

UK in the 21st Century

Knowledge checklist

Key ideas	How secure is my knowledge?		
<p>How is the UK changing in the 21st century?</p> <ul style="list-style-type: none"> • Overview of human and physical geographical characteristics of the UK, including population density, land use, rainfall and relief, and significant issues associated with these characteristics, including water stress and housing shortages. • Overview of population trends in the UK since 2001, using population pyramids and migration statistics, to determine its position on the Demographic Transition Model. • An understanding of the causes, effects, spatial distribution and responses to an ageing population. • A summary of the how the population structure and ethnic diversity of a named place of the UK has changed since 2001. • Identify major economic changes in the UK since 2001 by examining changes in the job market including political priorities, changing employment sectors and working hours. • Investigate the pattern of core UK economic hubs. • Identify the changes in one economic hub and its significance to its region and the UK. 			
<p>Is the UK losing its global significance?</p> <ul style="list-style-type: none"> • Examine the UK's political role in one global conflict through its participation in international organisations. • Explore the UK's media exports and their global influence including television programmes and film. • The contribution of ethnic groups to the cultural life of the UK through one of food, media or fashion. 			

Human geography in the UK:

Top cities

1. London – 7.1 million people
2. Birmingham – 1.1 million people
3. Leeds – 725,000 people
4. Glasgow - 616,000 people
5. Sheffield – 530,000

Facts

- 82% of the British population live in urban areas
- 61 million people live in the UK (1 in 4 of these people live in London and SE England)
- 54 million of those live in England (Scotland 5.3m, Wales 3.1m and NI 1.8m)
- Australia is 31 times larger than the UK, and has only 20 million people

Definitions

- Distribution - the way in which something is spread over an area.
- Population Density is a measurement of the number of people in an area. It is calculated by dividing the number of people by the area. Population density is usually shown as the number of people per square kilometre.
- Places which are sparsely populated contain few people. Places which are densely populated contain many people

Physical geography in the UK:

UK water

- Almost 50% of the UK's water is used in the home
- Almost 21% of the UK's water is lost through leakage
- UK water demand is rising

Rising Demand

- Growing population
- More houses being build
- Increase in water intensive appliances e.g. coffee machines, dishwashers

Water stress/surplus

- In the UK the North and West of the UK has a surplus of water due to high rainfall, low evaporation and plenty of sites for reservoirs
- In the South and East there is a water deficit, this creates water stress – where demand exceeds supply. This is due to less rainfall and it being the most densely populated part of the UK
- Drought make this worse

Saving water

- Water can be saved by:
- Using water meters
- Using recycled water

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- Using more efficient appliances

Water transfer

- In 2006 the government proposed transferring water from areas of surplus to areas of deficit
- However, the huge cost of this largely stopped it happening
- There is a growing need for water transfer but people resist due to the impact of land and wildlife, high cost and the amount of greenhouse gases released in the process of pumping water long distances

Water quality

- Water quality is very important
- The Environment Agency measures UK water quality
- River water quality is measured
- Chlorine is added to the water supply
- Sediment is removed
- Recreational use is restricted

However...

- Some issues still occur with our water due to:
- Leaching from old mines
- Discharge from industrial sites
- Runoff from chemical fertiliser from farmland

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- Water used for cooling power stations released back into rivers

UKs changing population:

DTM

- The DTM describes a sequence of changes over a period of time in the relationship between birth and death rates and overall population change.
- The model is based on population changes in several industrialised countries in western Europe and North America.
- The model suggests that all countries will pass through similar demographic transition stages of population cycles.
- There are 5 stages to the DTM
- Stage I (high fluctuating)
 - A period of high fluctuating birth and death rates (around 35 per 1000) which gives a small population growth.

Reasons:

- Limited birth control and family planning
- High infant mortality
- Children are the source of future income
- In some cultures children are the sign of fertility
- Some religions encourage large families
- High incidence of disease
- Poor nutrition and famine

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- Poor levels of hygiene
 - Little medical science including doctors, hospitals and drugs.
 - Stage 2 (early expanding)
 - Birth rates remain high but death rates fall rapidly to about 20 per 1000 people giving a rapidly expanding population.

Reasons:

- Improved public health
- Decrease in child mortality
- Improved medical provision and vaccinations
- Improvement in food production (better nutrition)
- Improved transport to move food, doctors etc.
- Stage 3 (late expanding)
 - Birth rates fall rapidly to around 20 per 1000 people. Death rates continue to fall (15 per 1000 people) to give a slow increasing population.

Reasons:

- Changing socioeconomic reasons
 - Emancipation of women. Women now educated and having own careers and therefore having children later or not at all.
 - Preference for small families
 - Increased personal wealth and desire for material possessions.

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- Compulsory schooling makes children more expensive
 - Low infant mortality rates
 - Availability of family planning
 - Availability of abortion
 - Stage 4 (low fluctuating)
 - Low birth rates (16 per 1000) and low death rates (12 per 1000) which fluctuate slightly to give a steady population.
 - Population growth is small
 - Fertility dropping
 - More women in work force
 - Stage 5 (decline)
 - Death rate slightly exceeds birth rate
 - Population declines

Reasons

- Emancipation of women in the labour market
- Greater financial independence of women
- Concerns of population growth and resources
- Increase in same sex relationships
- Rise in the concept of childlessness
- Ageing population causes increased death rate

Uses of the DTM

- The concept is universal
- It can be used to predict how a population will change over time
- It is easy to understand
- Enables demographic comparisons between countries
- It describes what has happen in the UK
- USA and many other western countries have also been through the same stages
- Some countries are going through it at the moment - Newly Industrialised Countries, like South Korea
- Explains what has happened
- Explains why it happened in that particular sequence

Limitations

- Like all models the DTM has its limitations.
 - There is now a need for a stage 5 as in some countries population are declining.
 - The model is Eurocentric and assumes all countries will pass through all 4 stages.
 - Some countries may never reach industrialisation.
 - Stage 2 of the model assume death rates fall due to industrialisation. However in the UK during stage 2, death rates rose due to insanitary conditions which arose due to rapid growth and it only fell after advances in medicine.

- The fall in birth rate in stage 3 has been less rapid due to political or religious opposition to birth control. Whereas in some countries the fall was more rapid due to government policies (China).

- The timescale in some South-east Asian countries is being squashed as they are developing at a much faster rate than the early industrialised countries did.

MEDC's and LEDC's have gone through population change in a number of different ways

LEDCs have generally.....

- Had higher birth rates in stages 1 and 2
- Had steeper falls in death rates
- Larger population bases in stages 2 and 3 due to higher populations in stage 1 and therefore the fall in fertility has been greater.
- There has been a weaker relationship between population change and economic development

The UKs ageing population:

Overpopulation

Too many people in an area relative to the number of resources and the level of technology available locally to maintain a high standard of living.

Therefore with no change in the level of technology or resources a reduction in population would result in a rise in living standards.

As long as there is over population the quality of life will decline through unemployment, pollution, degradation of the environment.

Characterised by:

- low per capita income
- High unemployment
- Under employment
- Outward migration

Underpopulation

Too few people in an area to use the resources efficiently for a given level of technology.

Therefore if population were to increase, resources would be used more efficiently and living standards would increase for all people.

An increase in population would lead to an increase in quality of life.

Characterised by:

- High per capita incomes
- low unemployment
- Inward migration

Optimum population

The theoretical population which, working with all the available resources, will produce the highest standard of living for the people of that area.

Carrying capacity

The maximum population that the resources of an area can support.

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- The reality of achieving OPTIMUM population is difficult in practice because of 2 main reasons:
 - Population sizes are not static but DYNAMIC and grow or shrink over time.
 - Technology changes, allowing the exploitation of natural resources that might not have previously been available (e.g. technology has allowed us to farm increasing amounts of land in the UK that 200 years ago would have been inadequate for farming).

Regional variations in the UK

- Age
- Gender
- Wealth
- Occupation
- Education

Wealth

- Each year, the Government publishes a survey of income poverty in the UK called Households Below Average income (HBAI).
- This survey sets the poverty line in the UK at 60 per cent of the median UK household income.
- In other words, if a household's income is less than 60 per cent of this average, HBAI considers them to be living in poverty

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- There are **3.6 million children living in poverty in the UK** today. That's 27 per cent of children, or more than one in four
 - People are poor for many reasons. But explanations which put **poverty down to drug and alcohol dependency, family breakdown, poor parenting, or a culture of worklessness are not supported by the facts**
 - Work does not provide a guaranteed route out of poverty in the UK. Almost two-thirds (62 per cent) of children growing up in poverty live in a household where at least one member works
 - Child poverty has long-lasting effects. **By 16, children receiving free school meals achieve 1.7 grades lower at GCSE** than their wealthier peers. Leaving school with fewer qualifications translates into lower earnings over the course of a working life

Gender

- Women live longer but are twice as likely to have a higher morbidity due to chronic illness (arthritis)
- Develop CHD later than men
- Men more likely to smoke and drink
- Women take better care of their health

Education

- Better educated = healthier lifestyle

Occupation

- Those in manual jobs are 3 times more likely to suffer from poor health than those in non manual jobs.
- More manual jobs in the North
- Those in non-manual more likely to suffer from stress and mental health problems.
 - London has highest reported cases of stress

Environment and pollution

- **Big cities**
 - **More pollution**
 - **Poor health**
 - **London has high rates of respiratory disease due to poor air quality**
- Hard water vs soft water
- Areas with natural radiation

London's booming population

- London's population comes from every part of the world
- The largest numbers are from countries like India, Nigeria and Jamaica
- Since 2007 more migrants have come from Eastern Europe with the free movement of migration within the EU
- Migration goes back to Roman times. Later Saxons and Normans also settled in London

The UKs changing economy

Definitions

1. **Deindustrialisation** is the decline of a country's traditional manufacturing industry due to exhaustion of raw materials, loss of markets and competition from NEEs.
2. **Globalisation** is the process which has created a more connected world, with increases in the movements of goods (trade) and people (migration & tourism) worldwide.
3. **Government Policy** is a plan or course of action decided by a government to manage issues in a country

Why has the economy of the UK changed

- Deindustrialisation and the decline of traditional industries
- Globalisation
- Government policies

Deindustrialisation and the decline of traditional industries

- The UK has been experiencing deindustrialisation for several decades. This is the decline in manufacturing (secondary) industry and the subsequent growth in tertiary and quaternary employment. In the UK this has happened because:
 - Machines and technology have replaced many people in modern industries e.g. car production
 - Other countries e.g. China, Malaysia and Indonesia, can produce cheaper goods because labour there is less expensive.

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- Lack of investment, high labour costs and outdated machinery made UK products too expensive
 - Traditional UK industries – coal mining, engineering and manufacturing have now declines. Instead the UK is now a world centre for financial services, media, research and the creative industries.

Globalisation

- Globalisation is the growth and spread of ideas around the World. This can involve the movement or spread of cultures, people, money, goods and information

Post – industrial UK:

Definitions

- Post industrial economy - The economy of many economically developed countries where most employment is now in service industries.
- Deindustrialisation - The decline of a country's traditional manufacturing industry due to exhaustion of raw materials, loss of markets and competition from NEEs.
- Sustainability - Development that meets the needs of the present without limiting the ability of future generations to meet their own needs.

What has caused the UK to move to a post-industrial society?

- The development of IT
- Service industries and finance
- Research

Business and science parks

- Business Parks are purpose built areas of offices and warehouses, often at the edge of a city and on a main road. Science parks are often located near university sites, and high-tech industries are established. Scientific research and commercial development may be carried out in co-operation with the university.

Business parks

Activities found in business and science parks around the UK;

- Development of information technology,
- Service industries,
- Finance,
- Research,
- Science and business parks

Economic hubs in the UK:

Science parks

- A science park is a planned industrial complex which contains quaternary companies while a business park can also contain manufacturing companies.

Hanson Cement – Ketton. - It has been operational since 1923 (93 years)

Location: Ketton near Peterborough

- It was sited in this location as there is a good supply of limestone, the mineral needed to make cement. The quarry and processing plant supplies to major builders around the country, and supplied most of the cement used for the 2010 Olympics.

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- Near AI means that it is easy to transport goods around country.
 - Near Stamford, means lots of workers and people / businesses to sell to.

The locals

- However some people are not too happy with Castle Cement. They say the plant is **ugly**, that it creates a lot of **noise** from blasting and the **big lorries** that move around the area. Some environmentalists are worried about the effect the noise and **destruction** of grassed areas will have on **animal habitats**. Tourists **don't like the look** of the cement plant and quarry, they say it **ruins** the Lincolnshire countryside. Finally many locals are **angry about the dust created** by the blasting which takes place to mine the limestone.
- Castle Cement is clearly seen by some as a good thing for the local area, and for others as a bad thing.

London's place in the UK economy:

London's economy

- 13% of the UK's population live in London
- It produces 22% of the UK's wealth
- The gap between the UK and London is getting wider as London gets richer
- London attracts lots of business

Integrated transport system

- London has a well integrated transport system, but it is struggling to cope with the increase in passenger numbers.

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- As the population grows and work opportunities increase more people are using public transport to commute to work.
 - Driving a car is not sensible option for most Londoners with limited space to park and traffic congestion causing long journeys.
 - In 2014 roughly 75 million passengers used underground trains and buses in London each week- 25 million on the Underground and 50 million on buses and 50 million on buses. The number is growing every year.

Urban greening

- London is one of the world's greenest cities. Almost half the city- 47% is green space, including parks, woodlands, cemeteries and gardens.
- The percentage might have been higher but in recent years many people have paved over their gardens to create patios or make space to park their cars.
- London's large areas of green space is a result of the way in which the city has developed.

Infrastructure and economic hubs:

Road improvements

- In 2014 the government announced a £15 billion 'Road Investment Strategy'
- The aim is to increase the capacity and improve the condition of the UK roads.

Airports

- Airports are vital to the economy of the UK, Creating vital global links.
- It provides thousands of jobs and boosts economic growth massively:

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- 300,000 people employed
 - 3.6% of UK GDP

Cambridge business park

- This business park is home to brands such as HP, Siemens, Santander, P&G, Accenture, IBM and EE

The UKs global role:

Globalisation

- **Globalisation** is the process by which the world is becoming increasingly interconnected as a result of massively increased trade and cultural exchange.
Globalisation has increased the production of goods and services.

What is trade?

- When one country sells or **exports** its goods or services to another.
- Exports earn money for the exporting country so they are usually good for development.
- One country's exports become another's **imports** which that country has to pay for.
- The difference between exports and imports is called the **balance of trade**.
- If exports > imports = **trade surplus**.
- If exports < imports = **trade deficit**.

Trade

- International trade is dominated by developed countries – that is how they became developed!
- NICs like India and China are increasing their share of world trade but for many developing countries trade is another obstacle to development for two reasons:
 1. **The pattern of trade** for those countries which depend on primary products (raw materials) as exports is unfair.
 - Raw materials are cheap and value is added to them by manufacturing them into something else. This is done in more developed countries, therefore a country which exports raw materials will have to import manufactured goods at greater cost.
 - Primary products are traded in places like London and New York, far away from the producers. Prices go up and down and can sometimes be so low that producers do not cover costs. They cannot change crops quickly enough to minimise this impact – coffee bushes take years to grow for example.
 2. **Unfair trade** – developed countries have an unfair advantage. Farmers in these countries usually have a strong political voice and are supported in a number of ways:
 - **Subsidies** – grants made to farmers to help them produce food, making it cheaper to export (sometimes to developing countries)
 - Protection by **quotas** which restrict food imports, and **tariffs** which make imports from developing countries more expensive.
 - The WTO (World Trade Organisation) sets the rules of trade.

Trade blocs

- **Trade blocs:** An agreement between states, regions, or countries, to reduce barriers to trade between the participating regions.
- **European Union-** The EU has become the most powerful trading bloc in the world with a GDP nearly as large as that of the United States.
- **COMESA-** Common Market for Eastern and Southern Africa
- A free trade area with nineteen member states stretching from Libya to Zimbabwe.

The influence of media in the UK:

UK film industry

- The UK has one of the best established film and TV industries in the world
- Popular movies include James Bond and the Harry Potter movies
- In 2012 Skyfall became the most successful movie at the UK box office ever making £102 million

UK TV shows

- The UK TV industry is now worth over £70 billion
- The shows made in the UK are exported across the world
- UK TV has created 1.7 million jobs in the UK
- Popular UK exports include Peppa Pig, Downton Abbey, Top Gear, Come Dine with me and The Great British Bake Off

British food:

Takeaway food in the UK

- Takeaways used to be an occasional treat but now the average person in the UK spends £110 per month on takeaway
- This can equal as many as 12 takeaways per month

Why are people spending more money on takeaway food than they used to?

- Average income has increased more than the cost of takeout
- We lead busier lives and have less time to cook
- We travel more and want to experience different food
- People from many parts of the world live in the UK bring a large variety of food
- Chinese food is the most popular in the UK
- Chinese food arrived in the UK in the 19th century
- During the 1960's many people moved to the UK from Hong Kong, opening more restaurants
- Many cities have areas called China town
- Food in from the UK has not always had a good reputation
- Traditional British food includes:
 - Full English breakfast
 - Sunday roast
 - Shepard's pie