www.dynamicpapers.com

Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

6065375565

ENVIRONMENTAL MANAGEMENT **0680/11**

Paper 1 **May/June 2015**

1 hour 30 minutes

Candidates answer on the Question Paper.

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen.
You may use an HB pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.

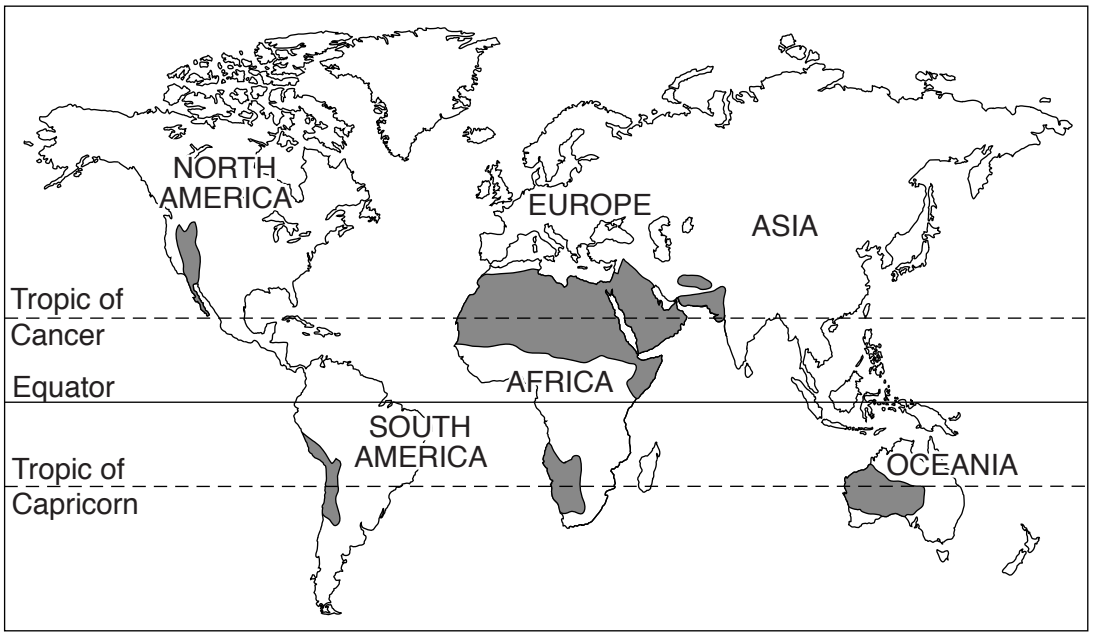
Electronic calculators may be used.
You may lose marks if you do not show your working or if you do not use appropriate units.

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.

DC (NF/SW) 92107/5
© UCLES 2015

www.dynamicpapers.com

1 The map below shows the main hot deserts of the world.



Key

hot deserts

(a) (i) Describe the distribution of hot deserts on the map.

.....

.....

.....

.....

.....

.....

..... [3]

(ii) Describe the main climatic conditions in hot deserts.

.....

.....

.....

..... [2]

© UCLES 2015

www.dynamicpapers.com

(b) (i) Many parts of the world are becoming desert in a process called desertification. Explain the causes of desertification.

.....

.....

.....

..... [2]

(ii) Desertification and soil erosion are often linked. State **one** strategy to prevent soil erosion and explain how it works.

strategy .....

.....

.....

.....

explanation .....

.....

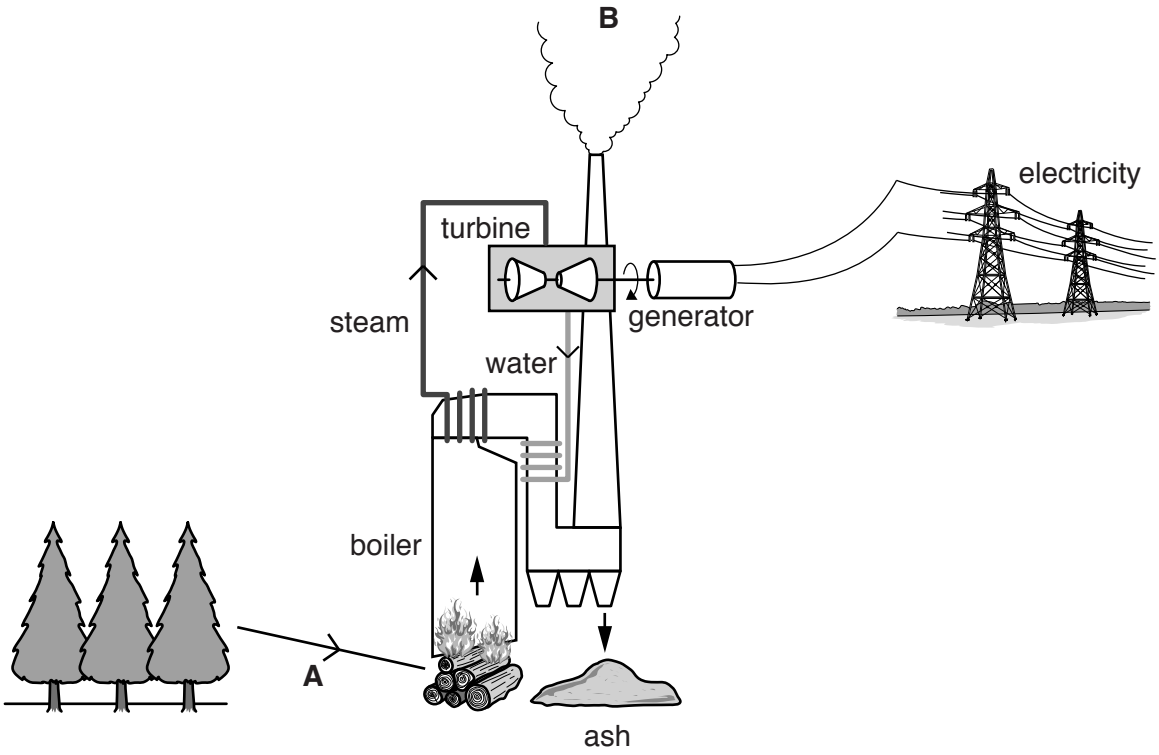
.....

.....

[3]

www.dynamicpapers.com

2 Look at the diagram below which shows a power station.



(a) (i) State the source of the energy in this power station at **A**.

..... [1]

(ii) Using the diagram and your own knowledge, explain how electricity is generated in this power station.

.....

.....

.....

.....

.....

..... [3]

© UCLES 2015

www.dynamicpapers.com

(b) (i) A waste gas emitted at **B** is carbon dioxide. Explain why less of this gas enters the atmosphere from this type of power station than it would if the energy source was coal.

.....

.....

.....

.....

.....

..... [3]

(ii) Give the name of another waste gas emitted at **B**.

..... [1]

(c) Suggest what could be done with the ash shown in the diagram.

.....

.....

.....

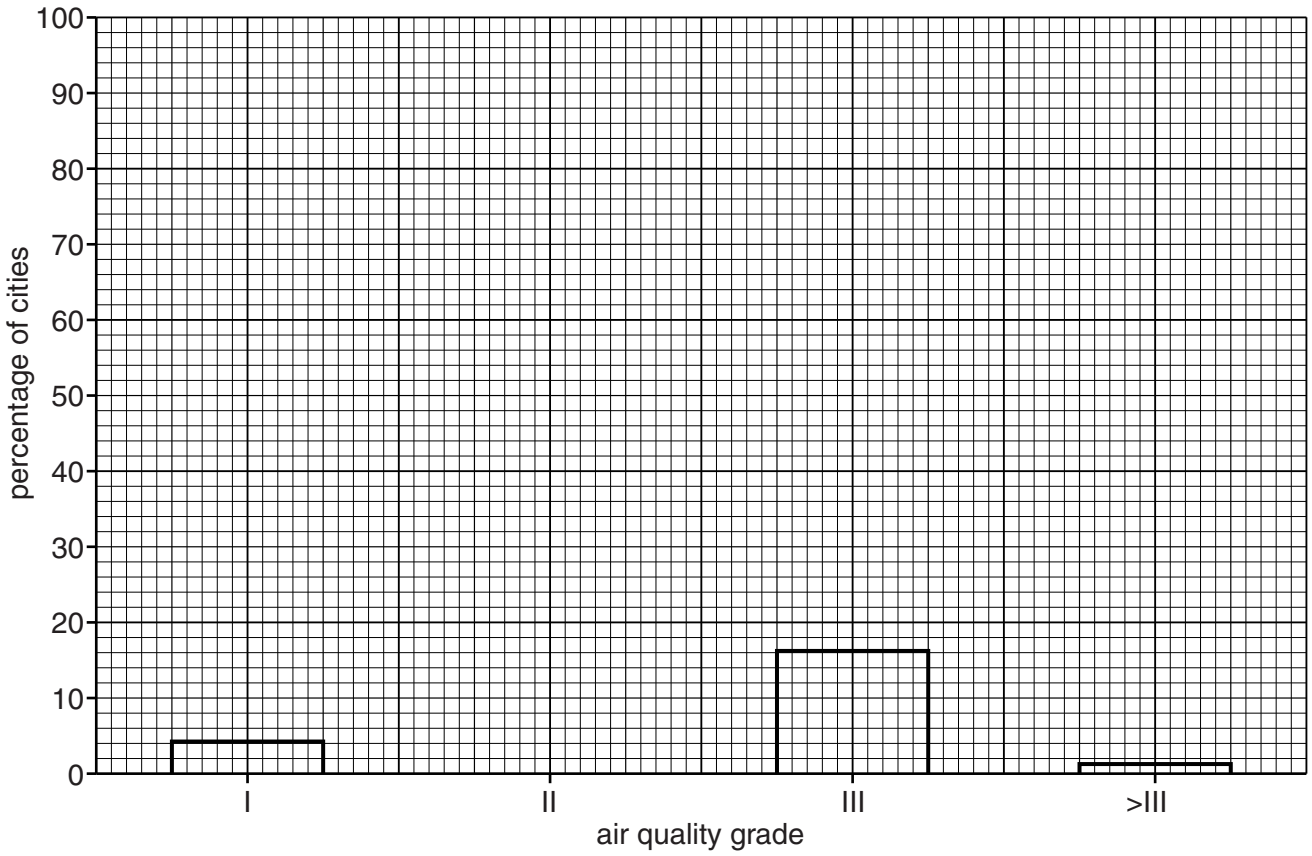
..... [2]

www.dynamicpapers.com

3 **(a)** The table of data and graph show air quality in a number of cities in China.

air quality grade	number of cities	percentage of cities
I	26	4.2
II	479	.....
III	99	16.2
>III	8	1.3
total	612	100.0

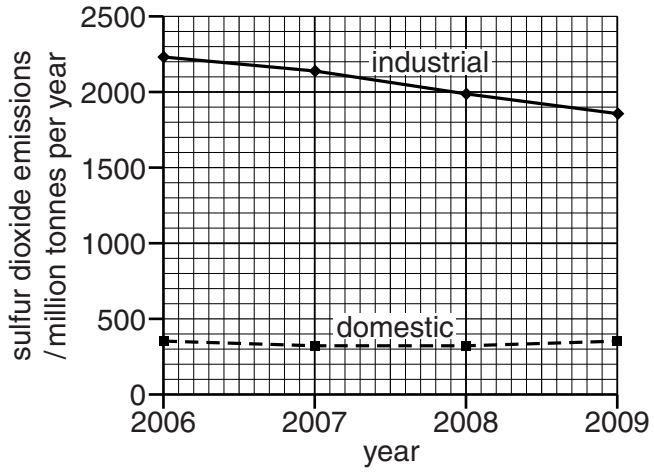
Key
grade I = least polluted



(i) Complete the table **and** use the data to complete the bar graph. [2]

www.dynamicpapers.com

(ii) Air can be polluted by gases, such as sulfur dioxide, which causes acid rain. Look at the graph below, which shows industrial and domestic sulfur dioxide emissions in Germany (a developed country). Describe and suggest reasons for the trends in emissions between 2006 and 2009.



.....

.....

.....

.....

.....

.....

.....

..... [4]

(b) Explain how air pollution can cause acid rain.

.....

.....

.....

.....

.....

.....

.....

..... [4]

© UCLES 2015

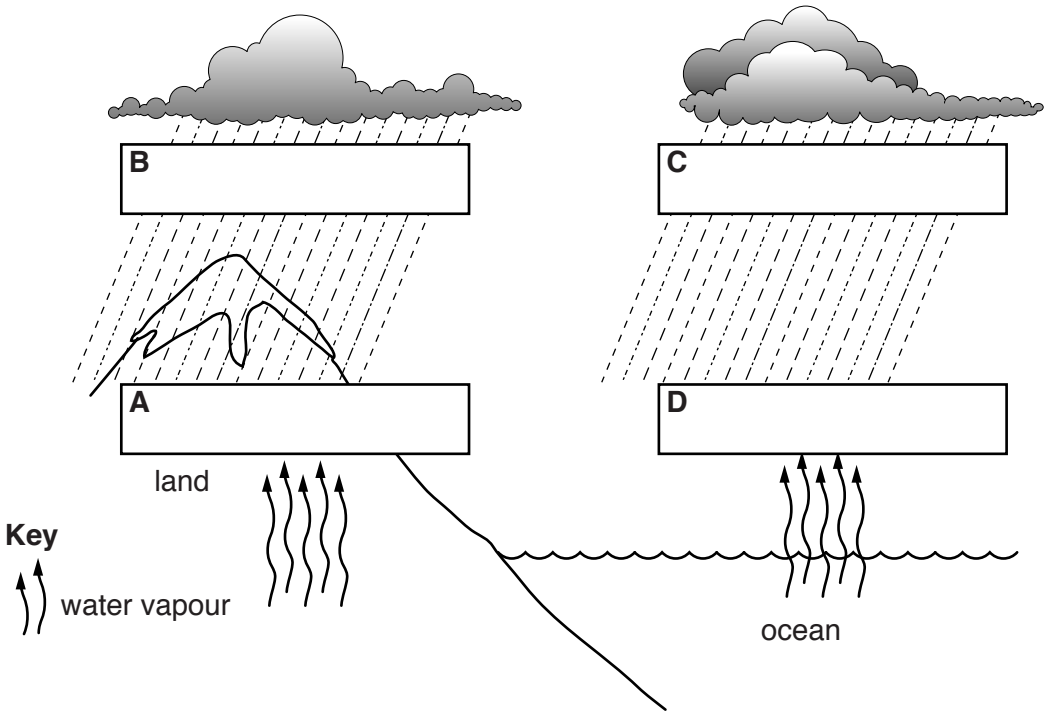
[Turn over

www.dynamicpapers.com

4 **(a)** The table below shows data about the movement of water through the water cycle.

water movement / thousands km^3 per year			
	ocean	land	total
precipitation	373	113	
evaporation	413	73	

(i) Use the data in the table to fill in the boxes **A**–**D** in the diagram below with the correct numbers. [2]



(ii) Complete the table **and** compare the **total** world precipitation and **total** world evaporation.

.....

.....

.....

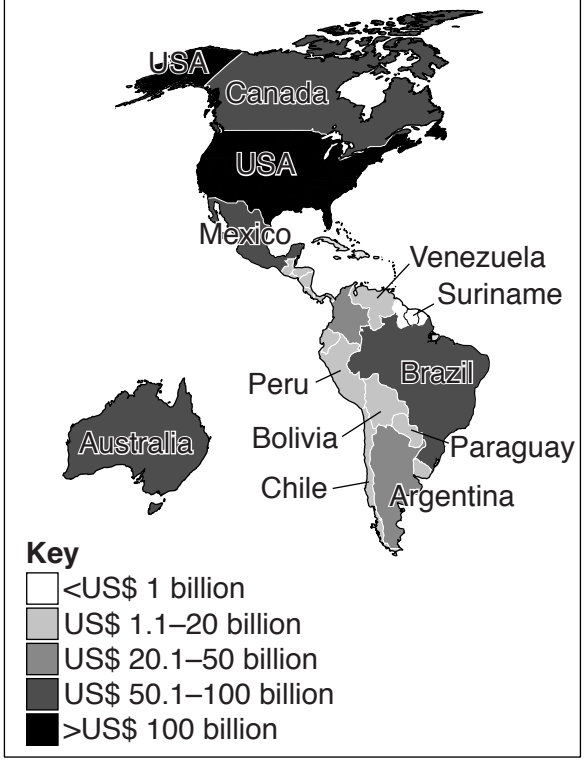
..... [2]

© UCLES 2015

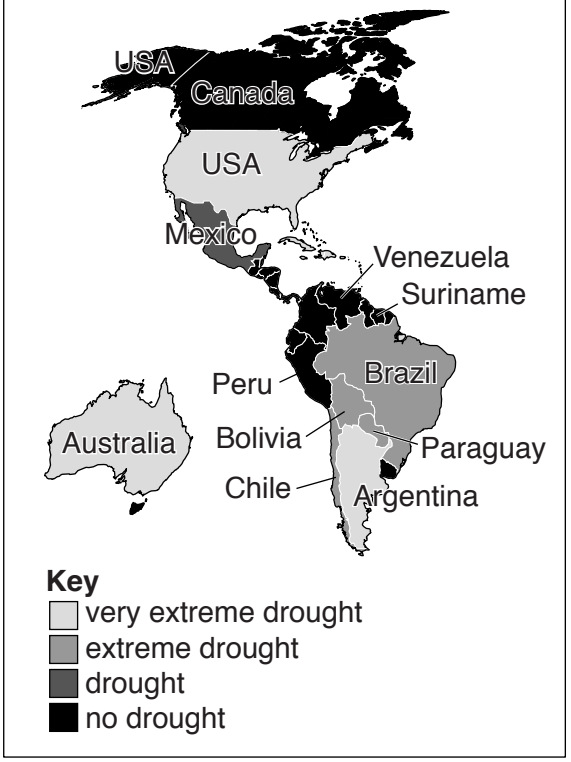
www.dynamicpapers.com

(b) One of the main uses for water is for agriculture. Map **A** shows world agricultural production in the Americas and Australia. Map **B** shows drought status.

map **A:** agricultural production by value



map **B:** drought status



(i) Suggest how far this information shows a mismatch between water supply and agricultural production. You can refer to the named countries in your answer.

.....

.....

.....

.....

.....

.....

.....

..... [3]

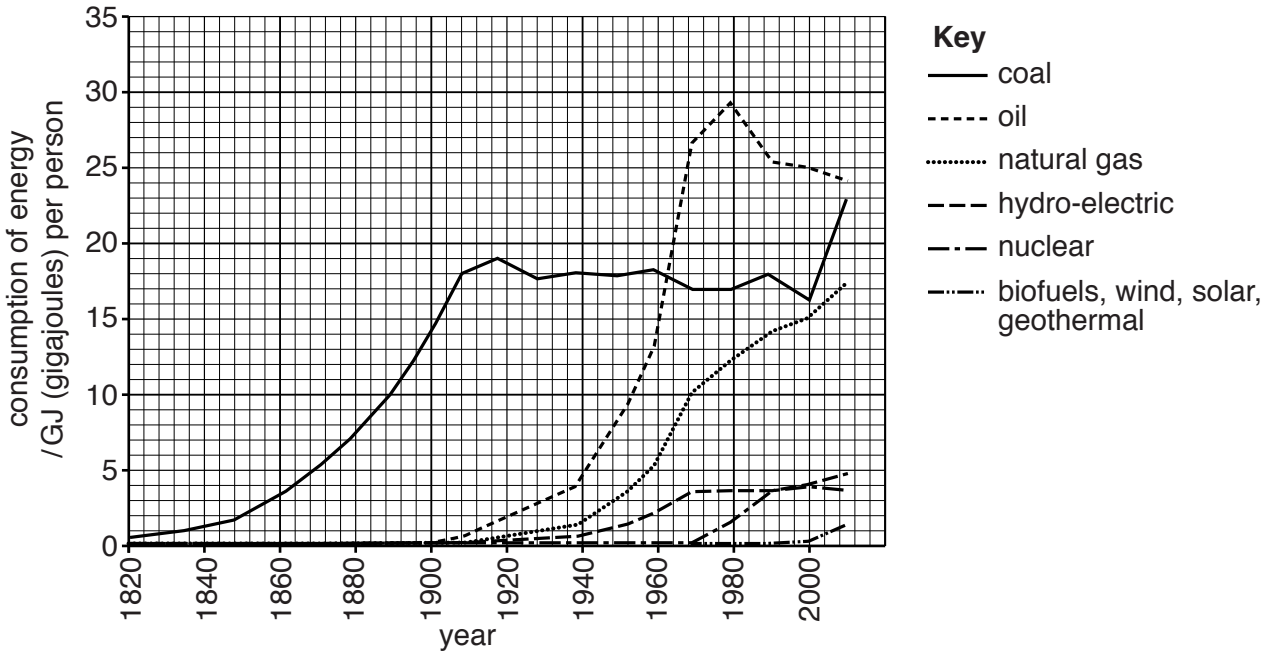
www.dynamicpapers.com

(ii) Although water is vital to life, it can also be the source of diseases. Complete the table below about water-related diseases. [3]

disease	type	carrier	caused by	symptoms
bilharzia	.....	.....	worm	weak and anaemic, kidney problems
cholera	water-borne	none	bacterium	.....
.....	.....	female mosquitoes	*Plasmodium*	.....

www.dynamicpapers.com

5 Look at the graph below, which shows the consumption of different energy sources per person from 1820 until 2010.



(a) (i) Calculate the total consumption of energy per person in 2000.

Space for working

..... GJ per person [1]

(ii) Identify the alternative sources shown in the graph.

.....

..... [1]

(iii) Name **one** alternative energy source which is not shown by the graph.

.....

..... [1]

© UCLES 2015

[Turn over

www.dynamicpapers.com

(b) (i) Name **two** minerals which are **not** used as fuels. For each mineral state **one** use in industrial processes.

mineral .....

use .....

.....

.....

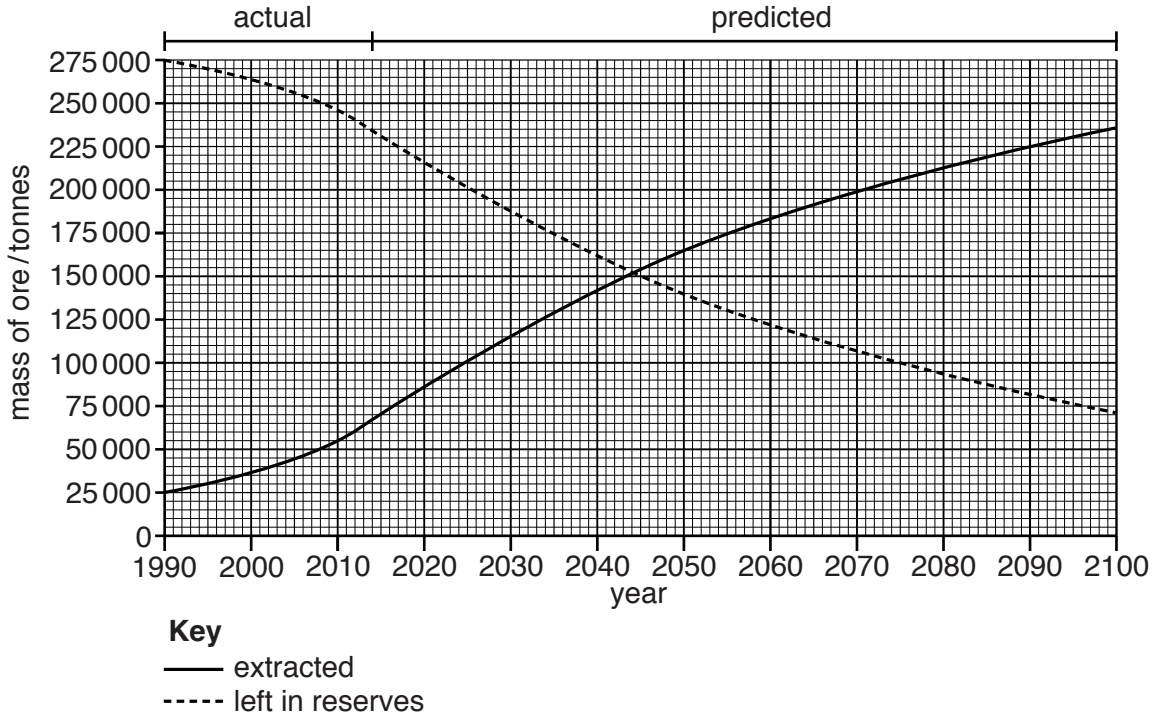
mineral .....

use .....

.....

..... [3]

(ii) The graph below shows the past and predicted future extraction of a mineral ore and the total amount of reserves left in the world.



State in which year the total amount of ore extracted equals the total amount left in reserves.

..... [1]

© UCLES 2015

www.dynamicpapers.com

(iii) Suggest ways in which the ore reserves could be made to last longer.

.....

.....

.....

.....

.....

..... [3]

www.dynamicpapers.com

6 **(a)** Look at the photographs (**A**, **B**, **C**) of part of three wooden benches with vegetation growing on them in 2008.



A



B



C

(i) Complete the table below to match each photograph to the year in which each of the benches were new.

year when bench was new	letter of photograph
2001	.....
2002	.....
2003	.....

[2]

(ii) The change in vegetation shown on the benches is called vegetational succession.
Explain why vegetation changes over time in an area.
Your answer should refer to soil changes and competition.

.....

.....

.....

.....

.....

.....

.....

..... [4]

© UCLES 2015

www.dynamicpapers.com

(b) Competition between weeds and crops is a problem for farmers because it reduces crop yield.
Suggest how a farmer might reduce this problem.

.....

.....

.....

.....

.....

.....

.....

..... [4]

© UCLES 2015

www.dynamicpapers.com

BLANK PAGE

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.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cie.org.uk after the live examination series.

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.

© UCLES 2015