



Please write clearly, in block capitals.

Centre number

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Candidate number

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Surname

Forename(s)

Candidate signature

GCSE GEOGRAPHY

Paper 2: Challenges in the human environment

Additional specimen

Morning Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- a pencil
- a ruler
- a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the bottom of this page.
- Answer **all** questions in Section A and Section B.
- Answer Question 3 and **one** other question in Section C.
- You must answer the questions in the spaces provided. Do **not** write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The total number of marks available for this paper is 88.
- Spelling, punctuation, grammar and specialist terminology will be assessed in Question 01.9.

Advice

For the multiple-choice questions, completely fill in the circle alongside the appropriate answer(s).

CORRECT METHOD  WRONG METHODS    

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

Section A Urban issues and challenges

Answer **all** questions.

0 1

Urban issues and challenges

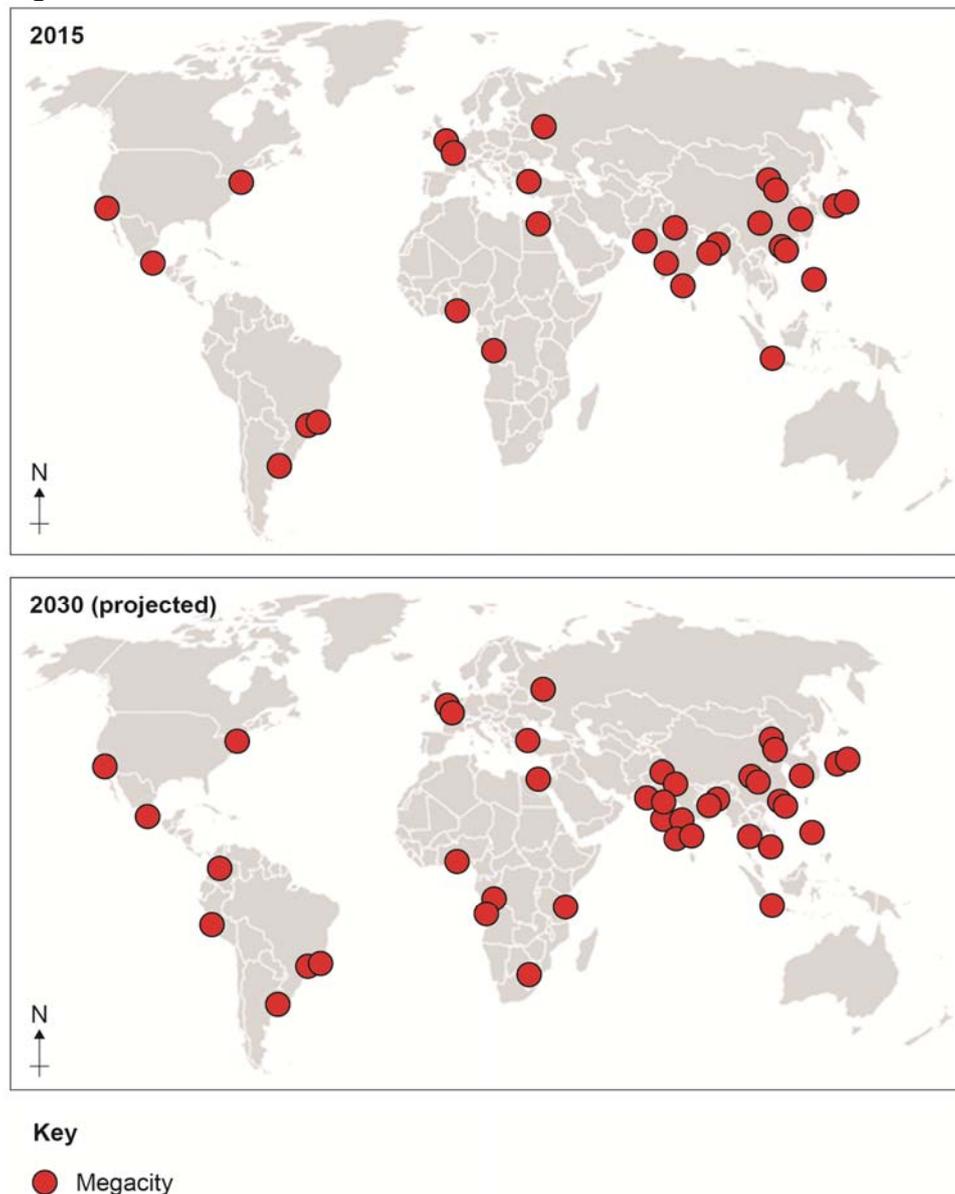
0 1 . 1

What is a megacity?

[1 mark]

Study **Figure 1**, a map showing megacities in 2015 and 2030 (projected).

Figure 1



0 1 . 2

Complete the following paragraph to describe the changes shown by the maps 2015 – 2030.

Choose the **three** correct answers from this list:

Africa South America Australasia Southern Asia

half one two four

[3 marks]

The greatest increase in the number of megacities is in_____ .

There are no new megacities in_____ of the continents on the 2030 map. The

continent of _____ shows a 100% growth in number of megacities

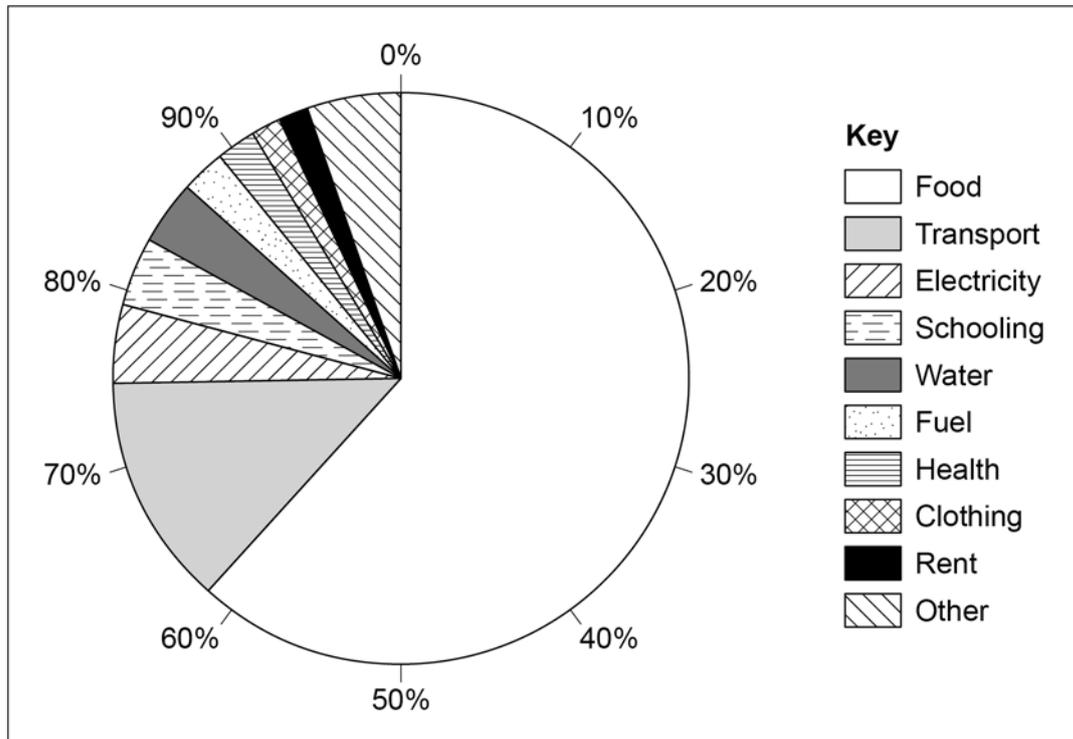
between 2015 and 2030.

Question 1 continues on the next page

Turn over ►

Study **Figure 2**, a pie chart showing how a household in a lower income country (LIC) spends its money.

Figure 2



0 1 . 3 Describe the pattern of spending shown in **Figure 2**.

[2 marks]

Study **Figure 3**, a photograph of a rubbish dump in the Payatas slum in Manila, a city in the Philippines.

Figure 3



0 1 . 4 Suggest **one** opportunity for people shown in **Figure 3**.

[2 marks]

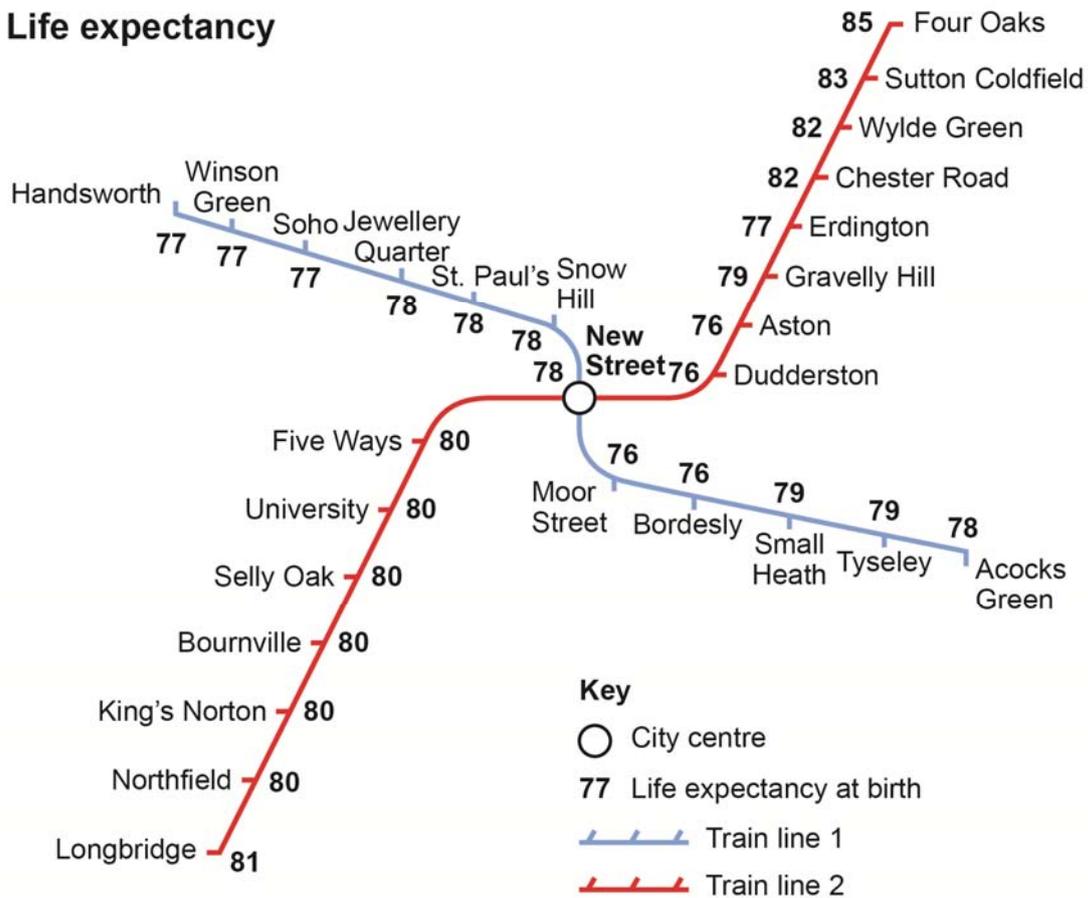
Question 1 continues on the next page

Turn over ►

Study **Figure 4**, a topological map showing variation in life expectancy along two train lines in Birmingham.

Figure 4

Life expectancy



0 1 . 6 Calculate the range in life expectancy shown in **Figure 4**.

[1 mark]

Question 1 continues on the next page

Turn over ►

0 1 . 7 Using **Figure 4** and your own understanding, suggest why there are inequalities in health in urban areas.

[4 marks]

0 1 . 8 Outline **one** way that international migration has led to change in the character of a named UK city.

[2 marks]

Section B The changing economic world

Answer **all** questions.

0	2
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The changing economic world

Study **Figure 5**, a table showing the results of a survey of life satisfaction for a number of European countries in 2011.

Life satisfaction is how happy people are with their quality of life.

Figure 5

0 = lowest possible life satisfaction score

10 = highest possible life satisfaction score

Country	Life satisfaction score
Bulgaria	5.5
Croatia	6.8
Denmark	8.4
Estonia	6.3
Finland	8.1
Germany	7.2
Hungary	5.8
Italy	6.9
Netherlands	7.7
Portugal	6.8
UK	7.3

0	2
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1

Calculate the median value for the life satisfaction data in **Figure 5**.

[2 marks]

Show your working here:

Median =

0 2 . 2 Suggest one reason why life satisfaction scores vary between countries.

[1 mark]

0 2 . 3 Give **one** disadvantage of using a social measure of development such as life satisfaction.

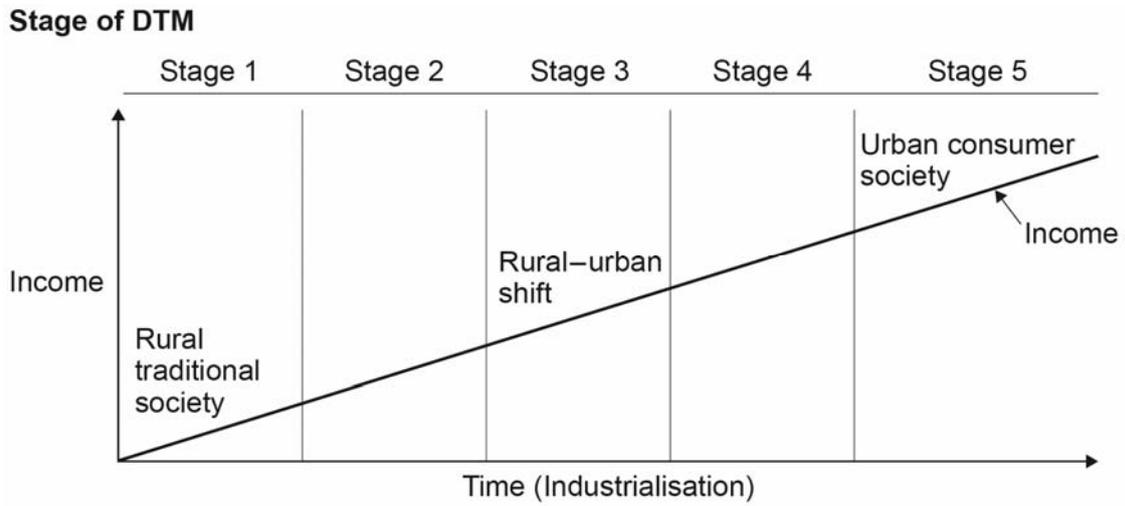
[1 mark]

Question 2 continues on the next page

Turn over ►

Study **Figure 6**, a simplified model of the link between the Demographic Transition Model (DTM) and economic development.

Figure 6



0 2 . 4 Using **Figure 6** and your own understanding, explain the link between the DTM and a country's level of development.

[4 marks]

Study **Figure 7**, which describes the effects of a microfinance project in Ghana, a country in Africa.

Figure 7

Before microfinance was available in the area the crops were failing and the people were going from crisis to crisis, especially in the dry season where they would often have no food or money. The children would have so little to eat that they had become extremely malnourished and there was a very high mortality rate.

Education showed villagers how to plant and grow dry season crops like tomatoes, onions and cabbages.

The difference in the crops was amazing. Villagers now had food all through the year for themselves and had a surplus to sell. This meant they could afford to buy health care, school uniforms and pay for labour on their small farms meaning they could farm much bigger areas of land which increased their food supplies.

0 2 . 5 Using **Figure 7**, state **two** challenges faced by the people of the area.

[2 marks]

1

2

0 2 . 6 Suggest **one** way microfinance loans can help to reduce the development gap.

[1 mark]

Question 2 continues on the next page

Turn over ►

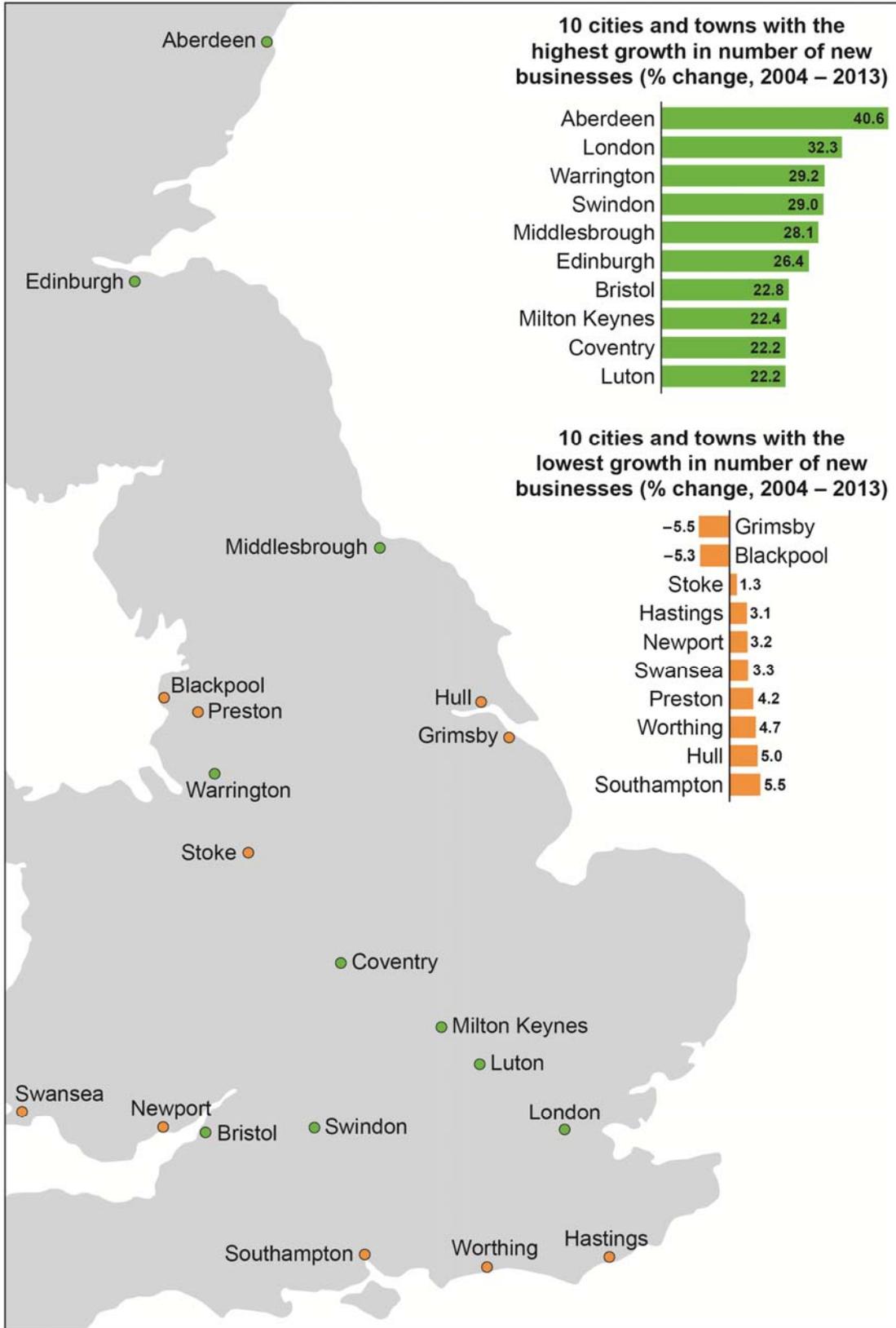
Question 2 continues on the next page

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

Turn over ►

Study **Figure 8**, a map showing the ten cities and towns in the UK with the highest and lowest growth in new business 2004 – 2013.

Figure 8



Section C The challenge of resource management

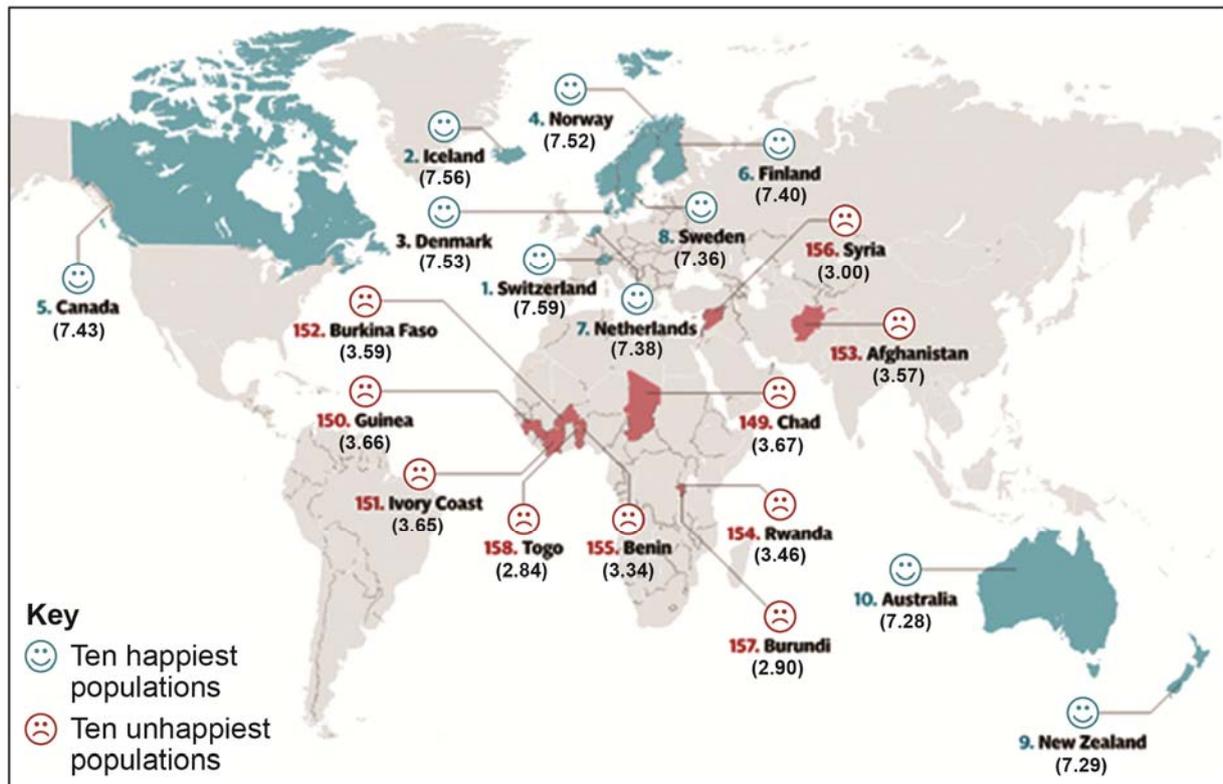
Answer Question 3 and **either** Question 4, Question 5 **or** Question 6.

0 3

Study **Figure 9**, a map showing the world's ten happiest populations and the ten unhappiest in 2015.

Figure 9 uses a scale of 0–10 with the higher the score, the happier the people.

Figure 9



0 3 . 1

What is the difference in score between the happiest and unhappiest populations shown in **Figure 9**?

[1 mark]

0 3 . 2

Using **Figure 9** and your own knowledge, explain how inequalities in the supply of resources influence social well-being.

[3 marks]

0 3 . 3

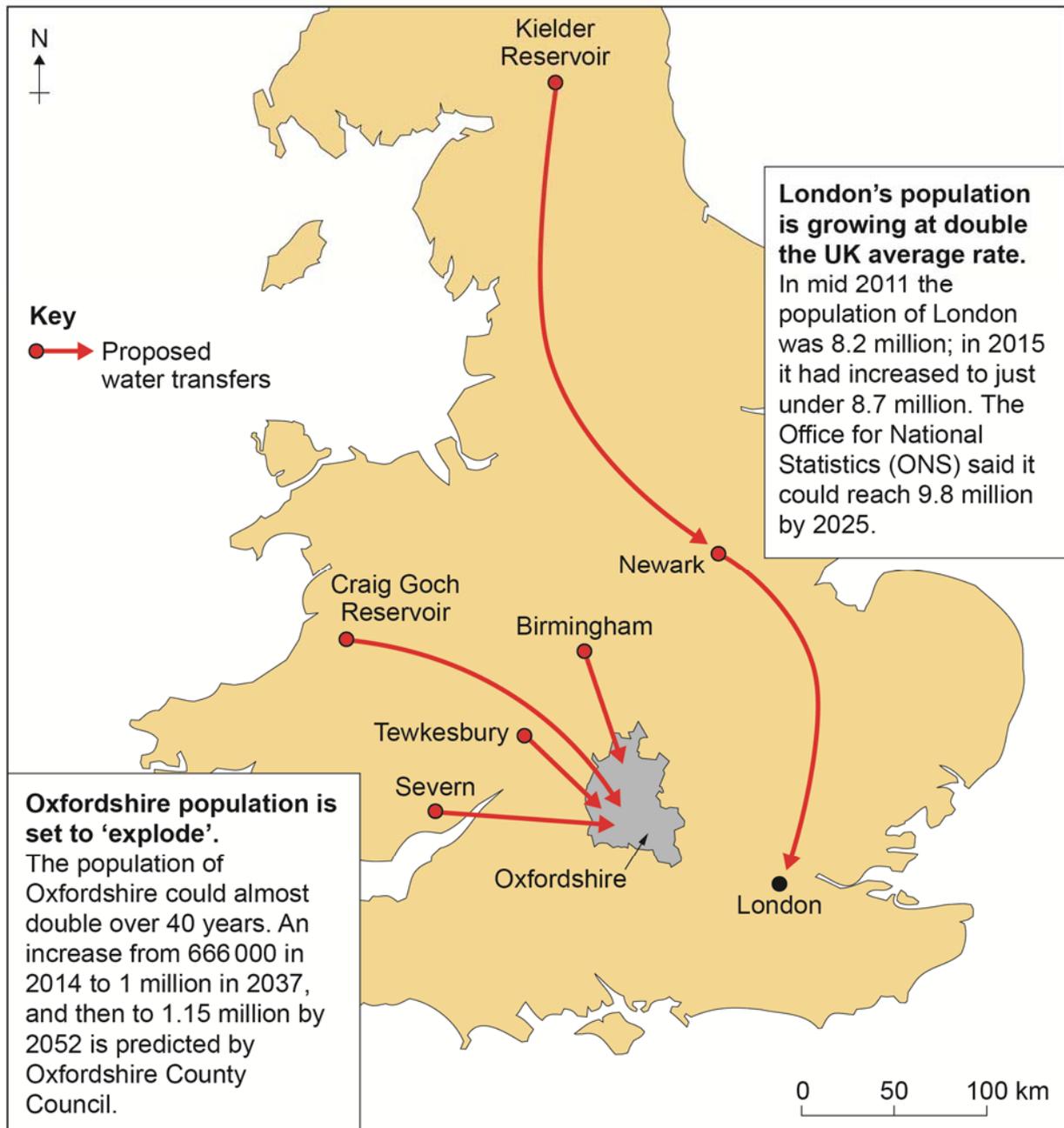
Outline **one** opportunity created by the changing demand for food in the UK.

[2 marks]

Turn over ►

Study **Figure 10**, a map showing proposed water transfer schemes in England and Wales and some information about population change.

Figure 10



Answer **either** Question 4 **or** Question 5 **or** Question 6.

Shade the circle below to indicate which optional question you will answer.

Question **0 4**

Question **0 5**

Question **0 6**

CORRECT METHOD

WRONG METHODS

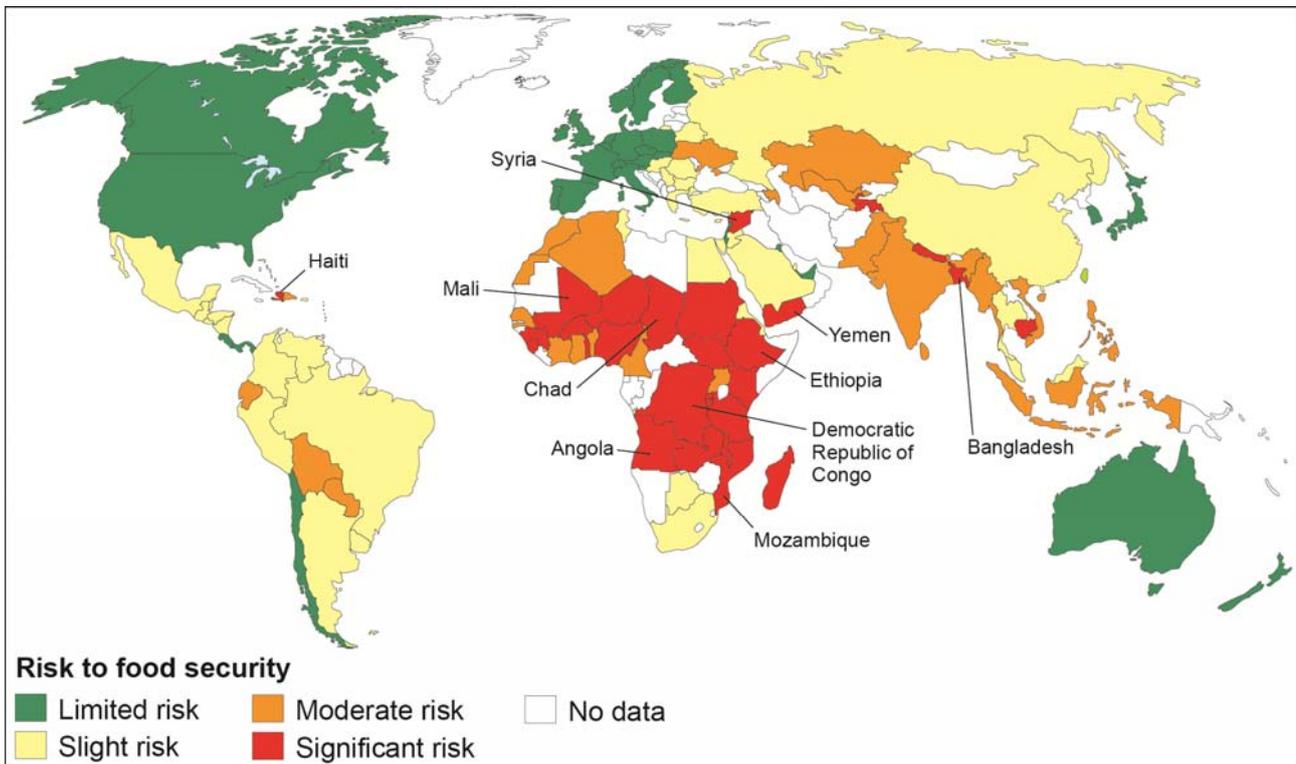


0 4

Food

Study **Figure 11**, a world map showing the risk to food security in 2013.

Figure 11



0 4 . 1

Name **one** Asian or Middle Eastern country with a **significant** risk to food security.

[1 mark]

0 4 . 2 How many South American countries for which data is shown have a **moderate** risk to food security?

Shade **one** circle only.

[2 marks]

A 3

B 1

C 2

D 0

What percentage of the thirteen countries in mainland South America for which data is shown have a moderate risk to food security?

0 4 . 3 Describe the distribution of countries with a significant risk to food security shown in **Figure 11**.

[2 marks]

0 4 . 4 Outline **one** reason why some countries have a significant risk to food security.

[2 marks]

Turn over ►

Turn over for the next question

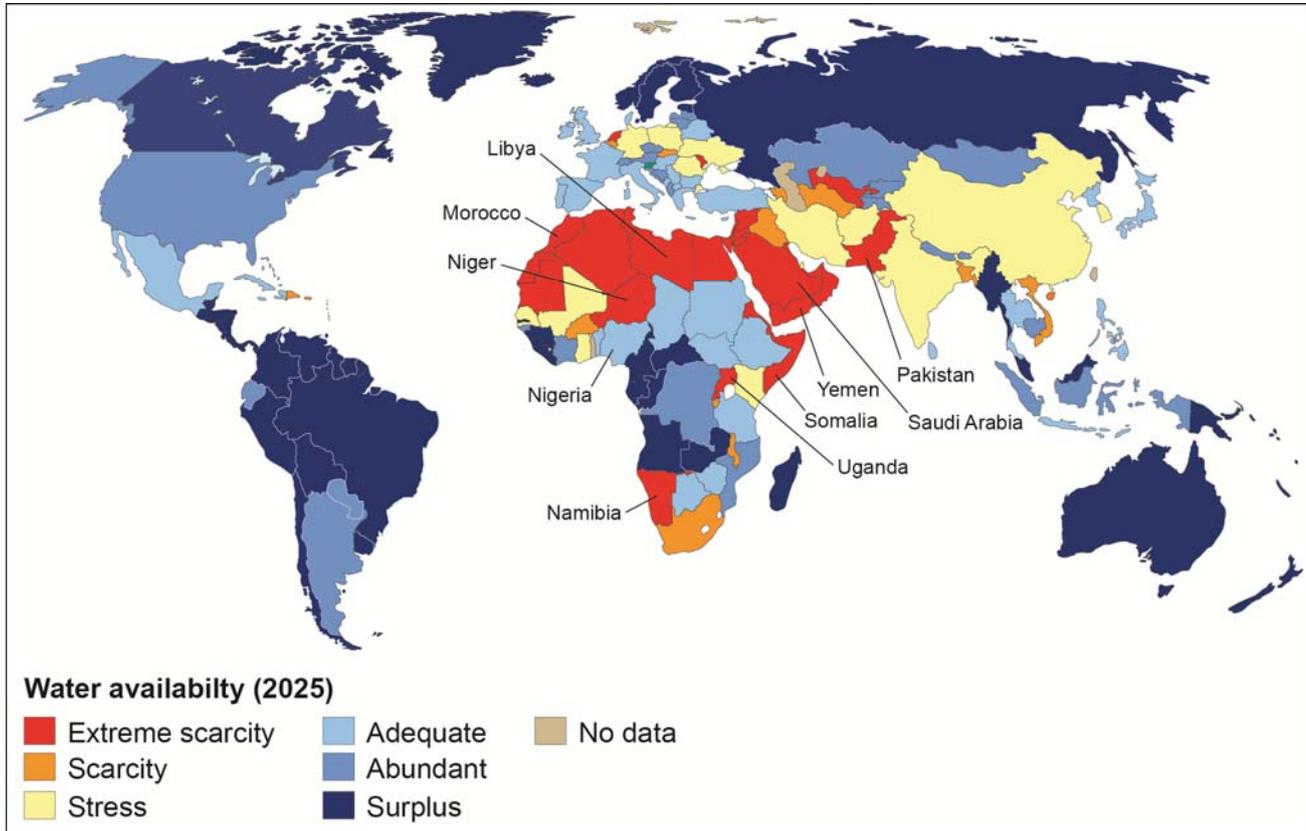
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ANSWER IN THE SPACES PROVIDED**

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0 5

Water

Study **Figure 12**, a world map showing projected water availability in 2025.

Figure 12

0 5

. 1

Name **one** Asian or Middle Eastern country with **extreme** scarcity projected in 2025.

[1 mark]

0 5 . 2 How many South American countries have an **abundant** water supply projected in 2025?

Shade **one** circle only.

[2 marks]

A 3

B 1

C 2

D 0

What percentage of the thirteen countries in mainland South America have a projected abundant water supply in 2025?

0 5 . 3 Describe the distribution of countries with an extreme risk of water scarcity shown in **Figure 12**.

[2 marks]

0 5 . 4 Outline **one** reason why some countries have an extreme risk of water scarcity.

[2 marks]

Turn over ►

Turn over for the next question

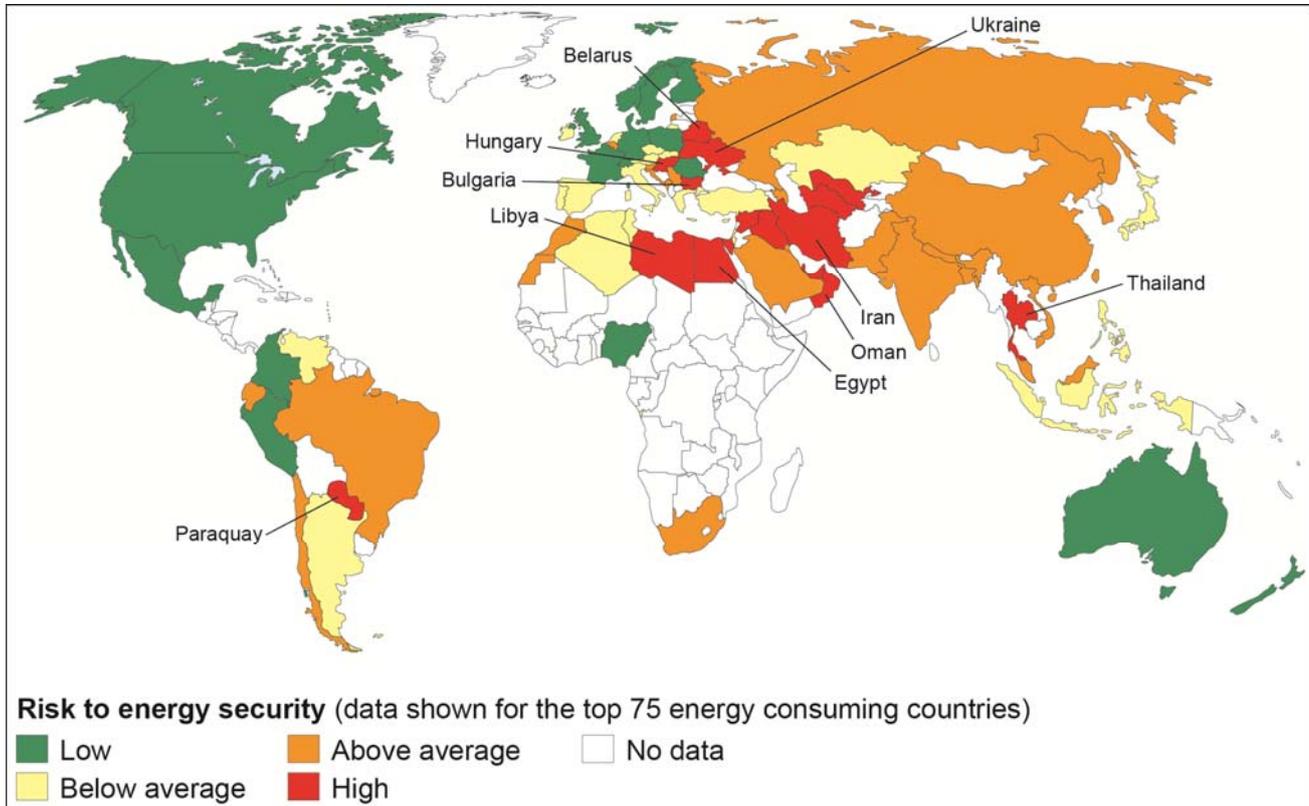
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ANSWER IN THE SPACES PROVIDED**

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0 6

Energy

Study **Figure 13**, a world map showing the risk to energy security in 2011.

Figure 13

0 6 . 1

Name **one** Asian or Middle Eastern country for which data is shown with a **high** risk to energy security.

[1 mark]

0 6 . 2 How many South American countries for which data is shown have an above average risk to energy security?

Shade **one** circle only.

[2 marks]

A 3

B 1

C 2

D 0

What percentage of the eight countries for which data is shown in South America have an above average risk to energy security?

0 6 . 3 Describe the distribution of countries in the **low** risk category for energy security shown in **Figure 13**.

[2 marks]

0 6 . 4 Outline **one** reason why some countries have a low risk to their energy security.

[2 marks]

Turn over ►

