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GCSE GEOGRAPHY RESOURCE FILE

Human Geography of the UK

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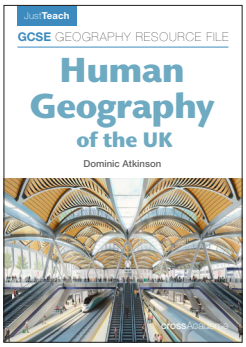

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Contents

Unit 1	The population of the UK – an overview	3
Unit 2	Population change and the Demographic Transition Model	7
Unit 3	Population structure and population pyramids	11
Unit 4	The ageing population	14
Unit 5	Population minorities	18
Unit 6	International migration	22
Unit 7	An urban overview	25
Unit 8	Urban processes in the development of Bournemouth	28
Unit 9	London – internal and international migration	32
Unit 10	Manchester – national and international links	35
Unit 11	Urban regeneration – the Olympic Park, London	39
Unit 12	Patterns of urban deprivation	43
Unit 13	Environmental challenges in cities – air pollution and waste management	46
Unit 14	Sustainable city transport in Cambridge	52
Unit 15	Sustainable urban living	56
Unit 16	Deindustrialisation	60
Unit 17	Sectors of employment	65
Unit 18	Air transport trends and developments	70
Unit 19	Development of the 'High Speed 2' (HS2) railway	75
Unit 20	UK car production – an environmentally sustainable industry	80
Unit 21	Crossrail – a sustainable transport project	84
Unit 22	The North–South divide	88
Unit 23	The Northern Powerhouse – reducing regional inequalities	93
Unit 24	The UK's economic links with the wider world	96
Unit 25	The UK's involvement in global affairs – aid	100
Unit 26	Food resources	104
Unit 27	The energy mix	108
Unit 28	Recent energy developments	112
Unit 29	Water security	116
Unit 30	Water management strategies	121

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UNIT

1

The population of the UK – an overview

The population of the UK is approximately 65 million, with over 56 million living in England and Wales. It is expected to continue to increase in future years due to natural increase and positive net migration. **Natural increase** occurs when the birth rate exceeds the death rate. Positive net migration is where immigration (the number of people entering a country) exceeds emigration (the number of people leaving a country) in a year.

Population density is the number of people living in a square kilometre. Various human and physical factors affect the population density of an area:

- human factors – these include access to infrastructure, employment opportunities, health and services, government policy;
- physical factors – these include access to natural resources, water and food, relief, soil quality and climate.

Activities

1 Look at Figure 1.

(a) Complete the final 2 columns of the table, working out the actual change in population and the percentage change for each region, and then also complete the final row for the England and Wales total. *(5 marks)*

Figure 1 *Population sizes of different regions in England and Wales, 1981 and 2011*

Region	1981 (millions)	2011 (millions)	Difference (millions)	Percentage change
Northeast	2.6	2.6		
Northwest	6.8	7.1		
Yorkshire and the Humber	4.8	5.3		
East Midlands	3.8	4.5		
West Midlands	5.1	5.6		
East of England	4.8	5.8		
London	6.6	8.2		
Southeast	7.0	8.6		
Southwest	4.3	5.3		
Wales	2.7	3.1		
Total				

Source: www.ons.gov.uk

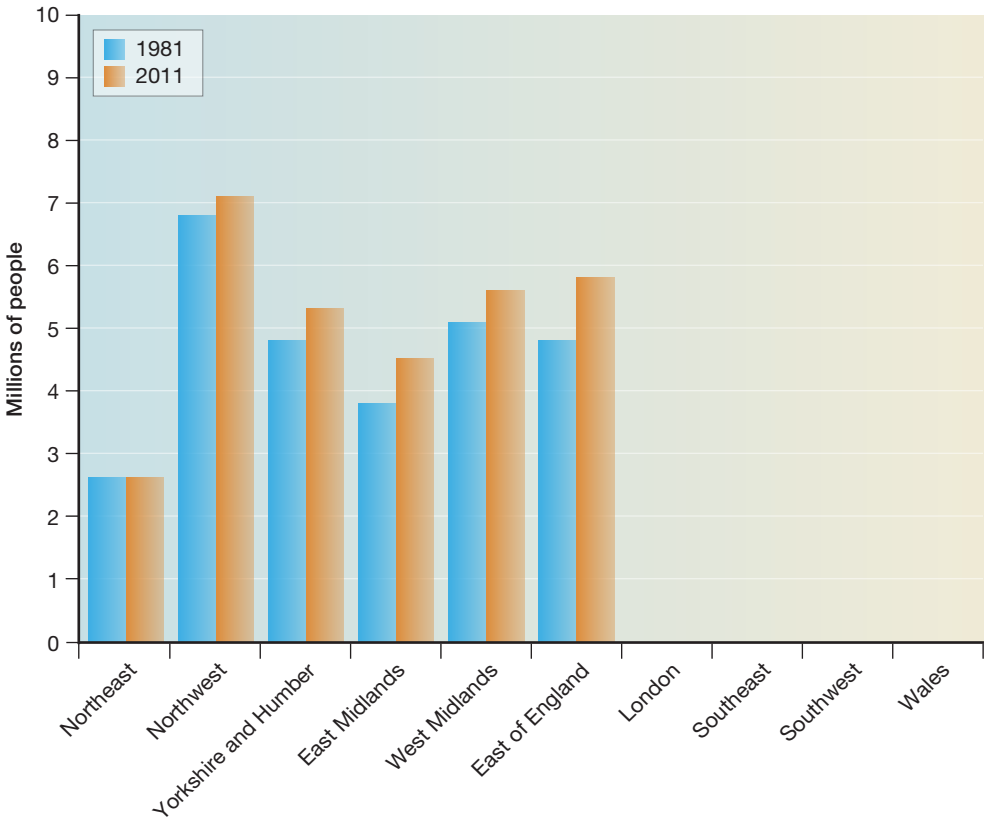


Figure 2 *A bar chart showing population sizes of different regions in England and Wales, 1981 and 2011*

(b) Figure 2 is a bar chart that shows population by region in England and Wales for 1981 and 2011. Use Figure 1 to complete the bar chart by plotting information for London, the Southeast, the Southwest and Wales. ***(4 marks)***

(c) Using Figures 1 and 2, describe the changes in the UK regional population between 1981 and 2011. ***(4 marks)***

2 Look at Figure 3.

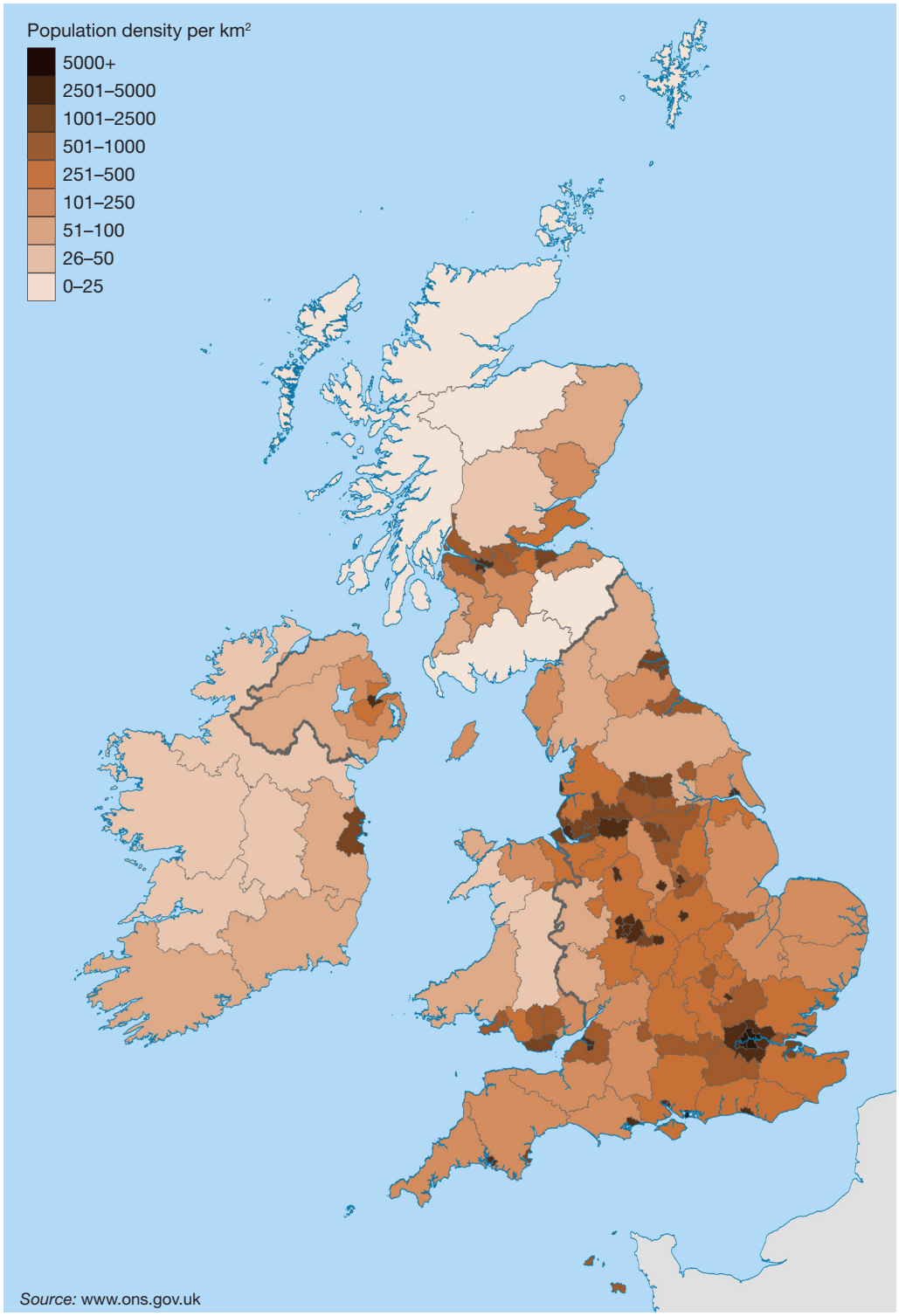


Figure 3 *Population density of England and Wales, 2011*

(a) Describe the pattern of population density in England and Wales. *(4 marks)*

(b) Suggest reasons for the variation in UK population density. *(6 marks)*

Online activity

Go to: https://www.theguardian.com/news/datablog/interactive/2013/aug/01/every-person-in-england-wales-dot-map#9/52.4301/-1.5238

This dot map shows the distribution of the UK population from the 2011 census.

For further study, suggest the positives and negatives of a map like this for showing population distribution.

UNIT

2

Population change and the Demographic Transition Model

Since the beginning of the nineteenth century, the UK's population has increased significantly and will continue to do so in the coming years. This is due to changes in the birth and death rates (natural increase) as well as impacts from immigration.

- **Birth rate** is the number of births per 1000 population per year.
- **Death rate** is the number of deaths per 1000 population per year.
- **Natural increase** is the difference between the birth rate and the death rate and is usually expressed as a percentage.
- **Migration** is the movement of people from place to place – immigration is into a country and emigration out of a country.

The current birth rate in the UK is 12/1000 and the death rate is 9/1000. This results in a natural increase of 3/1000 or 0.3%. Immigration, particularly from Eastern Europe and the Middle East, exceeds emigration, helping to account for the UK's rising population.

The Demographic Transition Model

Look at Figure 1. It shows the Demographic Transition Model, a graph used to show changes in birth and death rates over time.

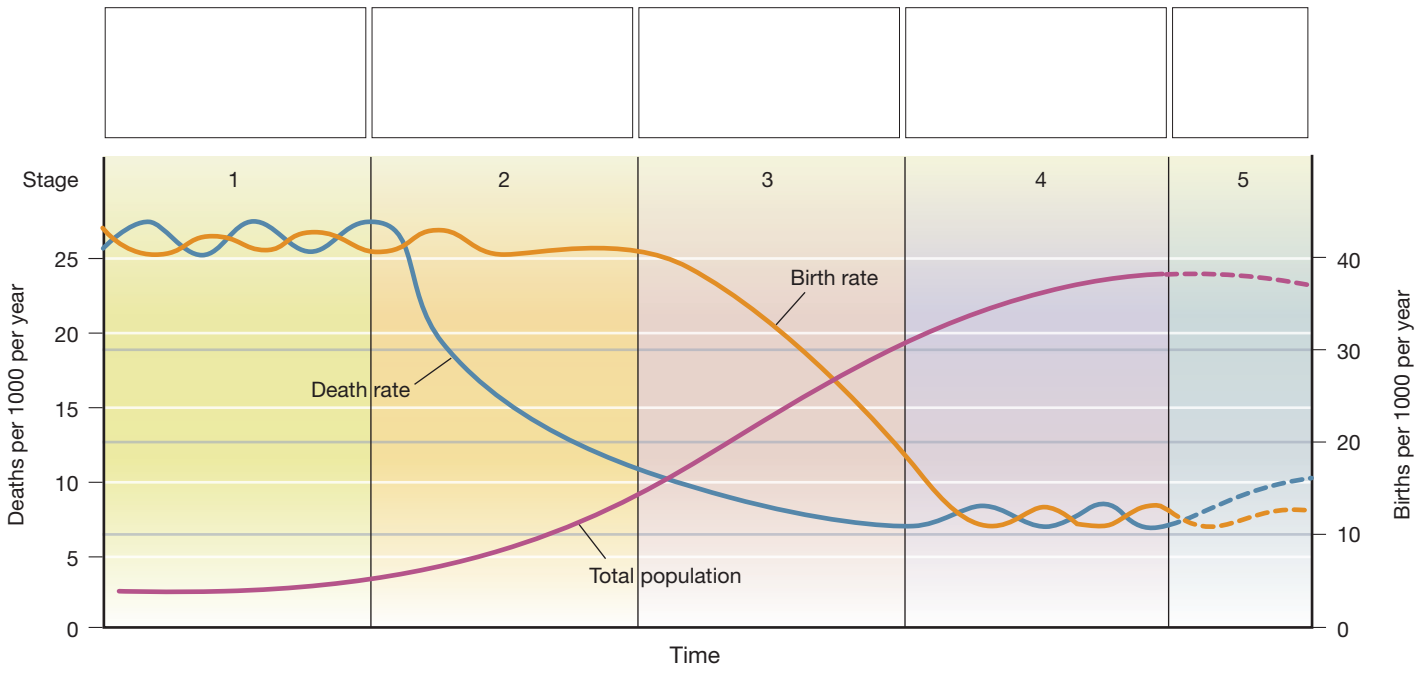


Figure 1 *The Demographic Transition Model*

Birth and death rates are affected by a number of factors:

- **factors affecting birth rate** – these include access to contraception, quality of family planning, attitudes to family size, the role of women in the family and employment;
- **factors affecting death rate** – these include access and quality of medication and healthcare, quality of diet, access to clean water and sanitation.

1 (a) Study Figure 1. Use a colour to shade and label the natural increase. *(2 marks)*

(b) Select the correct name for each stage of the model from the list below and write it in the appropriate box above Figure 1. *(5 marks)*

- Early expanding
- Early fluctuating
- Decline
- Late fluctuating
- Late expanding

(c) Complete Figure 2 by adding relevant comments in the spaces provided. *(5 marks)*

Figure 2 *Stages of the Demographic Transition Model*

Stage	Birth rate	Death rate	Total population
Stage 1	High and fluctuating		Little change
Stage 2	Rapid decline	High and fluctuating	
Stage 3		Beginning to decline slowly	Population increasing
Stage 4		Low and fluctuating	Little change
Stage 5	Beginning to decrease slowly again		Population decline

(d) Explain why birth and death rates change over time. *(6 marks)*

2 Study Figure 3. It shows a partly completed Demographic Transition Model for the UK.

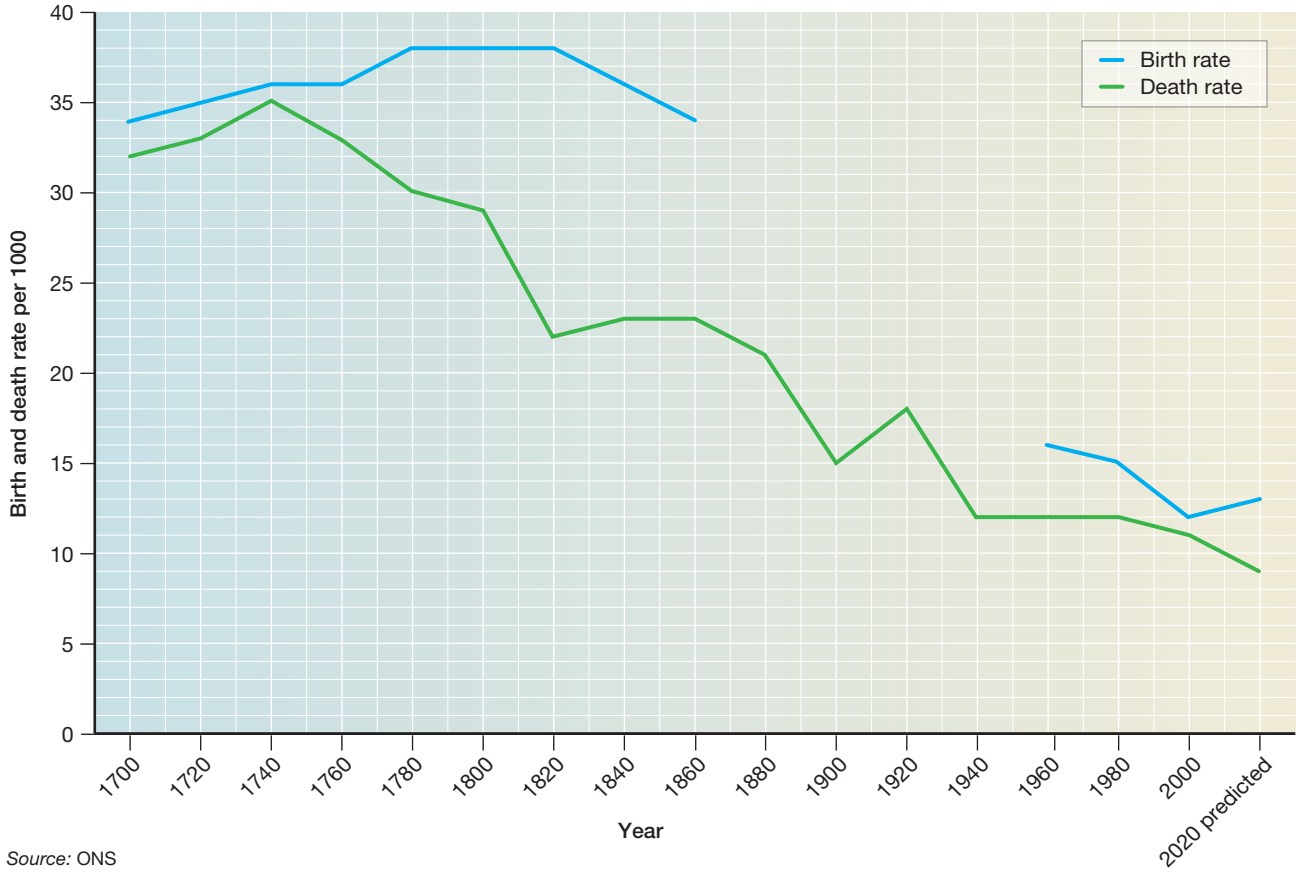
(a) Complete the line graph to show the birth rate for the UK using the following values:

1880	34
1900	32
1920	26
1940	15

(b) Using Figure 1, draw vertical lines on Figure 3 to show each of the stages of the demographic transition. *(3 marks)*

(c) Describe how the UK birth and death rates have changed over time. *(4 marks)*

Figure 3
A Demographic Transition Model for the UK



Source: ONS

(d) To what extent does Figure 3 match the actual model of the DTM in Figure 1?

(6 marks)

Online activity

Go to: http://www.telegraph.co.uk/news/2017/03/03/uk-population-largest-europe-2050-driven-immigration-ageing/

With the use of statistics and information from the webpage, describe and explain how the UK's population will change in the future.

UNIT

3

Population structure and population pyramids

Population structure describes the age/sex characteristics of a country. It is most commonly shown in the form of a graph called a **population pyramid**, though it seldom has the shape of a pyramid!

Population pyramids are valuable tools for governments planning healthcare, education provision and housing. For example, in 2014, 17.7% of the UK's population was aged 65 or over. By 2039 this is predicted to increase to 24.3%, which will have huge social, economic and political impacts on the country.

The shape of a population pyramid depends on the demographic characteristics of a country. If, for example, it has a high birth rate with many people aged below 15, it will have a broad base and will resemble a pyramid. A sustainable population will have a broad middle section (15–64 age group). This is the working age group that provides an income for the government and supports services such as healthcare.

Activities

1 Study Figure 1.

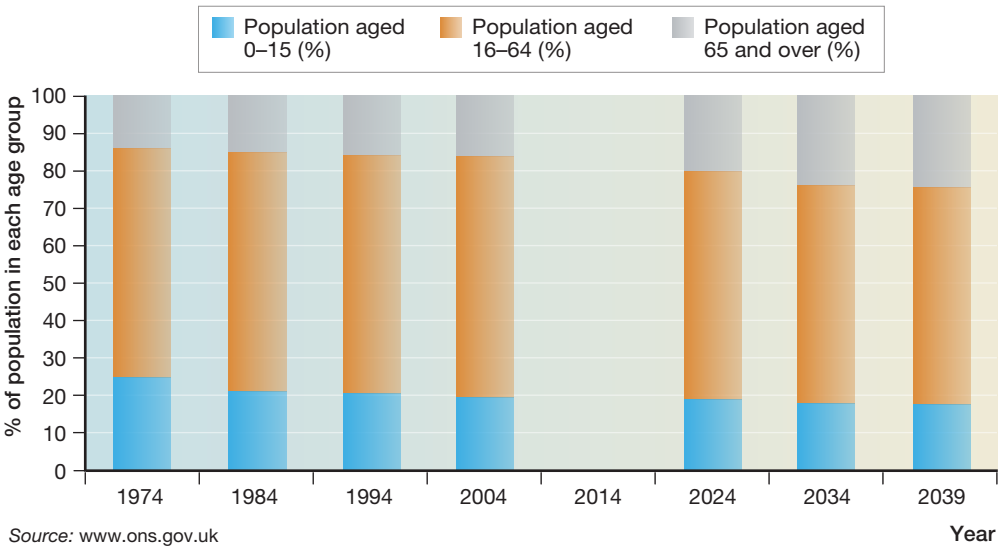
Figure 1 *The population structure of the UK, 1974–2039*

	Population aged 0–15 (%)	Population aged 16–64 (%)	Population aged 65 and over (%)
1974		61.0	13.8
1984	21.0	64.1	14.9
1994	20.7	63.4	15.8
2004	19.5		15.9
2014	18.8	63.5	17.7
2024 †	19.0	61.1	19.9
2034 †	18.1	58.5	23.3
2039 †	17.8	57.9	

Note: † Indicates population projections
Source: www.ons.gov.uk

(a) Complete the gaps in the table. *(3 marks)*

(b) Using data from Figure 1, complete Figure 2 – the composite bar graph for 2014. *(2 marks)*



Source: www.ons.gov.uk

Figure 2 *A composite bar graph to show population structure of the UK, 1974–2039*

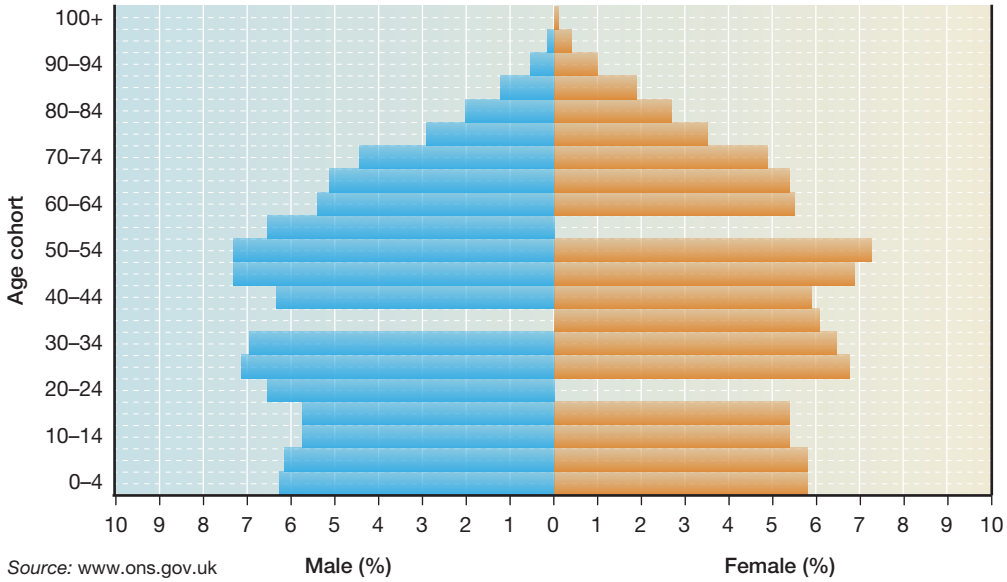
(c) Describe how the UK population structure has and will change between 1974 and 2039.

(4 marks)

(d) Outline three possible impacts of the changing population structure on the UK.

(6 marks)

2 Study Figure 3.



Source: www.ons.gov.uk

Figure 3 *A population pyramid for the UK, 2017*

(a) Complete the pyramid for the following age cohorts:

Female 55–59	6.5%
Male 35–39	6.6%
Female 20–24	6.2%

(3 marks)

(b) Add the following annotations in the correct place on the pyramid:

- A higher life expectancy for females
- High birth rates at the end of the 1960s and the start of the 1970s
- A recent increase in the birth rate

(3 marks)

Online activity

Goto: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2016

Scroll down to where it says 'Figure 3b: Interactive population pyramids'. Information regarding the United Kingdom appears on the left-hand side. On the right-hand side, try to find an interesting population pyramid that is different from the UK and annotate it to show key features – for example, high student population or high 20–30 working age population.