UNIVERSITY OF CAMBRIDGE INTERNATIONAL EX
International General Certificate of Secondary Educati

CANDIDATE NAME

CENTRE NUMBER | | | | | |

CAN NUMBER

0668353038

GEOGRAPHY **0460/21**

Paper 2 **October/November 2013**

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
Protractor
Plain paper
Calculator

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 provided.
Write in dark blue or black pen.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.
DO **NOT** WRITE ON ANY BARCODES.

Answer **all** questions.

The Insert contains Photographs A, B and C for Question 3, and Photograph D for Question 5.
The Survey Map Extract and the Insert are **not** required by the Examiner.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

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.

For Examiner's Use	
Q1	
Q2	
Q3	
Q4	
Q5	
Q6	
Total	

This document consists of **14** printed pages, **2** blank pages and **1** Insert.

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UNIVERSITY of CAMBRIDGE International Examinations

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1 Study the map extract, which is for Buffalo Range, Zimbabwe. The

(a) Fig. 1 shows some of the features in the north west part of th
and the map extract, and answer the questions below.

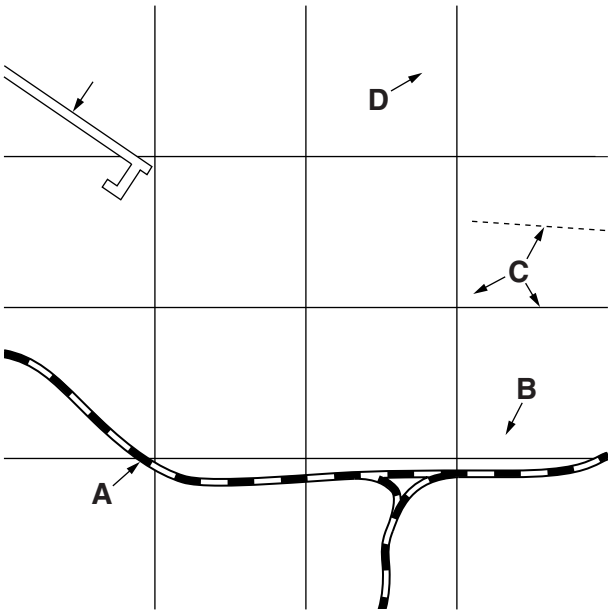


Fig. 1

Using the map extract, identify the following **transport** features shown on Fig. 1:

(i) feature **A**;

.....[1]

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

.....[1]

(iii) features **C**;

.....[1]

(iv) feature **D**;

.....[1]

(v) feature **E**.

.....[1]

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(b) Fig. 2 shows an area in the north east of the map extract.

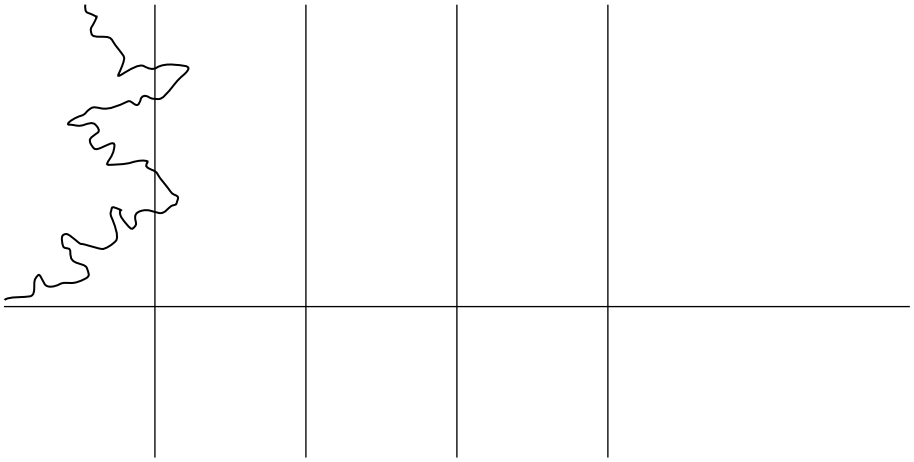


Fig. 2

(i) In which direction does the main river (Luhlangwalungwe) in this area flow? Circle **one** correct answer.

north west south west north east south east [1]

(ii) Describe other features of the drainage in this area.

.....

.....

.....

.....

.....

.....[3]

(c) (i) A contour is shown on Fig. 2. What height above sea level is shown by this contour?

.....[1]

(ii) On Fig. 2, mark the position of a quarry. Use the symbol shown in the key on the map extract. [1]

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(d) Fig. 3 shows the location of two hills in the east part of the and Chipoto Hill.

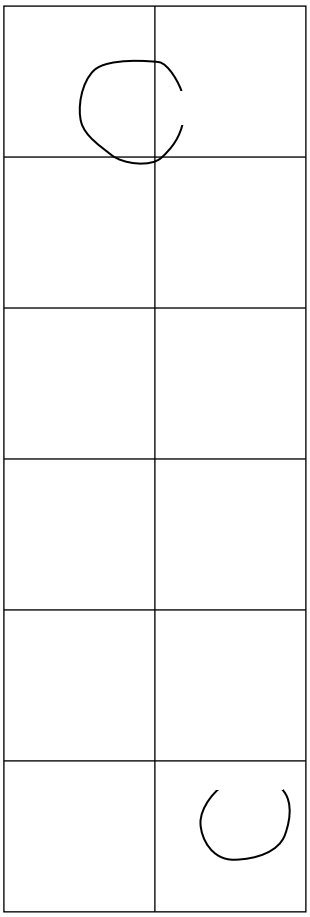


Fig. 3

(i) Identify the feature at the summit (top) of Chitsanga Hill.

.....[1]

(ii) Give the six figure grid reference of the feature at the summit of Chitsanga Hill.

.....[1]

(iii) Measure the distance in a straight line between the summits of the two hills. Give your answer in metres.

.....[1]

(iv) Measure the bearing from grid north from Chitsanga Hill to Chipoto Hill.

..... degrees [1]

(v) The summit of Chipoto Hill is 640 m above sea level. Which is the higher of the two hills and by how much?

.....[1]

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(e) Study the area of cultivation which covers much of the south

(i) Which **one** of the following statements describes the r
one correct answer.

Statement	Tick (✓)
steeply sloping	
cliffs	
gently sloping	
ridge	

[1]

(ii) How have water supplies been developed in the cultivated area?

.....

.....[1]

(iii) What is the map evidence of power supplies to the cultivated area?

.....

.....[1]

(iv) What map evidence shows that housing is available for workers?

.....

.....[1]

[Total: 20 marks]

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2 Fig. 4 shows the percentage of the population aged 0 – 14 in selec 2010.

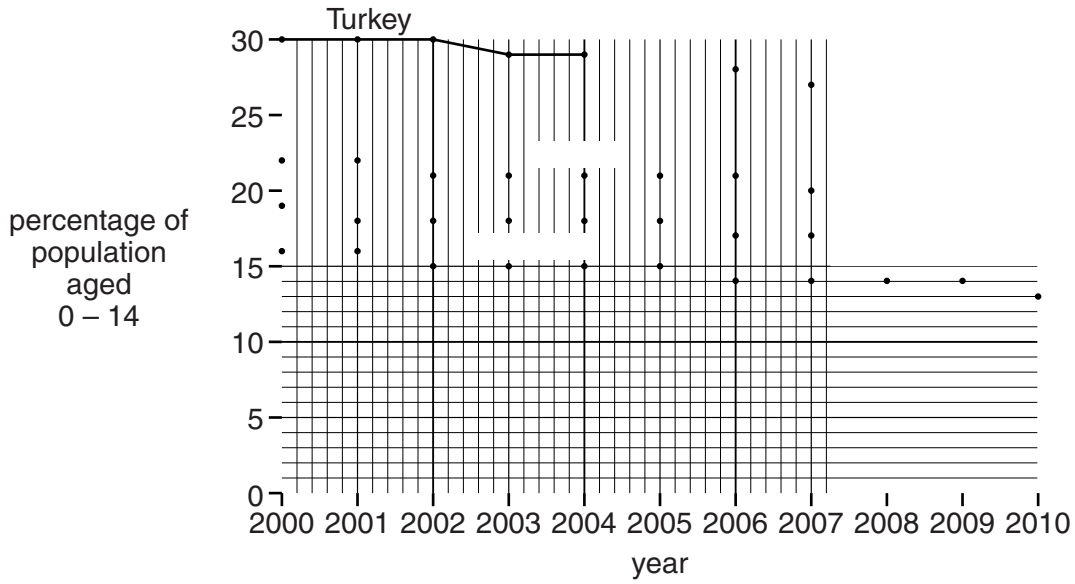


Fig. 4

(a) (i) In 2005 29% of the population of Turkey was aged 0 – 14. Complete Fig. 4 by adding this information. [1]

(ii) What percentage of the population of Germany was aged 0 – 14 in 2010?

..... percent [1]

(iii) Describe the general changes in the percentage of the population aged 0–14 between 2000 and 2010, shown on Fig. 4. There is no need to use figures in your answer.

.....

.....

.....

.....[2]

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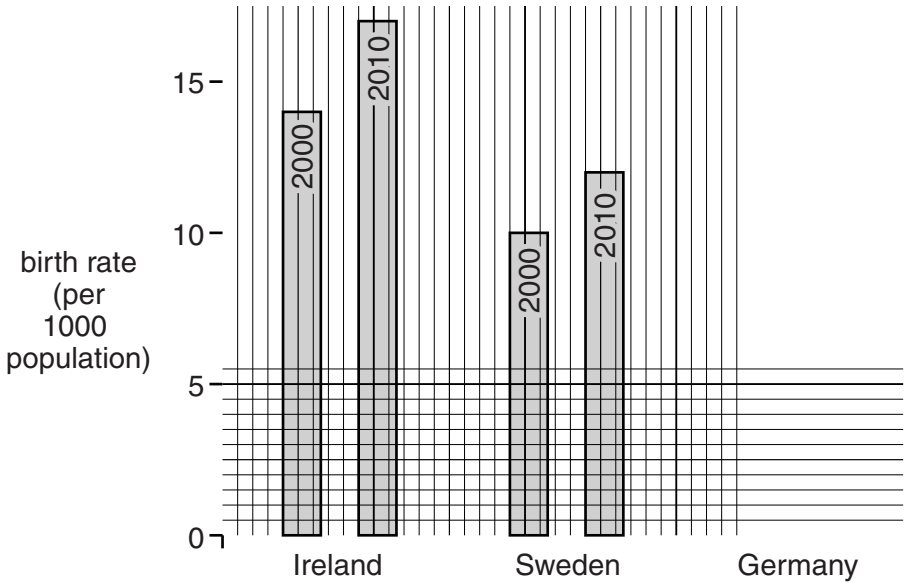


Fig. 5

(b) Fig. 5 shows the birth rates for three of the countries shown on Fig. 4 in 2000 and 2010. Using Fig. 5, state the birth rate of Germany in 2000.

.....[1]

(c) **(i)** Using Figs 4 and 5, which country is most likely to have fewer young people in the future? Tick (✓) **one** answer below.

	Tick (✓)
Ireland	
Sweden	
Germany	

[1]

(ii) Using Figs 4 and 5, which country is most likely to have the largest percentage of young people in the future? Tick (✓) **one** answer below.

	Tick (✓)
Ireland	
Sweden	
Germany	

[1]

(d) Suggest **one** advantage for a country of having a large percentage of young people.

.....

.....[1]

[Total: 8 marks]

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3 Photographs A, B and C (Insert) show three urban areas in Africa

(a) Complete the table below by placing a tick (✓) in the **four** c only for each row.

	Photograph A	Photograph B	Photograp	
high class residential zone				
industrial zone				
CBD				
squatter (informal or shanty) area				

[4]

(b) Describe the buildings shown in Photograph A.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....[4]

[Total: 8 marks]

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4 Fig. 6 shows cross-sections of two types of volcano, Volcano A a
and answer the questions on the opposite page.

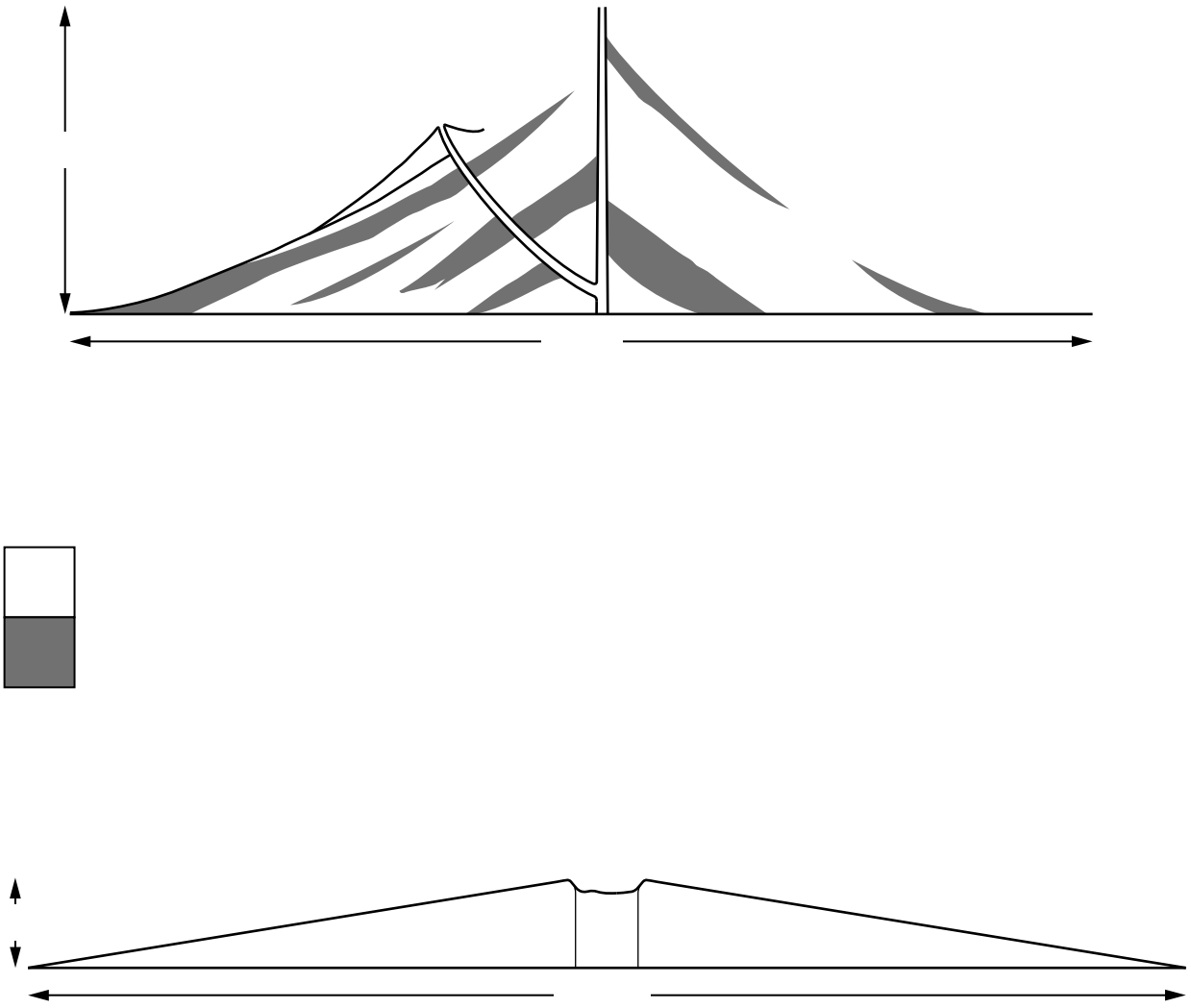


Fig. 6

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(a) Describe the differences between Volcano A and Volcano B.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....[5]

(b) Give reasons for the differences that you have described in part **(a)**.

.....

.....

.....

.....

.....

.....

.....

.....[3]

[Total: 8 marks]

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5 Photograph D (Insert) shows a coastal area.

(a) Identify features **W**, **X**, **Y** and **Z** shown on Photograph D. Cho

beach

arch

stack

wave-cut platform

cliff

spit

plateau

(i) **W** ……. [1]

(ii) **X** ……. [1]

(iii) **Y** ……. [1]

(iv) **Z** ……. [1]

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(b) Explain how feature **X** was formed.

.....

.....

.....

.....

.....

.....

.....

.....[4]

[Total: 8 marks]

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6 Fig. 7 gives information about air pollution in Pennsylvania, an USA.
The sources of three air pollutants: carbon monoxide, sulfur dioxi shown.

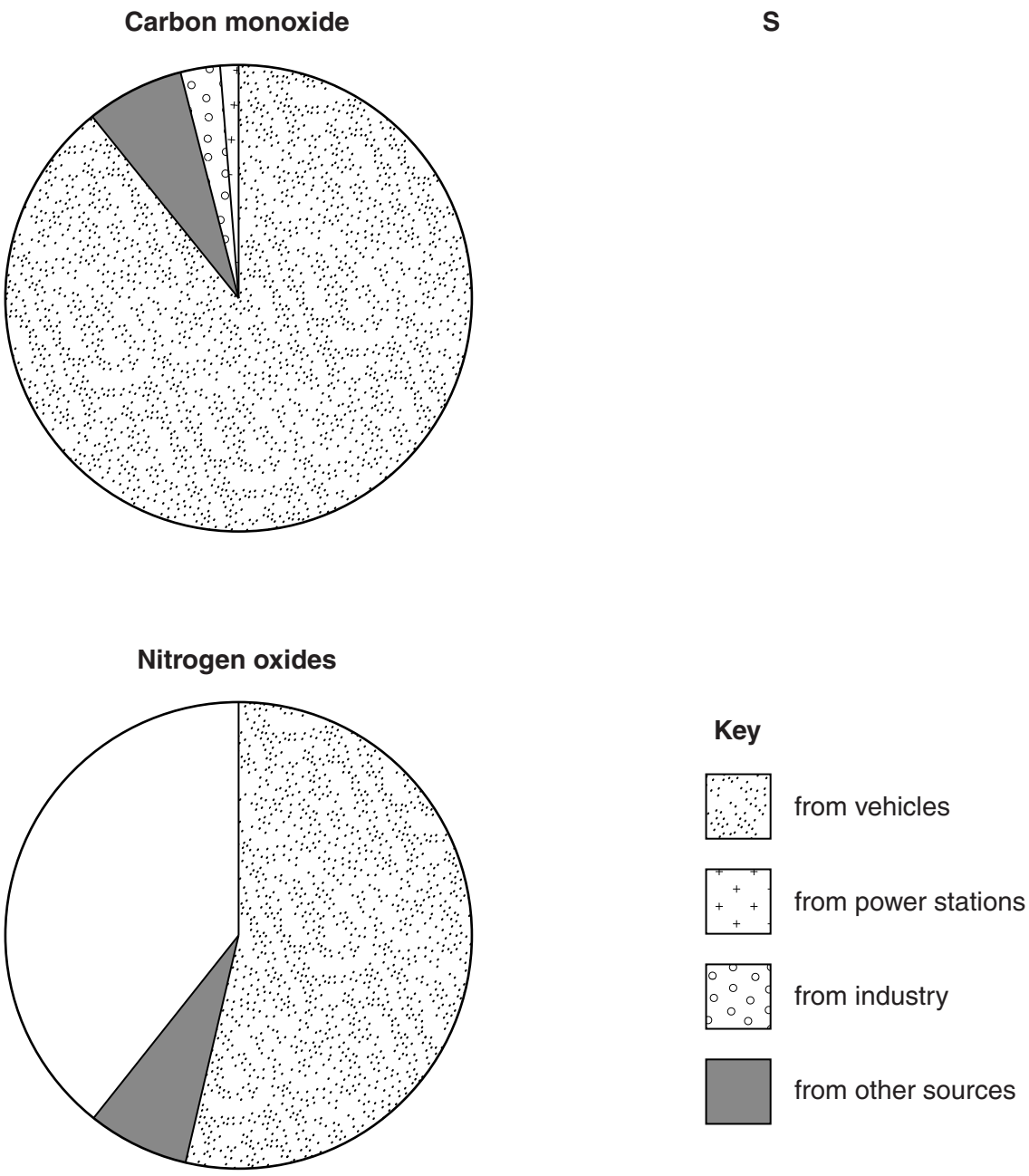


Fig. 7

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(a) Complete Fig. 7 by adding the following information: 27% of power stations and 12% came from industry. Use the key pro

(b) Table 1 gives information about the effects of each type of air

Table 1

Pollutant	Effect
Carbon monoxide (CO)	It can reduce the supply of oxygen to th for people suffering from heart disease
Sulfur dioxide (SO_2)	Causes coughing and irritation of the lungs. It increases the acidity of rain
Nitrogen oxides including nitrogen dioxide (NO_2)	Cause coughing and irritation of the lungs. They help to form ozone which causes photochemical smog

Using information from Fig. 7 and Table 1, explain why the following people may be in favour of reducing emissions from power stations.

(i) a doctor;

.....

.....[1]

(ii) an environmental pressure group.

.....

.....

.....

.....[2]

(c) The government might propose changing power stations to reduce these harmful emissions. Suggest why other people might oppose these changes.

.....

.....

.....

.....[2]

[Total: 8 marks]

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Copyright Acknowledgements:

Question 2 Figs 4 & 5	© adapted: *Eurostat*; http://epp.eurostat.ec.europa.eu
Question 3 Photograph A	D Kelly © UCLES.
Question 3 Photograph B	D Kelly © UCLES.
Question 3 Photograph C	D Kelly © UCLES.
Question 5 Photograph D	D Kelly © UCLES.
Question 6 Fig. 7	© adapted: United States Environmental Protection Agency; www.epa.gov

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