

Year 11 Exam Feedback

Geography Department



## Model Answer Booklet

### Paper 2: Challenges in the Human Environment

Name:	
Geography Group:	

<b>Action 1:</b>
Rewrite the 3 questions indicated on your feedback sheet. Use this booklet to improve the answers in your exam.
<b>Action 2:</b>
Complete the Intervention Pack indicated by your teacher.


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

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 in this section.

#### Question 1 Urban issues and challenges

**0 1 . 1** Which term is best defined by the phrase, 'the increasing percentage of the population living in towns and cities'?

Shade **one** circle only.

A Urban sprawl

B Urbanisation

C Migration

D Urban regeneration

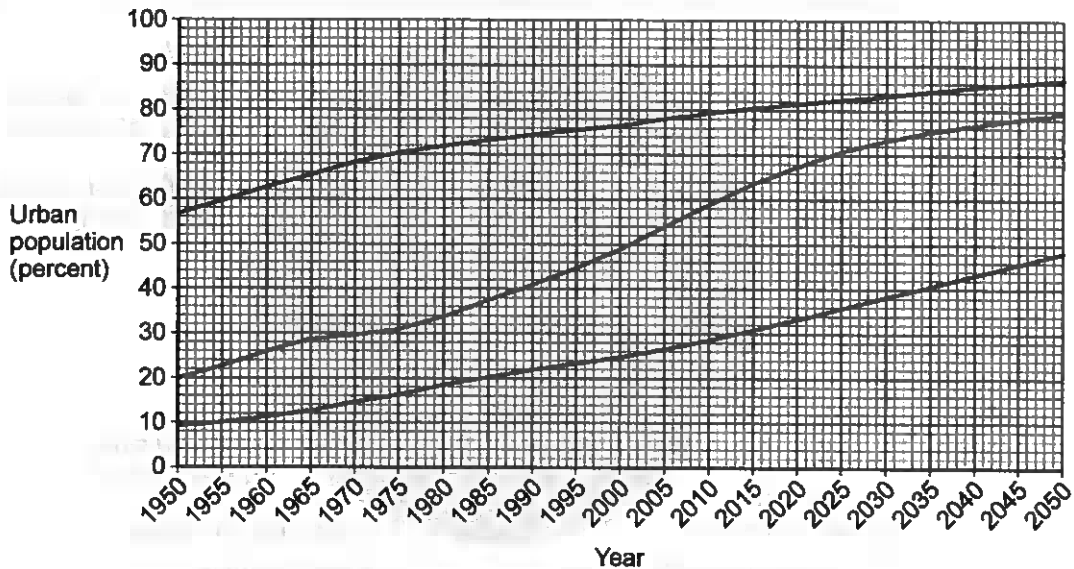
[1 mark]



Study **Figure 1**, a graph showing the percentage of the population living in urban areas in different parts of the world 1950–2050 (projected).

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**Figure 1**



**Key**

- Higher income countries (HICs)
- Newly emerging economies (NEEs)
- Lower income countries (LICs)

**0 1 . 2** Complete the following paragraph to describe the changes shown in **Figure 1**.

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

**HICs**                      **doubled**                      **NEEs**  
**slow down**              **trebled**                      **speed up**

The smallest increase in percentage of urban population 1950–2050 is expected to be in HICs.

From 2020 the rate of increase is expected to slow down in NEEs.

Between 2000 and 2050, lower income countries are projected to have almost doubled in the percentage living in urban areas.

**[3 marks]**

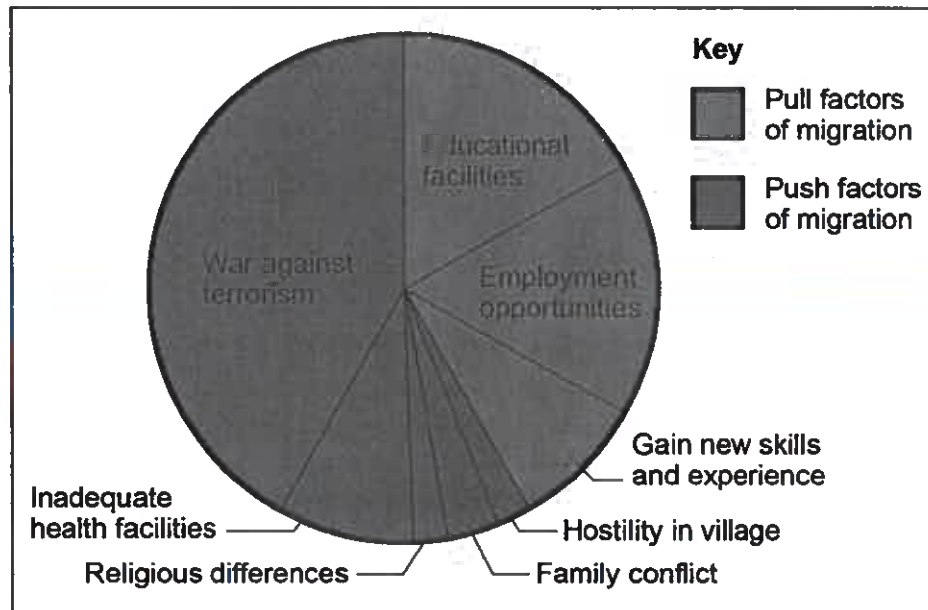
**Question 1 continues on the next page**

**Turn over ►**



Study **Figure 2**, a pie chart showing the reasons for rural–urban migration in a region of Pakistan, a country in Asia.

**Figure 2**



**0 1 . 3** Describe the pattern of reasons for migration shown in **Figure 2**.

**[2 marks]**

Figure 2 shows that the war against terrorism is the main reason for migration in Pakistan - this is a push factor. This reason is equal to the pull factors of education and employment in urban areas.

Study **Figure 3**, some social media comments about traffic in Bangalore, a city in India.

**Figure 3**



What is the main reason for traffic getting worse in Bangalore?  
Opinions please...

#RoadsPoorQuality	62%
#InsufficientPublicTransport	28%
#RoadsNeverRepaired	10%

10 miles to go... SatNav says... 1h30mins 😞  
That's #BangaloreCongestion

Turned down lift home yesterday - I was in a hurry!  
#BangaloreCongestion



0 1 . 4 Using Figure 3 suggest **one** problem faced by people in Bangalore as a result of traffic congestion.

[2 marks]

Figure 3 shows that 62% of people in a twitter poll think that poor road quality is the main reason for congestion in Bangalore. This causes increased levels of air pollution, which can impact health negatively.

0 1 . 5 Use Figure 3 and a case study of a city in a LIC or NEE to suggest why managing traffic congestion and air pollution may be challenging.

[6 marks]

Figure 3 shows that in Bangalore's insufficient public transport has resulted in increased levels of congestion. In Mumbai there are similar issues due to the rapid increase in population which is placing a strain on public transport among other services such as health, education and housing. This leads to congestion as people's experiences of public transport are negative and instead will use their own car or motorbike – contributing to rising levels of pollution and poorer environmental quality. As well as this, the growth in Mumbai's population means that there is an increasing amount of traffic on the roads which is contributing to further congestion and pollution. Mumbai is built on a peninsula and surrounded almost entirely by water – this means that there is limited space to build larger and wider roads and so congestion is worsened. To access the peninsula road users must use the four main bridges – this causes traffic to congest. Many people in Mumbai still remain relatively poor despite recent economic growth and so tend to drive older cars that release more pollutants into the environment.

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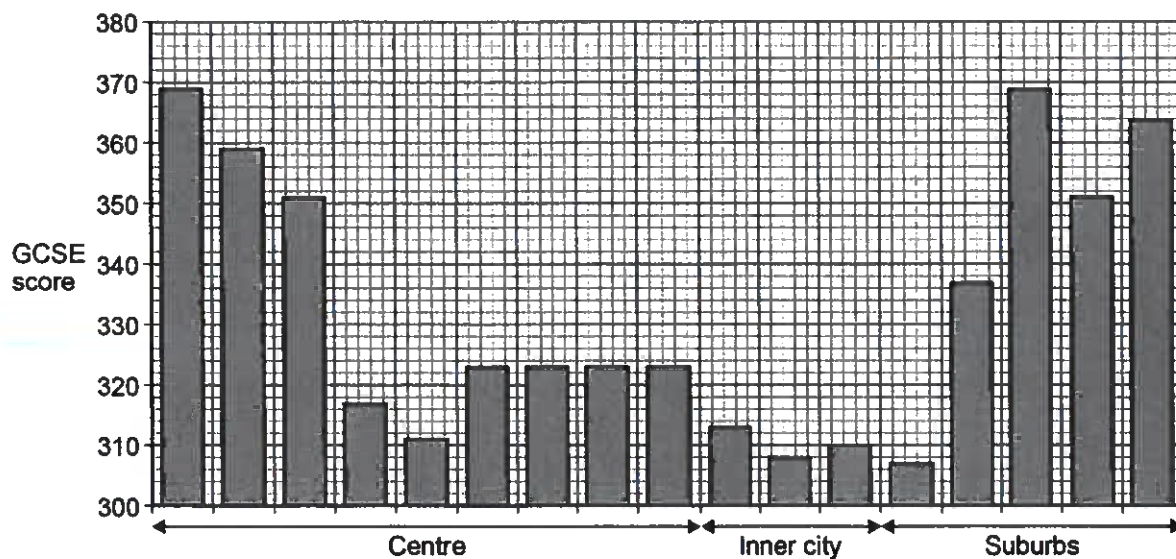
Turn over ►



Study **Figure 4**, a graph showing GCSE scores along a transect through a UK city.

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**Figure 4**



**Key**

█ Total GCSE score – the higher the score the better the student's overall exam performance

0 1 . 6 Calculate the range in GCSE scores shown in **Figure 4**.

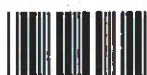
[1 mark]

$$369 - 307 = 62$$

0 1 . 7 Using **Figure 4** and your own understanding, suggest reason(s) for inequalities in education in urban areas in the UK.

[4 marks]

Figure 4 shows that GCSE average score in UK cities tends to be the lowest in the inner-city areas. In London's inner-city areas industry has collapsed and jobs have been lost. This has led to unemployment, urban decline and a lack of opportunities. In the north-east of London this is particularly true with high levels of unemployment. For this reason the Olympics were built here. Figure 4 shows that in the suburbs the average GCSE score is higher, this is due to richer people now living on the outskirts of cities and using private or public transport to commute to work.



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boxExtra space \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

**[2 marks]**

Younger people, particularly people who have just graduated from university often leave their hometowns to work in London. This is called the brain drain. This means there is less attachment to London's heritage and past so neighbourhoods are losing their individual character.

**0 1 . 9** To what extent has urban change created environmental challenges in a UK city you have studied?

**[9 marks]**  
**[+ 3 SPaG marks]**

Name of city: \_\_\_\_\_

Name of city: London.

I 75% agree that urban change has resulted in environmental challenges in London. Urban decline and deindustrialisation has meant that factories closed, leading to derelict and abandoned spaces in the inner-city of London. This mainly happened in the north-east of London and in the docklands. These areas were also heavily polluted due to the industry that was once present in London. Water was polluted which meant that habitats for wildlife were threatened. The ground in many areas was also contaminated with harmful substances from industry. These areas remained abandoned due to this issue as developers were not willing to clean the environment before developing new industries and/or housing.

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London is a HIC and many people living in London earn enough to own their own form of transport. As population grows and as London sprawls into the surrounding green areas, there is a growing number of commuters which is resulting in higher levels of pollution and congestion. This is leading to a poorer air quality which is linked to diseases such as asthma and even cancer.

However, 1 25% disagree because urban change has also lead to new opportunities. Urban decline in the north east of London has meant that the Olympics were held in the area. This has resulted in the improved quality of the environment such as reconditioning rivers and planting new trees, as well as economic opportunities such as the creation of 7000 new local jobs.

In conclusion, urban change has led to many challenges in London in terms of the environment. These issues are beginning to be addressed. As London grows economically, ex-brownfield sites are built on and the environment is improved. The introduction of electric cars could also see London's air quality improve – but this will need infrastructure and time to develop.

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End of Section A





## Section B The changing economic world

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Answer all questions in this section.

### Question 2 The changing economic world

Study **Figure 5**, a table showing the Gross National Income (GNI) data for selected countries in 2016.

**Figure 5**

Country name	GNI US\$ per person
Argentina	11 960
Belgium	41 860
China	8 260
Finland	44 730
Haiti	780
India	1 680
Kenya	1 380
Mali	750
Poland	12 680
Spain	27 520
United Kingdom	42 390

**0 2 . 1** Calculate the median value for the GNI data in **Figure 5**.

[2 marks]

Space for working

Middle value (order the data)  
1 mark for working out.

Median = 11 960

**0 2 . 2** Suggest **one** reason why the GNI per person varies between the countries shown in **Figure 5**.

[1 mark]

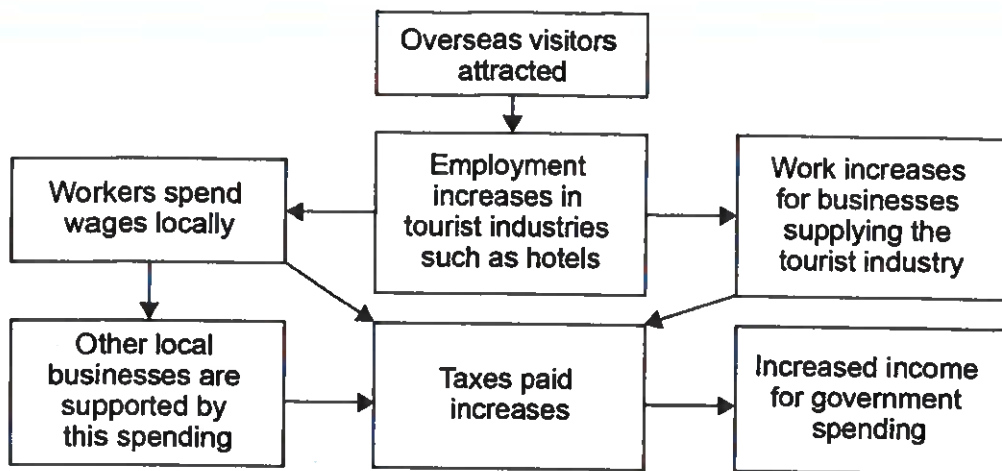
- i) Some of the countries are poor e.g. Kenya (1) ii) Haiti has a lower GNI than most other countries because it has a poorly developed economy (1) iii) European countries have the highest GNI scores because they have economies based around high value services (1)



0 2 . 3 Give **one** disadvantage of using an economic measure of development such as GNI. [1 mark]

- i) Economic measures do take any account of people's quality of life which is important in social terms (1) ii) Economic measures tend to be per person / are an average figure so do not allow for extremes of wealth and poverty (1)

Figure 6



0 2 . 4 Using **Figure 6** and your own understanding, suggest how the growth of tourism in a LIC or NEE might help to reduce the development gap. [4 marks]

When tourists visit an LIC/NEE, such as Tunisia for example, they spend money on services, e.g. hotels, restaurants, tours and souvenirs. This creates jobs which provides locals with an income which they spend locally which in turn creates more job opportunities. Workers in the tourist industry will pay taxes which the LIC/NEE government can spend on infrastructure, health and education which will improve social measures of development e.g. a rise in HDI or literacy scores.



Study **Figure 7** which describes the effects of an intermediate technology project in an area of Malawi, a country in Africa.

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**Figure 7**

**Bicycle Ambulances**

There are two small Health Centres in the area serving 45 000 people. 1 in 6 women die in childbirth.

People have to travel vast distances to be seen by a nurse or doctor. Travel to the clinics is usually by ox and cart but this is an expensive and slow mode of transport.

A project was started to build bicycle ambulances and to provide training to the people in the area so more patients can make their way to a health centre. It is hoped that these bicycle ambulances will help save many lives.



**0 2 . 5** State **two** challenges faced by the people living in the area described in **Figure 7**.  
[2 marks]

(i) Lack of transport; (ii) transport is expensive and slow; (iii) limited health care with 22 500 people per clinic; (iv) having to travel vast distances to see a nurse or doctor; (v) 1 in 6 women die in childbirth.



0 2 . 6 State **one** characteristic of intermediate technology.

[1 mark]

(i) The tools / systems are simple and affordable (1) (ii) By providing simple machines / tools people can develop businesses and earn money (1) (iii) It involves local communities so is 'bottom up' development (1)

0 2 . 7 Outline **one** way in which international aid has had an impact on a named LIC or NEE country.

[2 marks]

Two marks for a **developed idea** which relates to the named country:

- (i) Aid can fund major infrastructure projects (1) such as the Inga 3 Dam in the Democratic Republic of the Congo (d)(1)
- (ii) The UK has given £350million to Pakistan (1) which has been spent to improve education facilities (d)(1)

Question 2 continues on the next page

Turn over ►



0 2 . 8

Using a case study of a LIC or NEE country, explain the link between Transnational Corporations (TNCs) and industrial development in the country.

[6 marks]

Name of country: Nigeria

TNCs have created employment opportunities in Nigeria. For example, there are 65,000 direct jobs for Shell in the Nigeria. As a result, employees pay taxes, which the government can then invest into other services such as education, which will promote economic development as more educated people are more qualified for better paid work.

Paid employment also means a greater number of people with money to spend and therefore the domestic market grows, creating a consumer society which will stimulate industrial growth in other sectors

TNCs can be obliged to use companies from the host country as part of their operating conditions e.g. most (91%) of Shell's contracts given to Nigerian companies. As a result of this, wealth is spread across the country in different sectors.

However, TNCs are footloose and they may leave the host country if their costs increase. If this occurs, they may have a negative impact on economic development.

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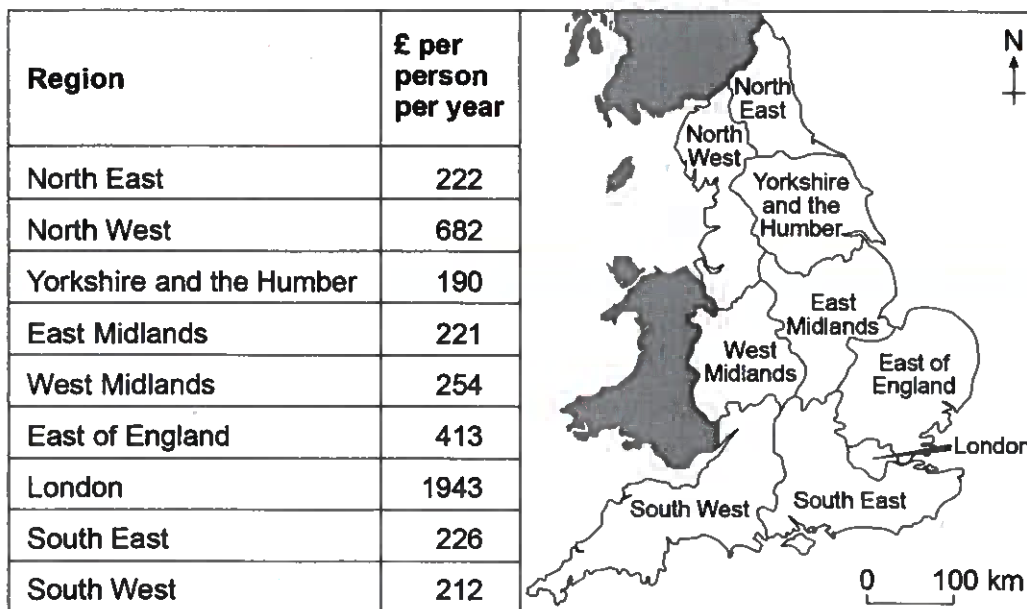
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Study **Figure 8**, information about the planned spending on transport infrastructure in England's regions 2016–2021.

**Figure 8**



0 2 . 9

Using **Figure 8**, calculate the mean planned spending per person per year 2016–2021 in the nine English regions.

[2 marks]

Show your working here.

£484.78 / £484.8 allow £485

Mean planned spending = £

**Question 2 continues on the next page**

Turn over ►



0 2 . 1 0 Assess the importance of transport improvements to the UK economy.

[9 marks]

Transport improvements are fundamental in improving the UK economy, but only to a certain extent. There is an imbalance in spending, where more is spent in London than anywhere else in the UK. Also the north west for example receives three times more much per head, compared to the North East.

In London there are plans to expand Gatwick airport, money for a new high speed rail service (HS2), Crossrail, smart motorways and increasing port capacity such as the Thames Gateway. An increased airport capacity will allow expansion of, in Heathrow's case, one of the world's busiest airports so to allow London to maintain its position as one of the world's leading financial centres.

All of these major transport improvements mainly benefit the London economy and have a much more limited impact on the UK economy as a whole. Until money spent on transport improvements is spread more evenly around the UK, there will continue to be an imbalanced UK economy.

Although transport improvements do have limited importance to the UK economy. However other factors such as the UK's withdrawal from the EU (Brexit), investment from overseas into the UK, trade wars and how other key economies such as those in the US and China are performing, are arguably more important than transport improvements in improving the UK economy.

Five horizontal lines for writing an answer.



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**Section C The challenge of resource management**

Answer two questions in this section.

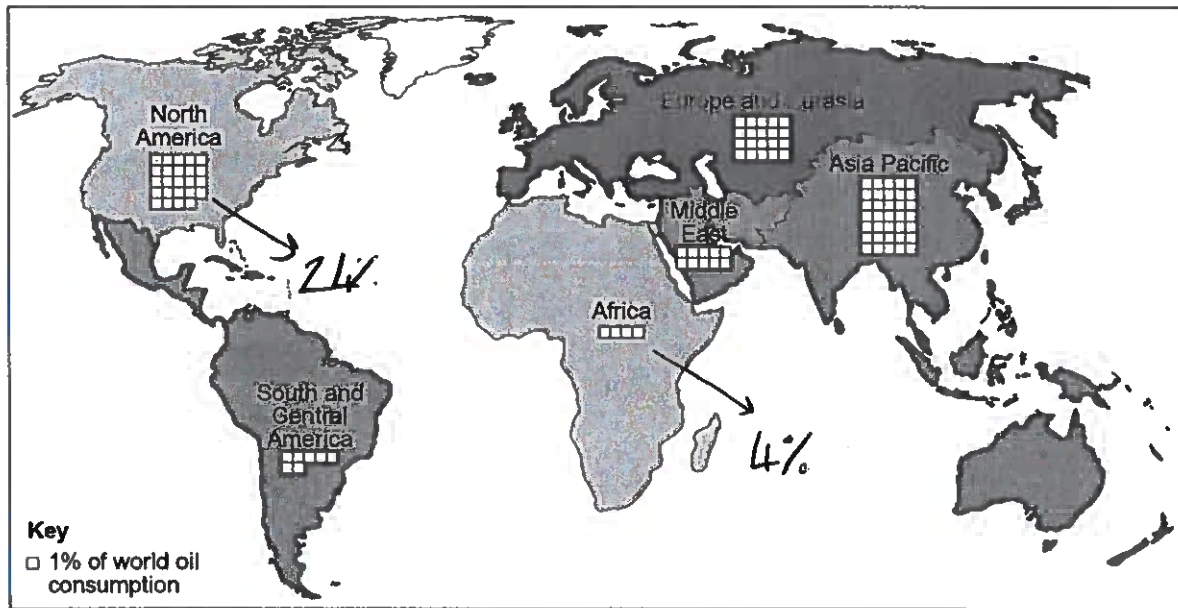
Answer **Question 3** and either Question 4 or **Question 5** or Question 6.

→ DON'T DO Q4 OR Q6

**Question 3 The challenge of resource management**

Study **Figure 9**, a map showing world oil consumption in 2016.

**Figure 9**



**0 3 . 1** What is the difference between Africa and North America's share of world oil consumption shown in **Figure 9**?

[1 mark]

$24\% - 4\% = 20\%$





**0 3 . 2** Using **Figure 9** and your own understanding, suggest how inequalities in the consumption of resources influence well-being.

**[3 marks]**

Africa has the lowest share of world oil consumption at 4%.

This links to for example Sub-Saharan Africa which has low levels of well-being measured through indicators such as HDI.

Richer countries will have the means to purchase oil and therefore energy for personal use and industrial development and this will increase the well-being of the population as they will have a good standard of living as a result.

**0 3 . 3** Outline **one** advantage of the trend towards agribusiness in the UK.

**[2 marks]**

Farmers in the UK can make more of a profit from agribusiness.

Farmers can also lower their costs of productions meaning their prices can be kept lower. As a result, food prices can be cheaper for people.

**Question 3 continues on the next page**

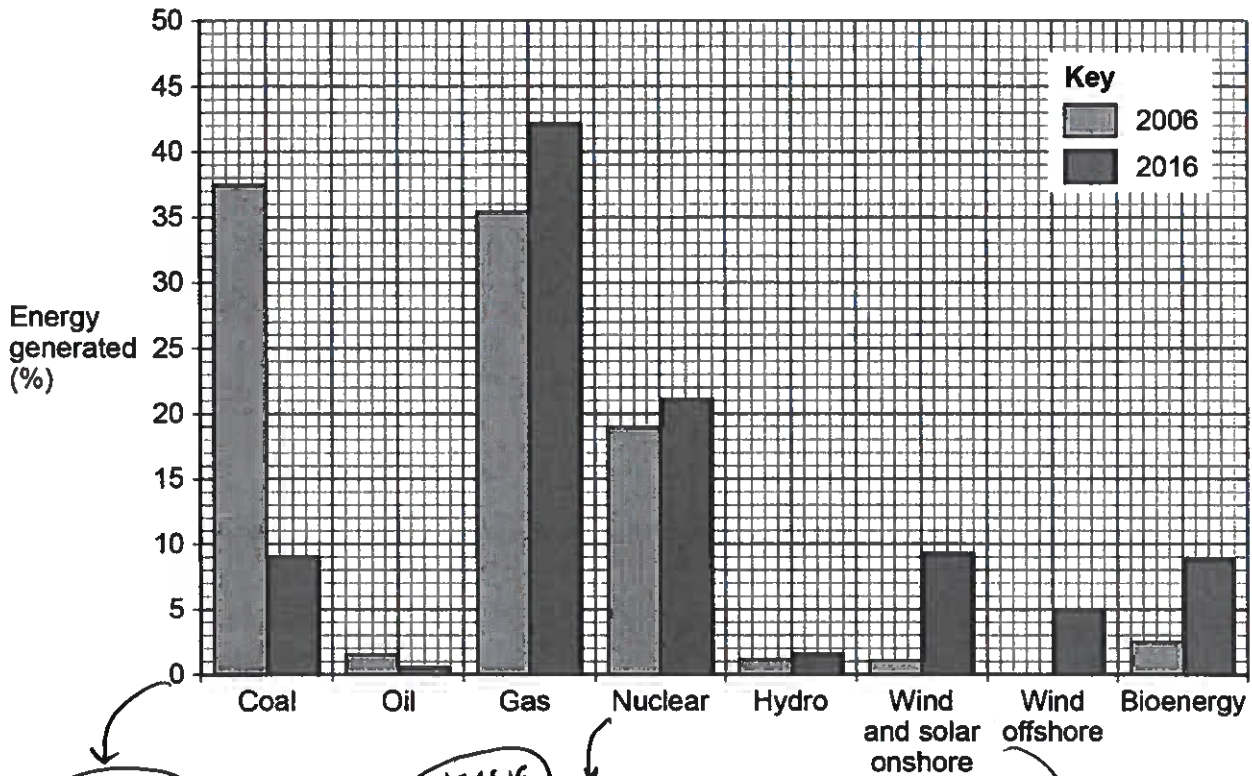
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Study Figure 10, a graph showing the UK's changing energy mix from 2006 to 2016.

Figure 10



ISSUE

ISSUE

⊖ Dangerous.

- ⊕ Good for the environment - less pollution
- ⊖ - unemployment in the UK

ISSUE

- ⊕ Reduced air pollution
- ⊖ Not reliable

↑  
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THE QUESTION



0 3 . 4

Using **Figure 10** and your own understanding, discuss the issues arising from the UK's changing energy mix.

**[6 marks]**

Figure 10 shows a clear shift from fossil fuels (particularly coal) to renewables in a 10 year period.

Coal has reduced from 37.5% in 2006 to 9% in 2016. This is positive as it has reduced the amount of CO<sub>2</sub>, air pollution and therefore global warming. However, this will have meant increased unemployment in the UK (in primary sectors – mining).

There is an increase in the amount of nuclear energy from 19% in 2006 to 21 in 2016. Although this is a small increase, it could create an increased risk of nuclear disaster.

The amount of renewable energy has increased between 2006 and 2016. This is most significant in wind and solar onshore (1% in 2006 to 19% in 2016). This is better for the environment because of reduced CO<sub>2</sub> and global warming, however, it is argued that renewable energy is not reliable and cannot meet out demand.

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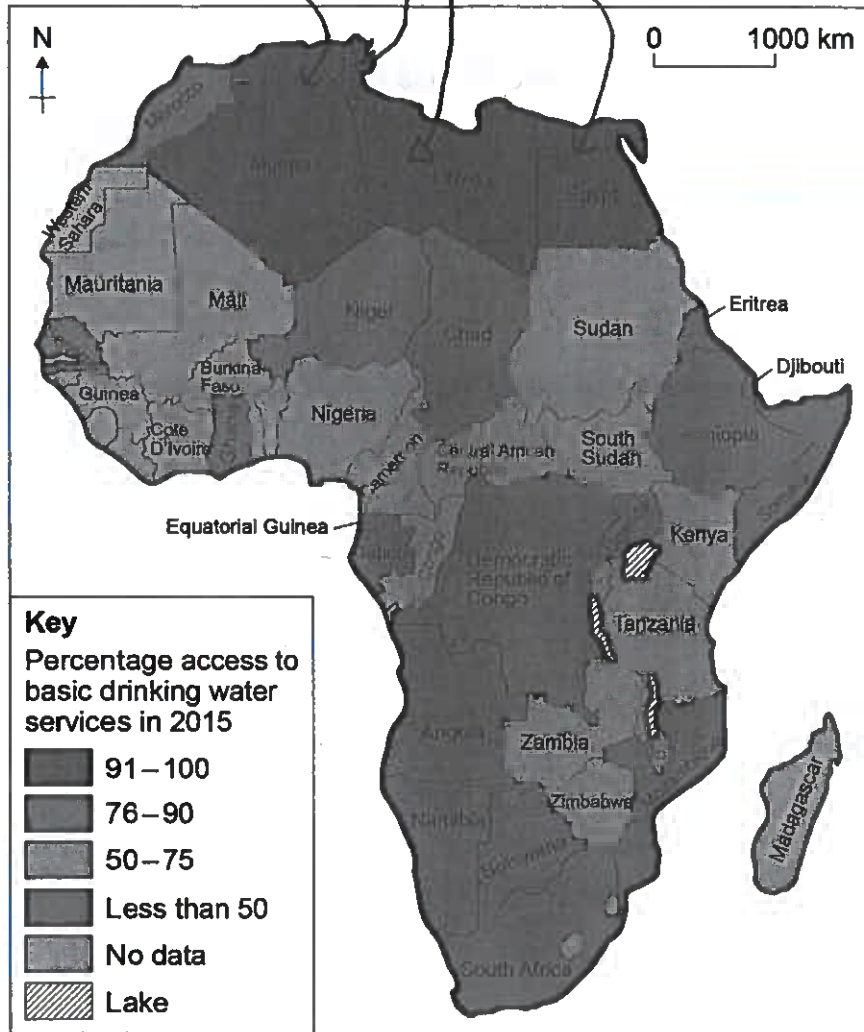
12

**End of Question 3****Turn over for the next question****Turn over ►**

**Question 5 Water**

Study **Figure 12**, a map of Africa showing percentage access to basic drinking water services in 2015.

**Figure 12**



0 5 . 1

Name **one** country with a 91–100% access to basic drinking water services.

[1 mark]

*Algeria, Egypt, Libya or Tunisia*



- 0 5 . 2** How many of the African countries shown in **Figure 12** had less than 50% access to basic drinking water services?

Shade **one** circle only.

[2 marks]

A 8

B 9

C 10

D 11

What percentage of the 48 countries in Africa for which data is shown had less than 50% access to basic drinking water services?

Answer to 1 decimal place.

20.8%

- 0 5 . 3** Describe the distribution of countries which had 76–90% access to basic drinking water services as shown in **Figure 12**.

[2 marks]

Four out of the 8 are in Western Africa (1) with the other 3 all grouped together on the southern tip of Africa. (1)

- 0 5 . 4** Outline **one** reason why some countries have a limited availability of water.

[2 marks]

Some countries are located in dry regions with limited rainfall.(2)

Poor countries are not able to store water for later use, so that water is unavailable simply because people cannot afford to buy it.(2)

Question 5 continues on the next page

Turn over ►



**0 5 . 5** Explain how different strategies can be used to make water supplies more sustainable. **[6 marks]**

Water conservation strategies are helping many countries in Asia to store and conserve water. One example of this is the use of bamboo gutters and water butts/barrels. This method helps to collect water from rainfall through bamboo guttering so that water is not soaked up by the ground. This method costs very little and means that water is available for future generations of people so that they can drink, clean and grow crops with it. This method has been used in Thailand and the Philippines.

Another method that is used in HIC's is the recycling of grey water from showers, baths and washbasins. This method uses water to grow crops and grass in America. This is sustainable because the water is recycled for future use by people and doesn't use up fresh water supplies through a water tap.

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**13****End of Question 5**