





# Australian Geography Competition Question Booklet 2002

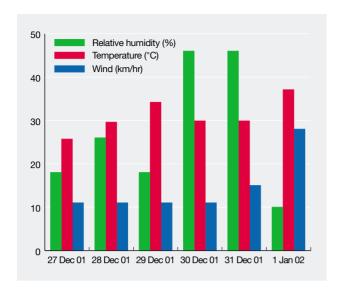
#### **Instructions**

- 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 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 2002 you may stop at Question 30, or continue to Question 40 to be eligible for major prizes.



**POST CODE** 





**Figure 1.** Meteorological observations at Penrith Lakes, 3pm readings

Source: Bureau of Meteorology

- Using the data in Figure 1, what was the relative humidity at 3.00pm on 1 January?
  - A 10%
  - B 15%
  - C 28%
  - D 37%
  - E 46%
- 2 Using Figure 1, on which of these days would the weather conditions have made bushfires most difficult to contain?
  - A 28 December
  - B 29 December
  - C 30 December
  - D 31 December
  - E 1 January
- **3** Which of these rivers flows through the ACT?
  - A Murray
  - B Murrumbidgee
  - C Torrens
  - D Yarra
  - E all of the above
- 4 In which physical region would you find calderas, plugs and lava fields?
  - A arid
  - B coastal
  - C glacial
  - D karst
  - E volcanic

- 5 I travel 10 km SE of Purple Peak to Blue Bluff. From Blue Bluff I travel 10 km SW to Violet Volcano. My journey is completed by a 10 km NW trip from Violet Volcano to Lilac Lake. What direction is Lilac Lake from Purple Peak?
  - A NE
  - B NW
  - C SE
  - D SW
  - E W
- **6** Which pair of rivers is found within the same continent?
  - A Amazon, Danube
  - B Ganges, Yangtze
  - C Indus, Missouri
  - D Murray, Zambezi
  - E Nile, Rhine
- 7 Which of these countries has the highest percentage of forest cover?
  - A Australia
  - B France
  - C Iceland
  - D Ireland
  - E Papua New Guinea



Figure 2. Location of a city CBD

- 8 In Figure 2, the red dot marks the position of which city's CBD?
  - A Adelaide
  - B Canberra
  - C Hobart
  - D Melbourne
  - E Sydney

#### 9 Eyre, Frome, Gairdner and Torrens are names of:

- A cities in New South Wales
- B islands in Western Australia
- C mountains in Northern Territory
- D regions in Tasmania
- E salt lakes in South Australia



Figure 3.

Courtesy of National Geographic Channel

## 10 What is the white circular shape that dominates the satellite image in Figure 3?

- A dust storm
- B hurricane
- C mushroom cloud
- D tornado
- E volcanic plume

#### 11 Near which site in Figure 4 was the satellite image in Figure 3 taken?

- A Site 1
- B Site 2
- C Site 4
- D Site 5
- E Site 6

# 12 Which site in Figure 4 has similar climatic conditions to Alice Springs, i.e. very little rain, rapid evaporation, warm to hot all year?

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

#### 13 In Figure 4, which of these products do all the countries shaded green export?

- A cotton
- B oil
- C rubber
- D sugar cane
- E wheat

## 14 In Figure 4, what is the most common religion in the countries shaded brown?

- A Buddhism
- **B** Christianity
- C Hinduism
- D Islam
- E Judaism

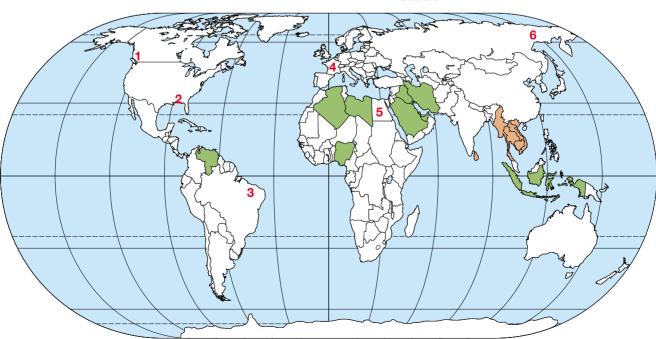


Figure 4. Outline map of the world

## 15 Which navigator sailed around Australia 200 years ago, confirming that it was one landmass?

- A Ferdinand Magellan
- B Henri Freycinet
- C Luis Torres
- D Matthew Flinders
- E Willem Jansz

#### 16 On which type of map would you find an isotherm?

- A cadastral
- B climate
- C orthophoto
- D road
- E topographic

#### 17 Which of these islands is administratively part of New South Wales?

- A Fraser Island
- B Kangaroo Island
- C Lord Howe Island
- D Phillip Island
- E Rottnest Island

**Table 1**. Visitors to and overstayers in Australia for selected countries

Source: ABS and DIMIA

Country of citizenship	Visitors to Australia 1999	Overstayers at 30 Jun 2001
Germany	144,500	1,599
Indonesia	91,000	3,555
Japan	707,500	2,740
Korea	108,600	2,894
Malaysia	139,800	2,008
UK	568,900	6,273
USA	417,100	5,142

# 18 Given that the data in Table 1 on visitor numbers is for a typical year, which of these countries has the highest percentage of its citizens illegally overstaying their visas?

- A Germany
- B Indonesia
- C Japan
- D Malaysia
- E UK

#### 19 Which is the most populous city in tropical Australia?

- A Brisbane
- B Darwin
- C Karratha
- D Port Moresby
- E Townsville

#### 20 In Figure 5, what are the coordinates for Cape Gambier (B1)?

- A 11°56'S 130°58'E
- B 11°56'S 131°02'E
- C 12°04'N 130°58'W
- D 12°04'S 130°58'E
- E 12°04'S 131°02'E

## 21 In Figure 5, the shortest route between Jim Jim Billabong (C3) and Bark Hutt Inn (C2) is mainly along a:

- A sealed major highway
- B sealed minor road
- C track
- D unsealed main road
- E unsealed minor road

## 22 In Figure 5, what is the approximate distance by road between Jim Jim Billabong and Bark Hutt Inn?

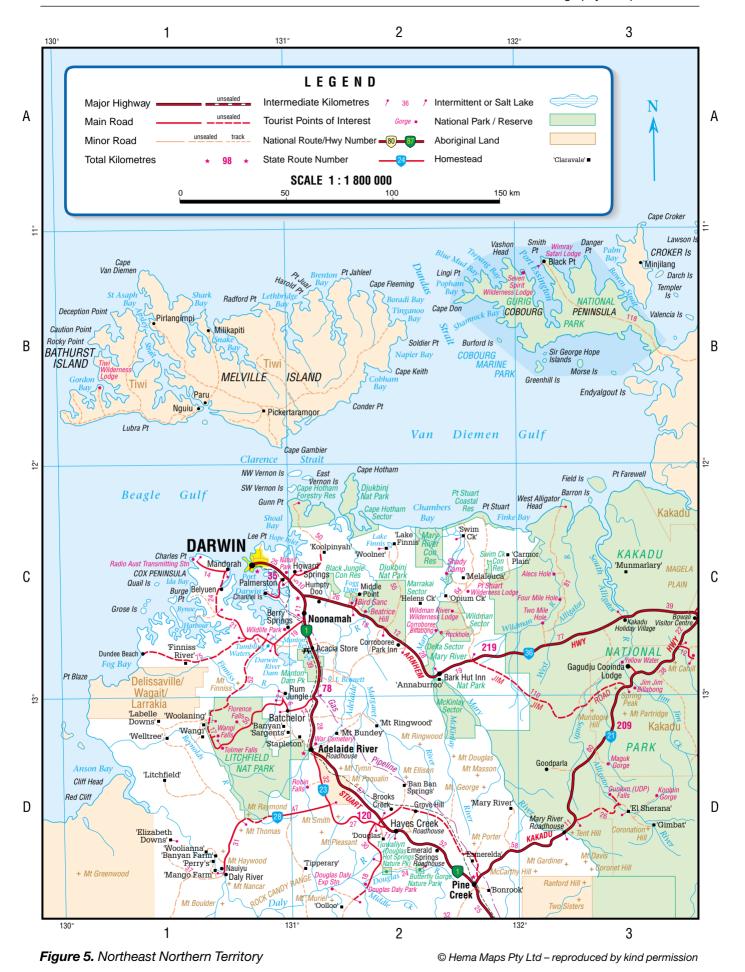
- A 36 km
- B 94 km
- C 110 km
- D 129 km
- E 219 km

#### 23 In Figure 5, what is located approximately 75 km directly SSW of Noonamah (C2)?

- A Cape Hotham
- B Delissaville Aboriginal Land
- C Gas Pipeline
- D Litchfield National Park
- E Woolianna Homestead

## **24** Using Figure 5, which statement about Melville Island (B1-2) is correct?

- A It is east of Cobourg Peninsula.
- B Melville Island is Aboriginal Land.
- C Pirlangimpi is located on Shark Bay.
- D There is a Wilderness Lodge on Melville Island.
- E There is no freshwater on Melville Island.



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#### 25 In which ocean is the deepest point on the ocean floor, the Mariana Trench?

- A Arctic
- B Atlantic
- C Indian
- D Pacific
- E Southern

#### 26 Which of these mountains has a distinctive volcanic cone shape?

- A Mt Cook
- B Mt Everest
- C Mt Fuji
- D Mt Kosciuszko
- E Mt St Helens

**Table 2**. Climatic extreme records for selected Australian capital cities

Source: Bureau of Meteorology

City	Highest temp.	Lowest temp.	Highest rainfall*	Lowest rainfall*
Α	46.2°C	1.2°C	1339mm	509mm
В	45.3°C	2.1°C	2194mm	583mm
С	43.2°C	2.3°C	2242mm	411mm
D	40.8°C	-2.8°C	1104mm	390mm
E	38.9°C	10.4°C	2777mm	1025mm

<sup>\*</sup>Figures are for annual rainfall

#### 27 Which city in Table 2 is Darwin?

- A City A
- B City B
- C City C
- D City D
- E City E

28 Which state has over 30% of its area reserved as national park or other protected area?

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

## Which environmental issue affecting the south west of Western Australia received a lot of attention in its last state election?

- A generating electricity from the tides near Broome
- B limiting tourist numbers in the Bungle Bungles
- C logging old growth forests in the areas around Manjimup
- D protecting whale sharks on Ningaloo Reef
- E reducing salinity levels in the Ord River catchment

#### **30** Using Table 3, what is the life expectancy of indigenous female New Zealanders?

- A 60.2
- B 63.0
- C 68.0
- D 73.0
- E 80.4

If you are less than **14 years** old on 31 August 2002 you may stop at Question 30, or continue to Question 40 to be eligible for major prizes.

Table 3. Population characteristics, Australia and New Zealand

Source: ABS

Population Characteristics	<b>A</b> u Total	stralia Indigenous	<b>New Zealand</b> Total Indigenous		
Population ('000)	19,157.1	418.8	3,830.8	598.8	
0-14 years (%)	20.5	39.0	22.9	36.5	
15-64 years (%)	67.2	58.5	65.3	60.2	
65 years and over (%)	12.3	2.5	11.8	3.3	
Median age (years)	35.2	20.2	34.3	21.3	
Population growth 1992-2000 (average annual %)	1.1	2.2	1.1	2.3	
Total fertility rate (babies per woman)	1.7	2.1	2.0	2.6	
Male life expectancy (years)	76.2	55.6	75.2	68.0	
Female life expectancy (years)	81.8	63.0	80.4	73.0	

Figures are for June 2000, except for Fertility and Life expectancy which are 1999.

#### 31 From the data in Table 3, which statement is correct?

- A Australian women are, on average, having more babies than NZ women.
- B Indigenous Australians form a larger proportion of the Australian population than do indigenous New Zealanders of the NZ population.
- C The median age of Australians is less than that of New Zealanders.
- D The NZ population is growing at a faster rate than the Australian population.
- E There is a greater difference in life expectancy between indigenous and total populations in Australia than in NZ.

## 32 In which sea are the islands of Corsica, Crete and Cyprus?

- A Andaman
- B Bering
- C Carribean
- D Mediterranean
- E South China

#### 33 At which of these latitudes are coniferous forests most likely to grow naturally?

- A 30° north
- B 30° north and south
- C 60° north
- D 60° north and south
- E 90° north



Figure 6.

Courtesy of National Geographic Channel

#### 34 Where was the photograph in Figure 6 taken?

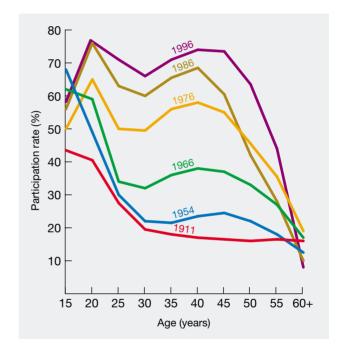
- A Jerusalem
- B Nairobi
- C Paris
- D Rio de Janeiro
- E Singapore

## 35 Which of these characteristics do Laos, Nepal, Rwanda and Austria have in common?

- A They all have an Atlantic coastline.
- B They are all in the southern hemisphere.
- C They are all landlocked.
- D They are all located in Asia.
- E They share borders with each other.

#### 36 Which of these countries shares a border with Afghanistan?

- A Pakistan
- B Tadzhikistan
- C Turkmenistan
- D Uzbekistan
- E all of the above



**Figure 7.** Female labour participation rates in Australia

Source: ABS

#### 37 Using the information in Figure 7, which of these statements is correct?

- A The decline in participation rates from age 30 to 40 is generally due to child rearing.
- B A greater proportion of 55-year-old women left work in 1996 than in 1911.
- C Prior to 1911 women were not allowed to work outside the home.
- D A smaller proportion of 15-year-old females worked in 1954 than in 1996.
- E Women aged 45 have the highest labour participation rate.

#### 38 What is a shanty town?

- A an area of unplanned, makeshift housing generally located on the fringe of a large city
- B the inner area of a city where old housing is being renovated by new, wealthy owners
- C a once-flourishing settlement, now completely abandoned
- D a settlement situated at high altitude to escape the summer heat of the tropics
- E a town built on a model which emphasises the importance of axial routeways

#### **39** Why is fog common off the Californian, Namibian and Newfoundland coasts?

- A Cold ocean currents flow along the coast.
- B Mountain ranges form a rain shadow.
- C Mountain ranges trigger precipitation.
- D Tropical high pressure systems predominate.
- E Warm ocean currents flow along the coast.

# 40 Using the data in Tables 4, 5 and 6, hydrocarbon pollution from which craft type increased by the largest percentage between 1989 and 1999?

- A cruiser
- B dinghy
- C fishing boat
- D jet-ski
- E speed boat

Table 4. Engine types in boats

Source: University of Glasgow Field Station

Boat type	Engine type
speed boat	2-stroke petrol outboard 4-stroke petrol
cruiser	4-stroke petrol diesel
fishing boat	diesel
day boat	2-stroke petrol outboard
dinghy	2-stroke petrol outboard
ferry	diesel
jet-ski	2-stroke petrol jet-ski

Table 5. Hydrocarbon emissions

Source: University of Glasgow Field Station

Engine type	Hydrocarbon emissions (g per hr)
diesel	37
4-stroke petrol	107
2-stroke petrol outboard	1529
2-stroke petrol jet-ski	2293

Table 6. Craft present during censuses of recreational craft activity, Loch Lomond, UK

Source: University of Glasgow Field Station

Year	Speed boat	Cruiser	Fishing boat	Day boat	Wind surfer	Canoe	Yacht	Dinghy	Ferry	Jet- ski	Row boat
1989	487	474	332	202	195	171	159	115	67	29	20
1999	2599	1862	421	283	130	235	769	573	162	899	227