B All the state capitals named experienced some growth in both periods.
- C From 1998 to 2000 Cairns experienced net growth.
- D In 2000 Sydney's rate of growth was greater than Melbourne's.
- E Norfolk Island experienced growth in each period.

**37 Which country is one of the ten set to join the European Union in 2004?**

- A Dominica
- B Germany
- C Morocco
- D Pakistan
- E Poland

**38 To what does the term 'development gap' refer?**

- A the corridor of land between adjacent suburban housing developments
- B a depressed area in need of investment in infrastructure
- C the difference in material production and use between less developed and more developed countries
- D a fissure that appears in the surface of glaciers as they develop
- E the range of market share percentages between two rival companies

**39 Using the data in Tables 1 and 2, which locations are currently suitable for alpine vegetation?**

- A Hotham Heights and Shannon HEC
- B Kosciuszko and Hotham Heights
- C Miena Dam and Perisher Valley
- D Perisher Valley and Kosciuszko
- E Shannon HEC and Miena Dam

**40 Using the data in Tables 1, 2 and 3, which location will be suitable for alpine vegetation in 2030 if global warming has the projected effect?**

- A Hotham Heights
- B Kosciuszko
- C Miena Dam
- D Perisher Valley
- E Shannon HEC

**Table 1.** Current climate parameters for selected locations

Source: Bureau of Meteorology

Climate parameter	Kosciuszko NSW	Perisher Valley, NSW	Hotham Heights, Vic	Miena Dam, Tas	Shannon HEC, Tas
Min. temp. coolest month (°C)	-4.0	-5.1	-4.1	-1.8	-1.1
Max. temp. warmest month (°C)	18.7	18.3	16.3	16.3	17.7
Annual precipitation (mm)	1290.0	1947.9	1552.9	823.0	853.7
Precipitation wettest month (mm)	135.9	256.9	166.0	84.0	91.2
Precipitation driest month (mm)	87.7	65.3	87.1	48.6	46.9
<i>All values are means.</i>					

**Table 2.** Climate parameter ranges suitable for alpine vegetation

Source: adapted from J R Busby

Climate parameter	Suitable range
Min. temperature coolest month	-5.5 to -0.7°C
Max. temperature warmest month	14.0 to 18.8°C
Annual precipitation	1262 to 3088mm
Precipitation wettest month	127 to 320mm
Precipitation driest month	67 to 143mm

**Table 3.** Climate change projected for 2030 with global warming - one scenario

Source: adapted from CSIRO Atmospheric Research

Climate parameter	Change Aust Alps* Tas	
Min. temp. coolest month	+ 1.4°C	+ 1.4°C
Max. temp. warmest month	+ 1.8°C	+ 1.4°C
Annual precipitation	- 2.5%	0%
Precipitation wettest month	- 2.5%	+ 7.5%
Precipitation driest month	0%	- 2.5%
<i>*includes Kosciuszko, Perisher Valley, Hotham Heights</i>		