



**Cambridge International Examinations**  
Cambridge Ordinary Level

CANDIDATE NAME

CENTRE NUMBER 

--	--	--	--	--

CANDIDATE NUMBER 

--	--	--	--

\* 0 1 2 3 4 5 6 7 8 9 \*

**GEOGRAPHY** **2217/02**  
Paper 2 Geographical Skills and Investigations **For Examination from 2016**  
SPECIMEN PAPER **2 hours 15 minutes**

Candidates answer on the Question Paper.  
Additional Materials: Ruler Protractor  
Calculator  
Plain paper

1:50 000 Survey Map Extract is enclosed with this question paper.

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces at the top of this page.  
Write in dark blue or black pen.  
You may use an HB pencil for any diagrams, graphs or rough working.  
Do not use staples, paper clips, glue or correction fluid.  
**DO NOT WRITE IN ANY BARCODES.**

**Section A**

Answer **all** questions.

**Section B**

Answer **one** question.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.  
The Insert contains Photograph A for Question 3, Fig. 12 for Question 7 and Figs 17 and 22 for Question 8.

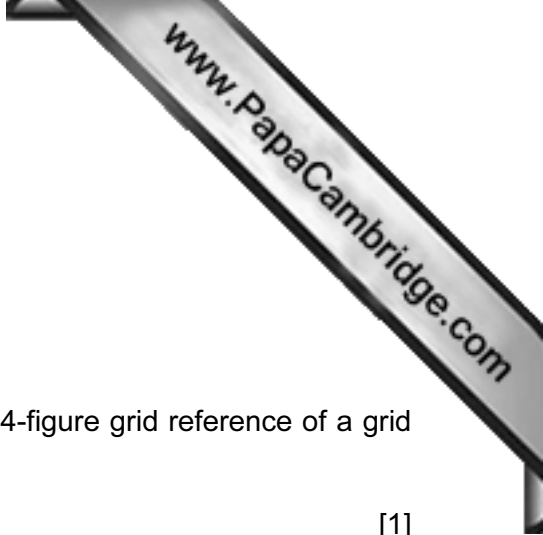
The Survey Map Extract and the Insert are **not** required by the Examiner.

At the end of the examination, fasten all your work securely together.  
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **33** printed pages, **1** blank page and **1** Insert.

**Section A: Geographical Skills**

Answer **all** questions in this section.



1 Study the 1:50 000 map of Bindura, Zimbabwe.

(a) (i) Bindura has a sports field in grid square 2284. Give the 4-figure grid reference of a grid square that contains another of Bindura's sports fields.

..... [1]

(ii) Bindura's rifle range is found in 2184. Give the 6-figure grid reference of the building nearest to the rifle range.

..... [1]

(iii) Name **two** other leisure activities at Bindura, indicated on the map.

.....  
.....  
..... [2]

(b) (i) Measure the distance along the railway branch line, from its start at 178830 to its junction with the main line at 225855. Give your answer in kilometres.

..... [1]

(ii) How have the builders of this railway branch line tried to keep it as level as possible?

.....  
.....  
..... [2]

(c) Study the area of Bindura bounded by the grid lines shown on Fig. 1.

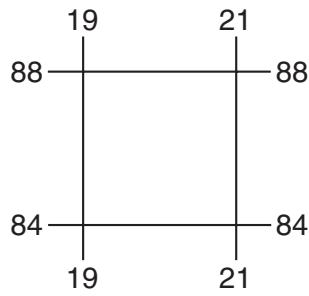


Fig. 1

(i) State the map evidence for mining in this area.

.....  
.....  
.....  
..... [3]

(ii) Describe the location of settlement (including huts and staff quarters) in this area.

.....  
.....  
.....  
.....  
..... [4]

(d) Study the area bounded by the grid lines as shown on Fig. 2.

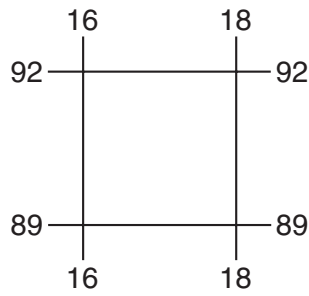


Fig. 2

(i) Describe the distribution of orchard or plantation in this area.

.....  
.....  
..... [2]

(ii) Describe the Mazowe river in this area.

.....  
.....  
.....  
.....  
..... [4]

[Total: 20 marks]



**TURN OVER FOR QUESTION 2**

2 Study Fig. 3, a climate graph for the city of Arica. Arica is in the Atacama Desert in South America.

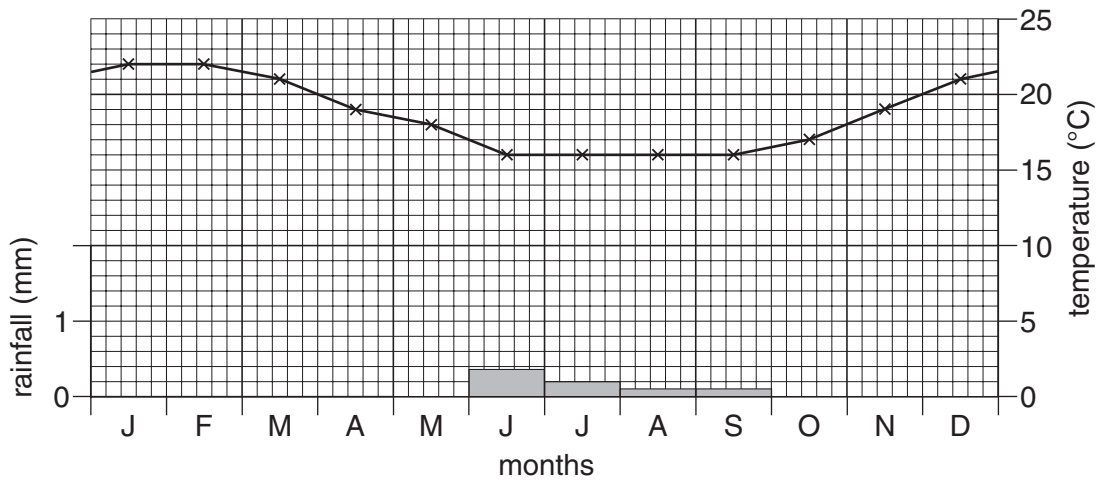


Fig. 3

(a) (i) In which months does rain fall?

..... [1]

(ii) Will 0.1 mm of rain fall every September? Explain your answer.

..... [1]

(b) (i) Use the data in Table 1 to complete the climate graph for La Paz, Bolivia on Fig. 4. [2]

Table 1

months	J	F	M	A	M	J	J	A	S	O	N	D
temperature (°C)	10	10	10	10	9	7	7	8	9	10	11	10
rainfall (mm)	130	105	70	50	10	5	10	15	30	40	50	90

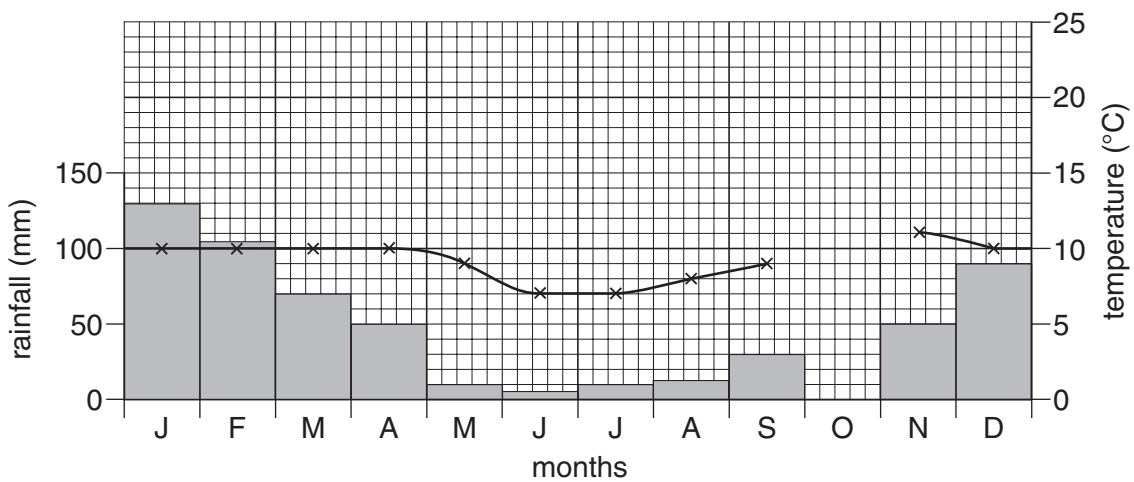


Fig. 4

(ii) Describe the differences in climate between Arica and La Paz.

.....

.....

.....

..... [2]

(c) Study Fig. 5, which shows the locations of Arica and La Paz.

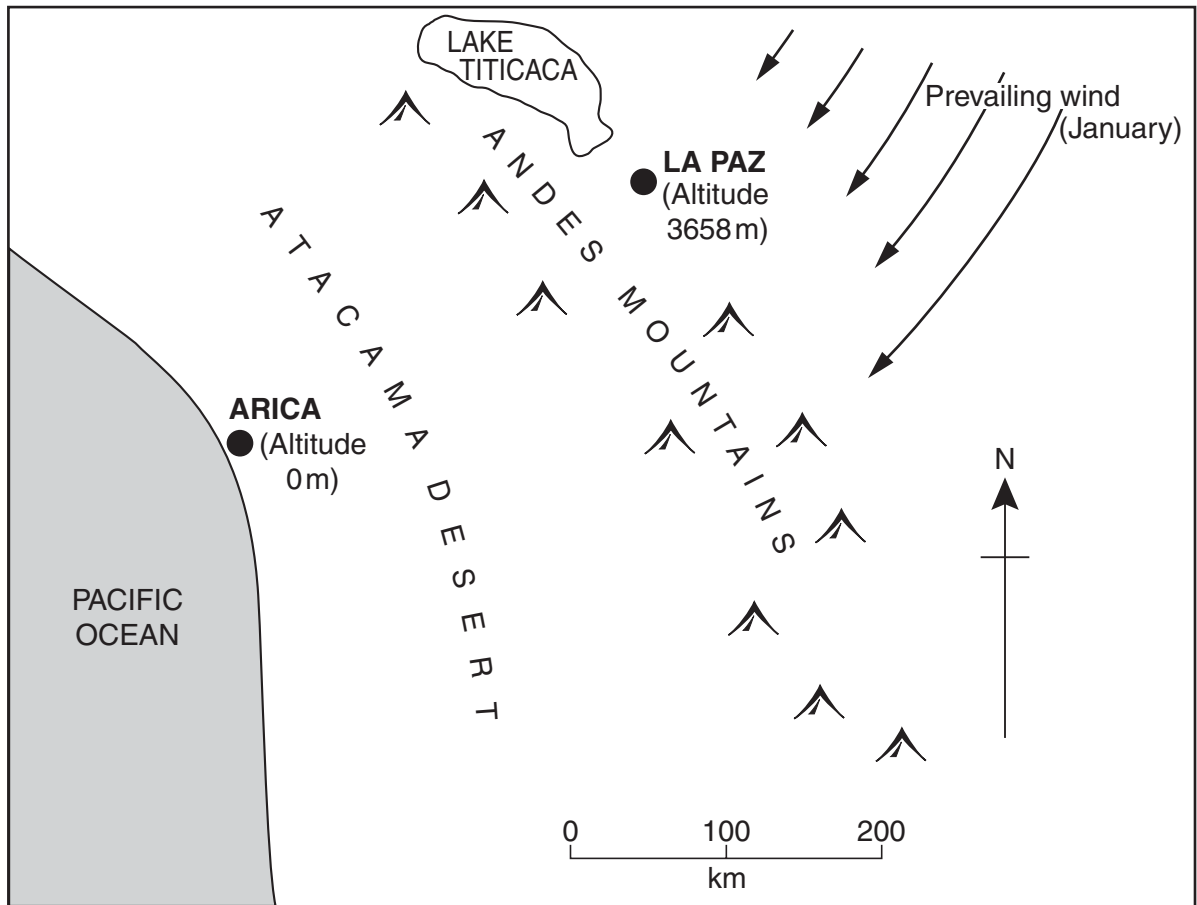


Fig. 5

Using Fig. 5, suggest reasons for the difference in climate between Arica and La Paz in January.

.....

.....

.....

.....

..... [2]

[Total: 8 marks]

3 Study Photograph A (Insert), of a river and its surroundings, and Fig. 6, which is a plan of the same area.

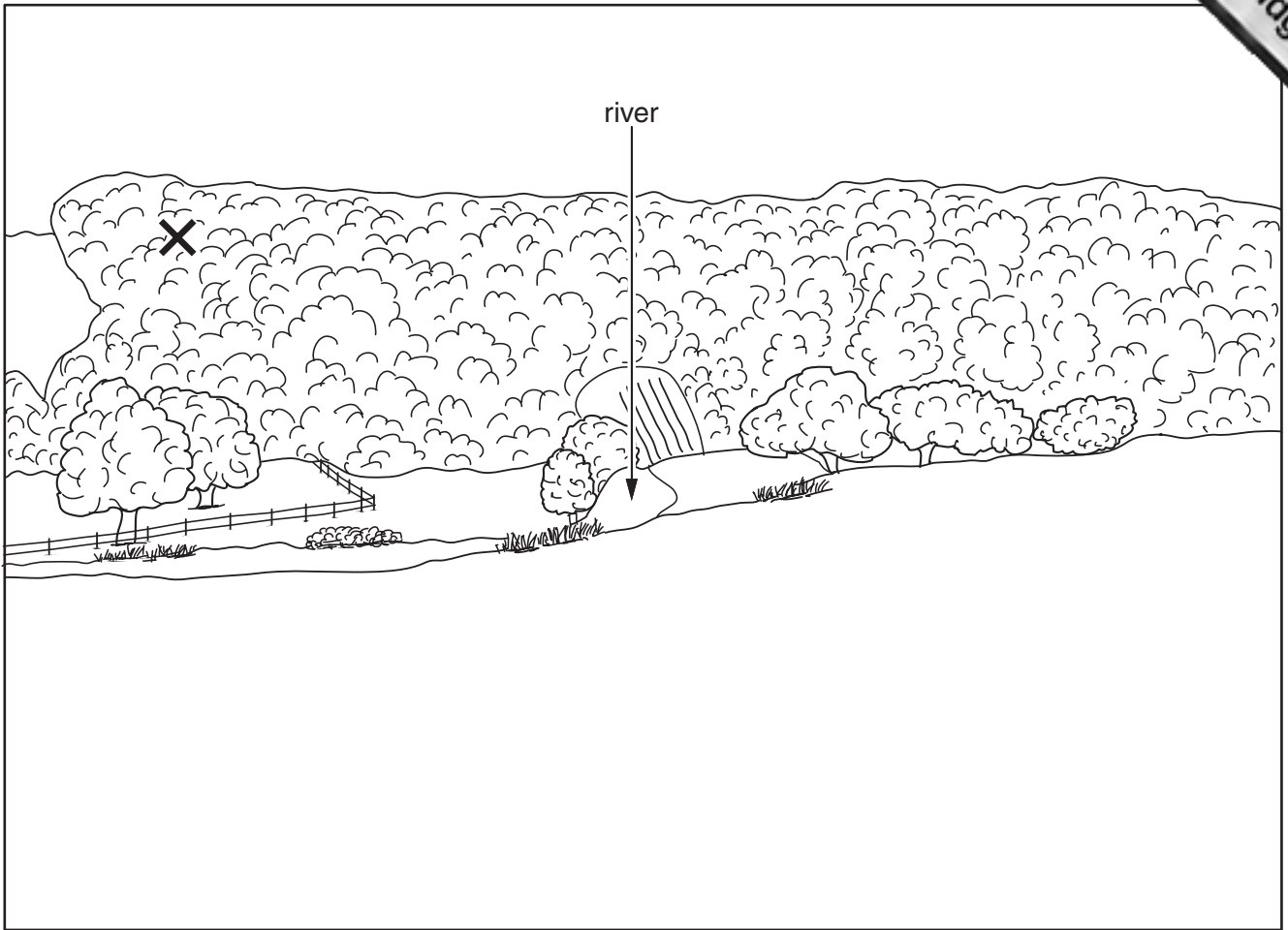


Fig. 6

(a) Describe the relief of the area shown in Photograph A.

.....

.....

.....

.....

.....

.....

.....

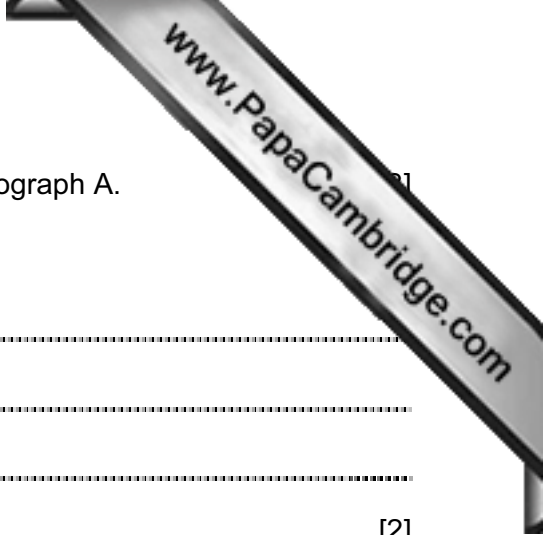
.....

.....

.....

[3]





(b) (i) Annotate Fig. 6 to describe the vegetation shown in Photograph A.

(ii) Suggest why the slope at X has the vegetation shown.

.....

.....

.....

..... [2]

[Total: 8 marks]

4 Study Fig. 7, which shows the main urban areas in Zambia, a country at a low level of development in Africa.

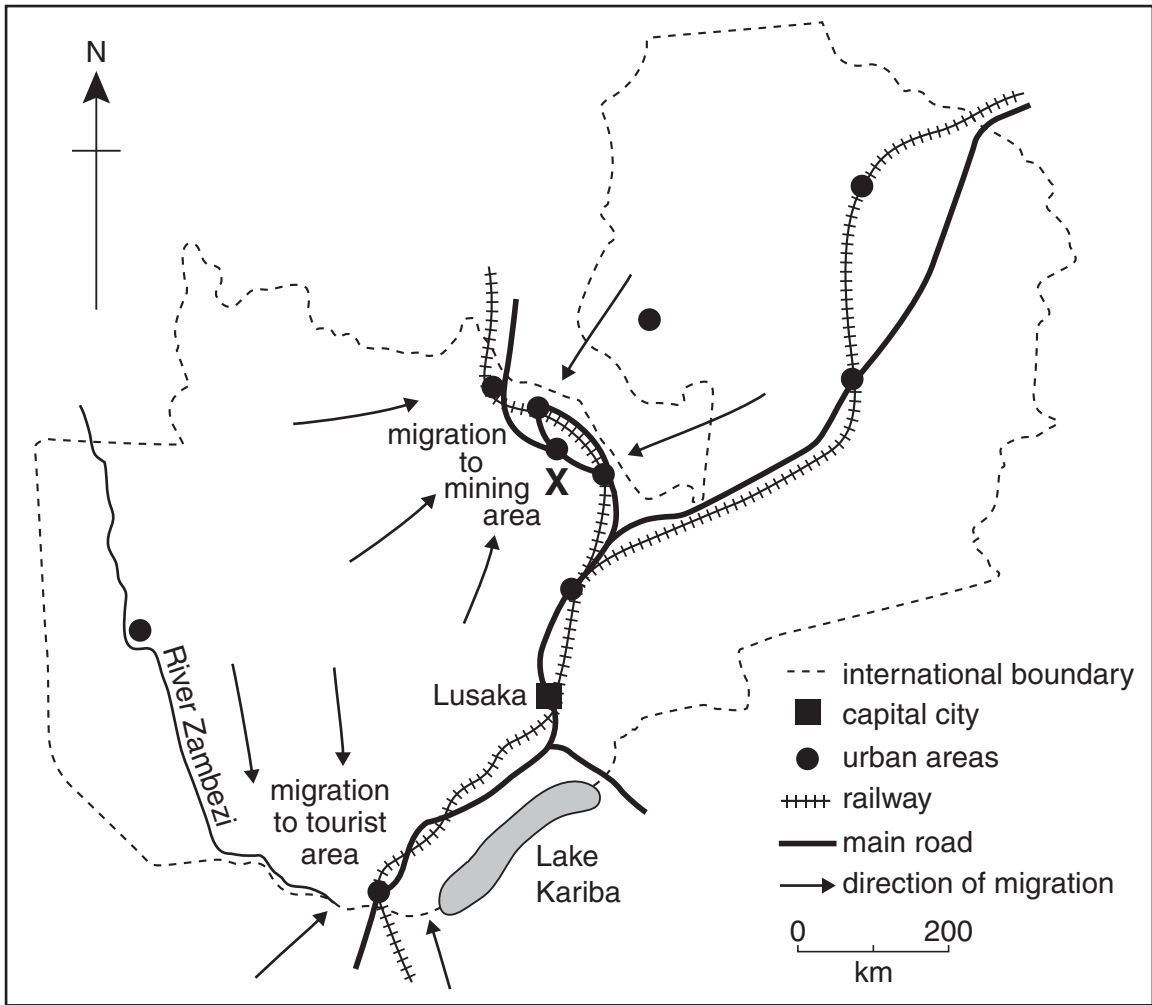


Fig. 7

(a) Describe the location of the main urban areas shown on Fig. 7.

.....

.....

.....

.....

[3]

(b) Study Fig. 8, a population pyramid for urban area X in Zambia.

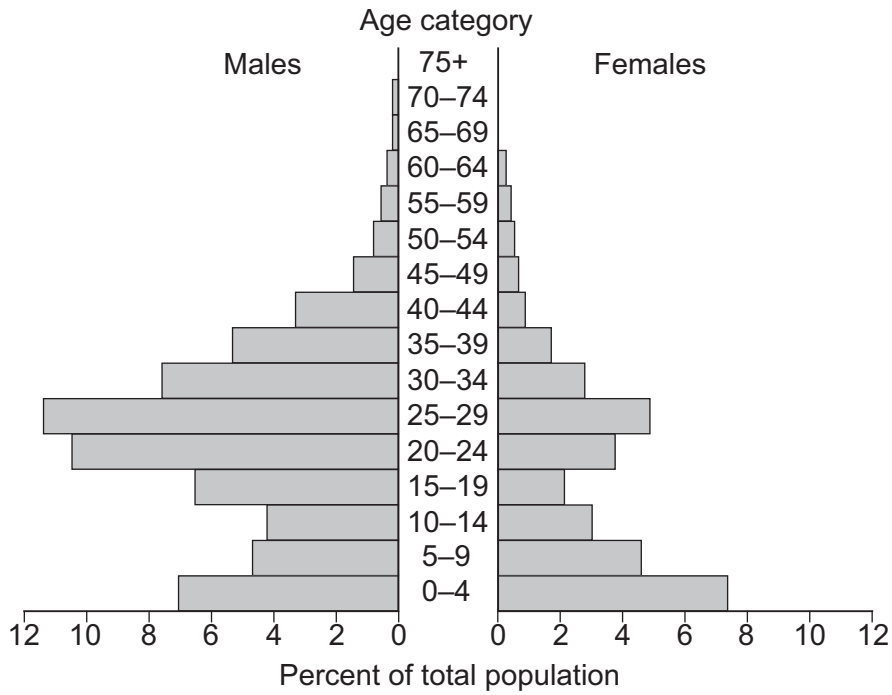


Fig. 8

(i) What percentage of this urban population are females aged 15-19?

..... [1]

(ii) Suggest reasons for the high number of males aged 20-29.

.....  
.....  
.....  
..... [2]

(iii) Birth rates in urban areas in countries at lower levels of development are usually lower than in rural areas. Suggest reasons for this.

.....  
.....  
.....  
.....  
..... [2]

[Total: 8 marks]

5 Study Fig. 9, which shows world car production.

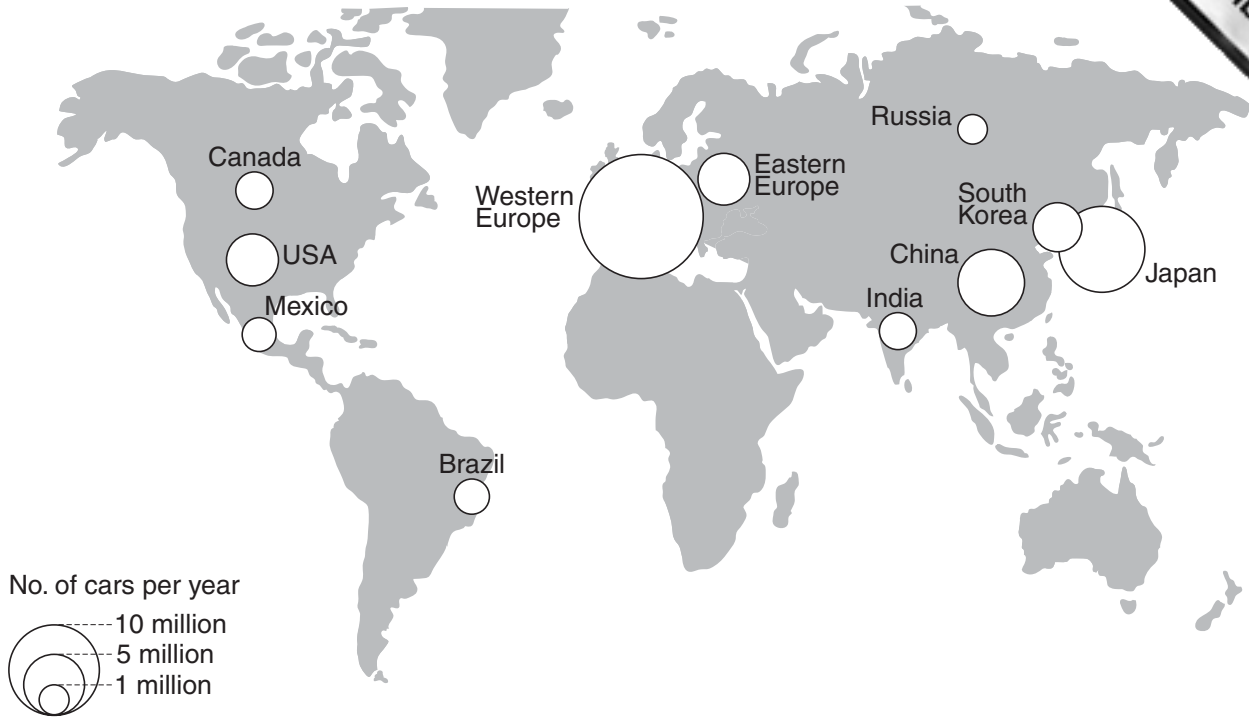


Fig. 9

(a) (i) How many cars per year are produced in Russia?

..... [1]

(ii) Use Fig. 9 to list the **three** main car producing areas in order of output.

Greatest .....

.....

.....

[1]

(iii) Suggest why these areas produce the most cars.

.....

.....

.....

.....

[2]



6 Study Fig. 11, which shows the amount of food aid received by several countries.

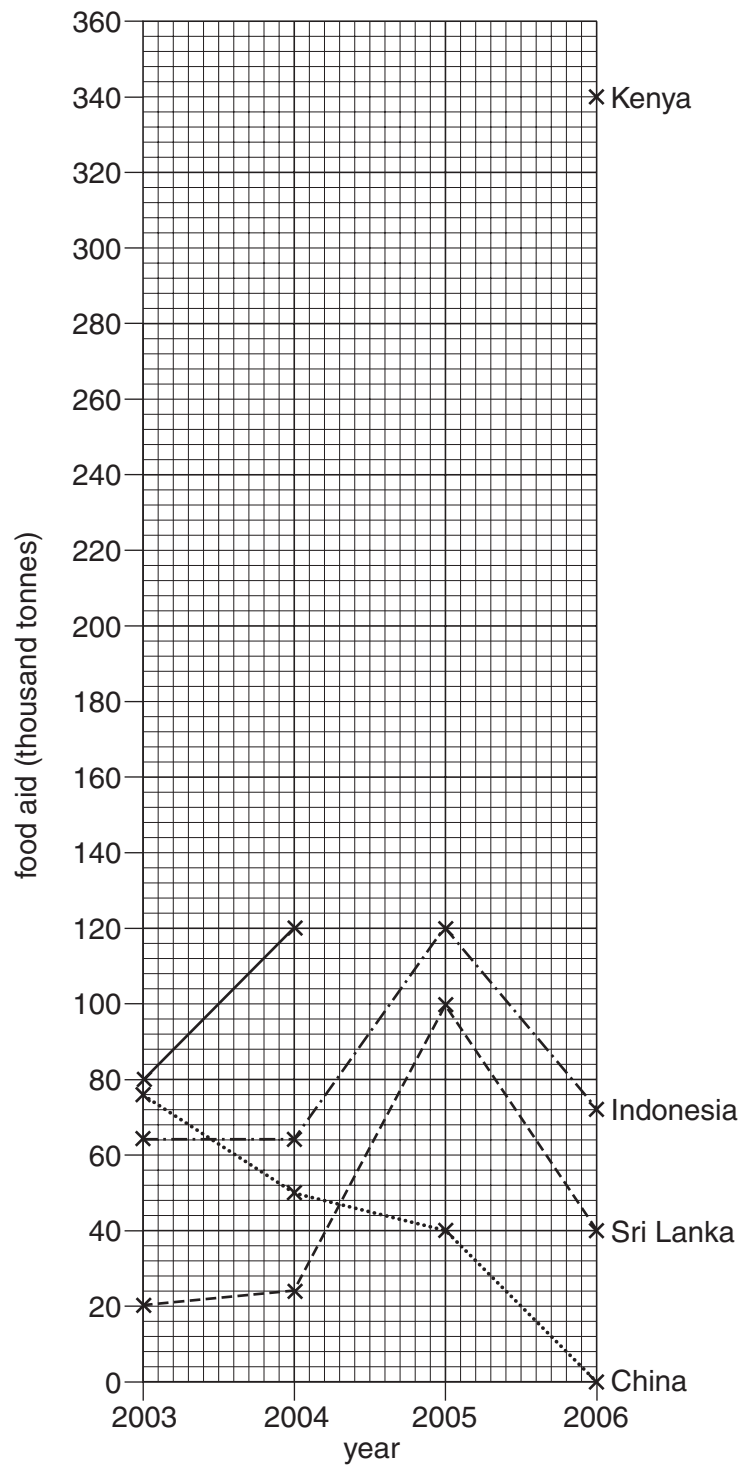
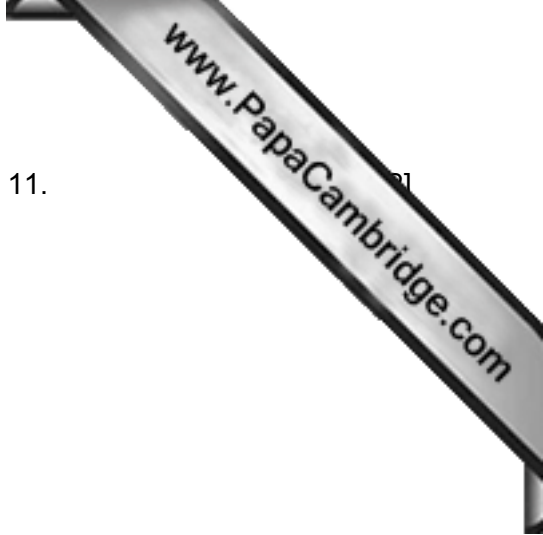


Fig. 11



(a) Use the data in Table 2 to complete the line for Kenya on Fig. 11.

Table 2

year	food aid for Kenya (thousand tonnes)
2003	80
2004	120
2005	210
2006	340

(b) Describe the changes in the amount of food aid supplied to Indonesia.

.....

.....

.....

.....

.....

.....

..... [3]

(c) Suggest reasons for changes in the supply of food aid to countries such as those on Fig. 11.

.....

.....

.....

.....

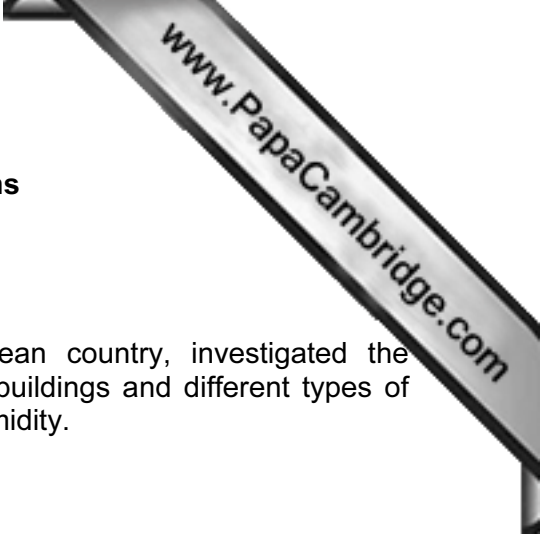
.....

..... [3]

[Total: 8 marks]

**Section B: Geographical Investigations**

Answer **one** question from this section.



- 7 Students at a school in the Netherlands, a northern European country, investigated the microclimate around their school. This was to find out whether buildings and different types of ground surface influenced the air temperature and the relative humidity.

The two hypotheses were:

**Hypothesis 1:** *Temperatures are higher nearer to the buildings.*

**Hypothesis 2:** *Relative humidity is affected by vegetation on the ground.*

- (a) The students recorded temperature and relative humidity in calm and clear conditions during November. Why were these conditions important for the investigation?

.....

.....

.....

..... [2]

- (b) Study the map, Fig. 12 (Insert). This shows eight sites, labelled A to H, around the school buildings. These sites were used by the students for measuring temperature and relative humidity.

- (i) The school's Stevenson screen is located at Site A. Suggest **two** reasons why this is a good location for a Stevenson screen.

1 .....

.....

2 .....

..... [2]



- (ii) A traditional maximum-minimum thermometer is located in the Stevenson screen. Use Fig. 13 to identify maximum, minimum and present temperature shown on the thermometer. Record these in the boxes on Fig. 13.

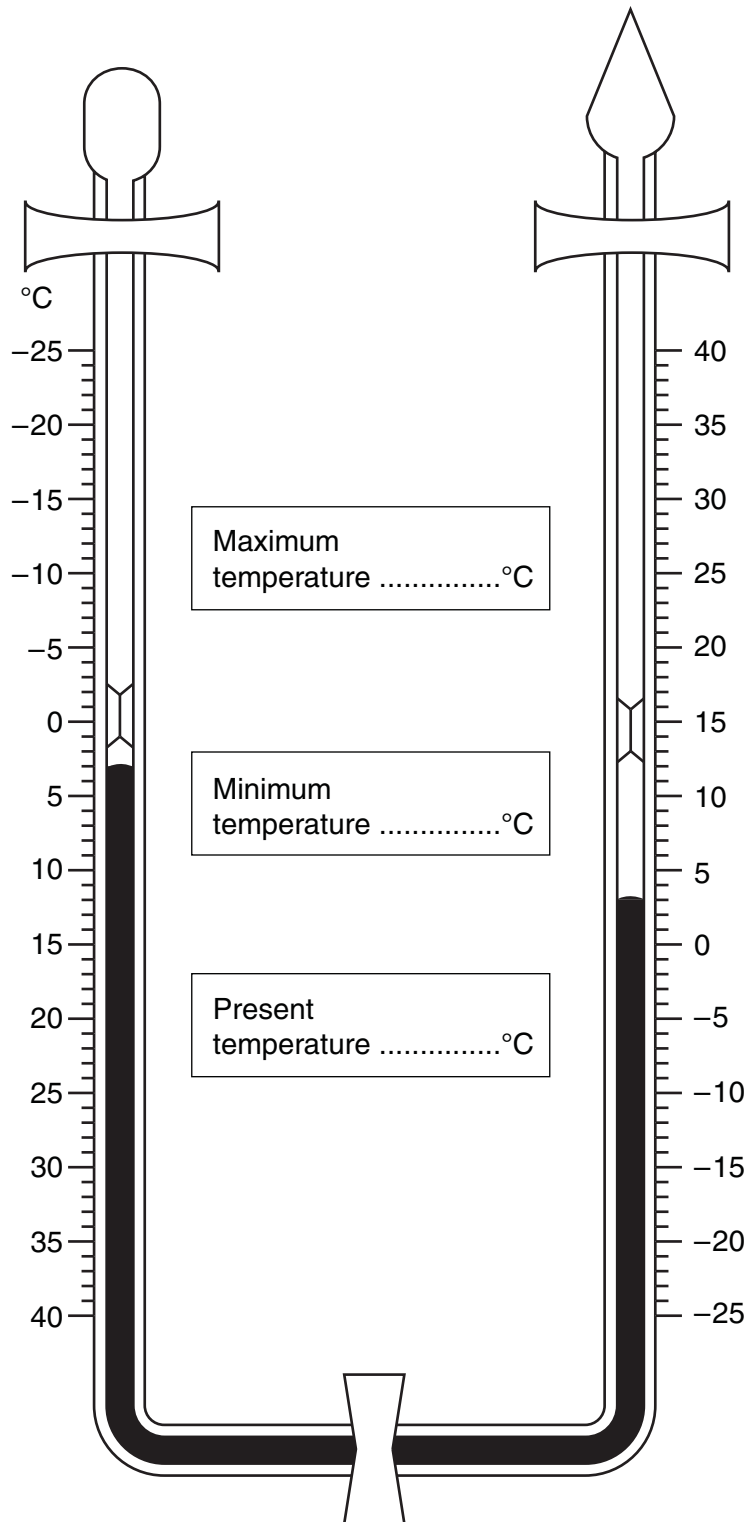


Fig. 13

- (c) The temperature at the other seven sites was measured using a hand-held digital thermometer. The instructions from the teacher on how to use this thermometer are shown in Fig. 14, below.

Readings should be taken at each site at 08.00 and 15.00 hours. Hold the digital thermometer at waist height for 30 seconds. Write the air temperature on the recording sheet. Repeat the measurement two minutes later. Calculate the average (mean) temperature of the two readings. Record this on the sheet too. Do this in the morning and in the afternoon for three days.

Fig. 14

- (i) Suggest **one** advantage of using a digital thermometer over a maximum-minimum thermometer.

.....  
..... [1]

- (ii) Give **one** disadvantage of the method described in Fig. 14.

.....  
..... [1]

- (iii) Suggest why the temperatures were taken each morning and afternoon.

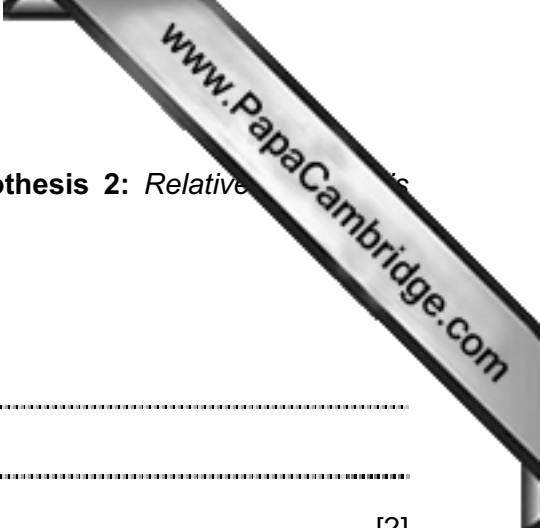
.....  
..... [1]

**TURN OVER FOR QUESTION 7(d)**









(g) (i) Does the data collected by the students support **Hypothesis 2: Relative humidity is affected by vegetation on the ground?**

State your answer and explain your decision.

.....  
.....  
..... [2]

(ii) Suggest **three** improvements the students could have made to their data collection methods.

1 .....  
.....  
2 .....  
.....  
3 .....  
..... [3]

[Total: 30 marks]

- 8 Students in Italy were investigating tourism in the village of Pescasseroli in the Abruzzi National Park. They did their fieldwork during the summer holiday. They wanted to test the following hypotheses:

**Hypothesis 1:** *People of different ages visit the National Park for different reasons.*

**Hypothesis 2:** *Tourism has a positive effect on the village of Pescasseroli.*

- (a) The students used the Internet to find some information about Pescasseroli. This information is given in Fig. 16 below.

Pescasseroli is a settlement of 2000 inhabitants. It is located on a wide plain surrounded by mountains, in the middle of the Abruzzi National Park. Activities in winter include downhill skiing and cross country skiing. In the summer there are many opportunities for a variety of walking and outdoor activities. There are six hotels in the settlement and 11 restaurants for visitors and residents to use.

**Fig. 16**

- (i) Which **one** of the following describes the Internet as a source of information? Circle your answer.

Regular          Sampling          Secondary          Tertiary          [1]

- (ii) The students also collected primary data. What is meant by a primary source of data?

.....  
 ..... [1]

- (iii) Give **one** example of a primary source of data.

..... [1]



(b) To find out information for Hypothesis 1 the students produced a questionnaire. This is shown in Fig. 17 (Insert).

(i) The results to Question T1 (i) are shown in Table 5 below.

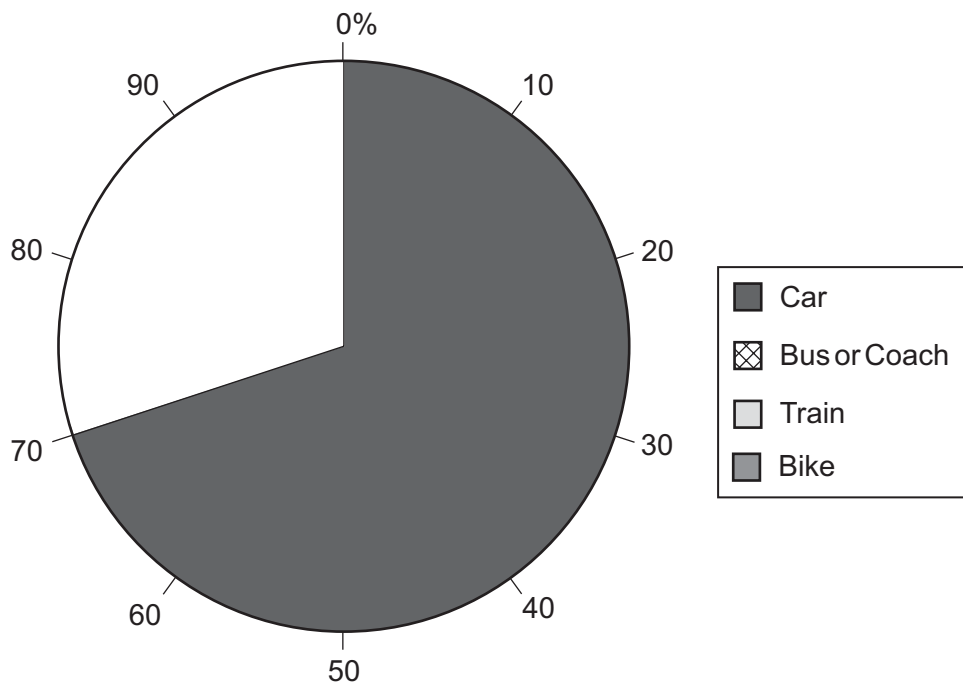
**Table 5**

**Question T1 (i)**  
**How did you get to the National Park today?**

Method	Number	Percentage
Car	56	70
Bus or Coach	17	21
Train	7	9
Bike	0	0

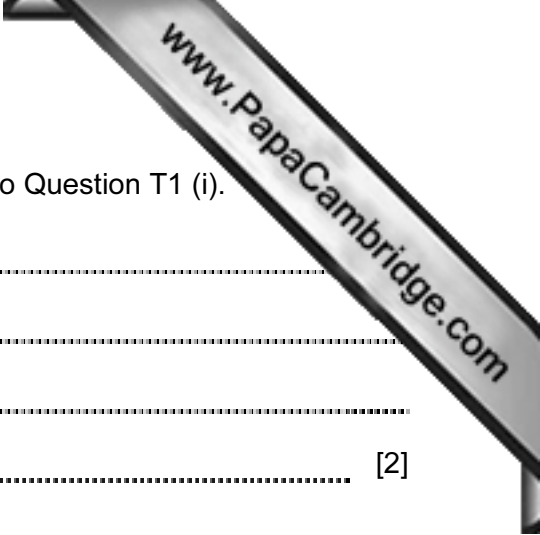
Use these results to complete the pie chart, Fig. 18, below.

**Method of transport used by tourists**



**Fig. 18**

[2]



(ii) Describe the pattern of transport shown by these results to Question T1 (i).

.....

.....

.....

..... [2]

(iii) Suggest **one** reason for this pattern.

.....

..... [1]

(iv) The results to Question T1 (ii) are shown in Table 6 below.

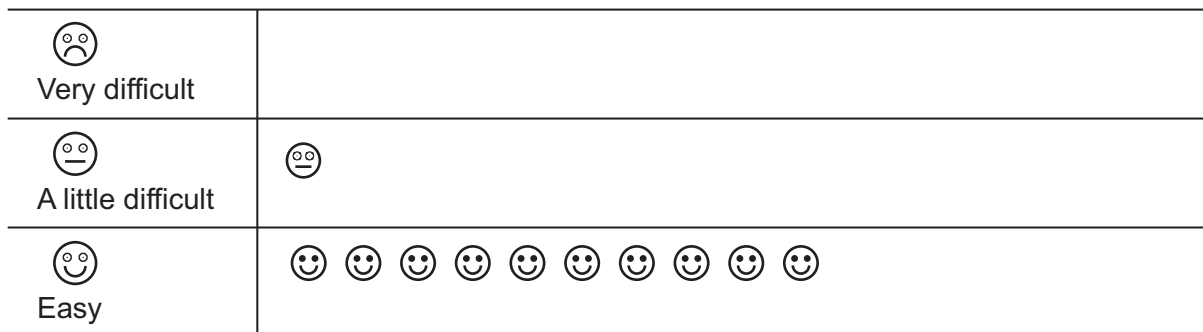
**Table 6**

**Question T1 (ii)**  
**If you came by car did you find parking difficult?**

Opinion about parking	Number	Percentage
Very difficult	12	21
A little difficult	4	7
Easy	40	72

Use these results to complete the pictograph, Fig. 19, below, to show tourists' opinions about parking in Pescasseroli. [1]

**Tourists' opinions about parking**



 or  or  = 4 people

**Fig. 19**

(c) (i) The results to Question T2 are shown in Table 7 below.

**Table 7**

**Question T2**

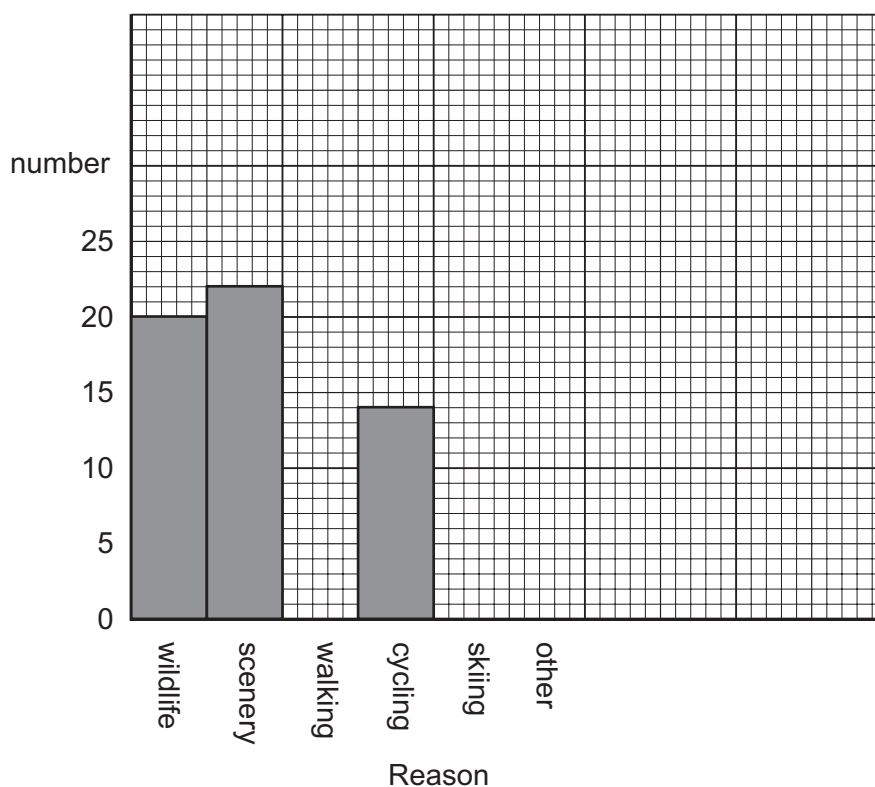
**What is the main reason for your visit to the National Park?**

Main reason	Number	Percentage
See the wildlife	20	25
Scenery	22	28
Walking	15	19
Cycling	14	17
Skiing	0	0
Other e.g. visiting friends	9	11

Use these results to complete the bar graph, Fig. 20, below.

[2]

**Reasons for visiting the Abruzzi National Park**



**Fig. 20**





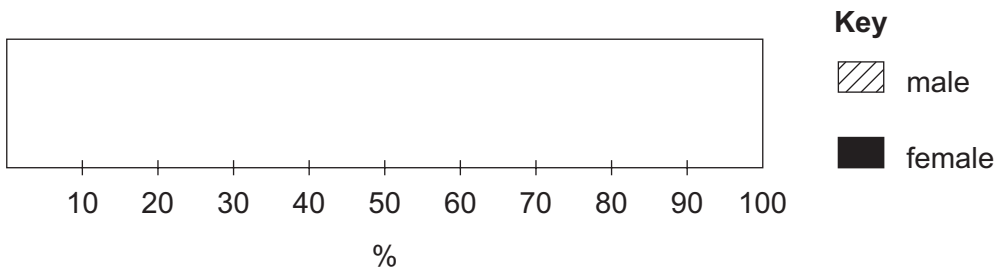
(v) The data about the gender of visitors is shown in Table 11 below.

**Table 11**

**Gender of visitors**

Gender	Percentage
Male	54
Female	46

Use the data in Table 11 to plot the percentage of visitors gender in the divided bar graph below.



**Fig. 21**

[2]

**TURN OVER FOR QUESTION 8(d)**

- (d) To find out information for **Hypothesis 2: Tourism has a positive effect on the quality of life of residents of Pescasseroli**, the students produced a questionnaire for residents. This is shown in Fig. 23 (Insert). The results of this questionnaire are shown in Fig. 23 below.

**Results of questionnaire for residents (125 results)**

			Number	%
R1	Length of residency	Under 5 years	19	15
		5–10 years	22	18
		11–15 years	66	53
		Over 15 years	18	14
R2	Opinion of main problems	None	50	40
		Crowded	18	14
		Litter	15	12
		Traffic	26	21
		Noisy people	16	13

			Yes	No
R3	Residents' views on benefits of tourism	Tourism related job	66%	34%
		Adequate tourist facilities	72%	28%
		Adequate parking	69%	31%
		Improved facilities	83%	17%

**Fig. 23**





---

*Copyright Acknowledgements:*

Question 3 Photograph A  
Questions 4 & 5

© Sandra Bird; © UCLES.  
© Garrett Nagle; *GCSE Geography through diagrams*; Oxford University Press; 1998.

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.