

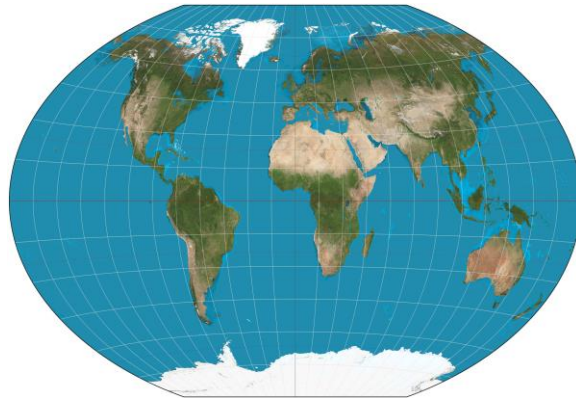


CREATING A CLIMATE FOR GREAT LEARNING,
SUCCESS AND OPPORTUNITY

Name: _____

Home Learning Number: _____

Year 10 - Geography Semester 2a 2023-2024



Creating a climate for great learning, success and opportunity



Word Revolution	Flood	Overflowing of water onto land that is normally dry
	Floodplain	An area of flat land alongside a river
	Flash flood	Flash floods happen when rain falls so fast that the underlying ground can't drain the water fast enough

1:

River management strategies: soft engineering

Soft engineering does not involve building artificial structures but takes a more sustainable and natural approach to managing the potential for river flooding. Each approach has its advantages and disadvantages.

The river Tees is found in the north-east of England, crossing Middlesborough, Darlington and the Pennine Hills. Soft engineering strategies have been used on the River Tees to protect towns from flooding. This mainly takes the form of land use zoning with agricultural land and flood plains.

3:

Flood warnings and preparation (soft engineering)

The environmental agency monitors rivers and issues warnings via newspapers, TV, radio and the internet when they are likely to flood so people can prepare.

Advantages

- People have time to protect their properties, e.g. with sandbags.
- Many possessions can be saved, resulting in fewer insurance claims.

Disadvantages

- Some people may not be able to access the warnings.
- Flash floods may happen too quickly for a warning to be effective.
- They do not stop land from flooding - they just warn people that a flood is likely.

2:

Flood plain zoning (soft engineering)

Allowing only certain land uses on the floodplain reduces the risk of flooding to houses and important buildings.

Advantages

- More expensive buildings and land uses are further away from the river, so have a reduced flood risk.
- Less damage is caused, leading to fewer insurance claims.

Disadvantages

- Not always possible to change existing land uses.
- Planners have to decide what type of flood to plan for

Questions

1. What does soft engineering on a river not involve?
2. Where is the river Tees?
3. Give one advantage of flood plain zoning.
4. Why is it not always possible to change land use?
5. State one disadvantage of flood warnings.
6. What is a flash flood?



Word Revolution	Economy	An economy is an area of the production, distribution and trade, as well as consumption of goods and services.
	Tertiary sector	The service sector of the economy (hairdressers, teachers, cashiers)
	Heavy industry	Traditional industry, including manufacturing of metals, cars and coal

1:

Causes of economic change in the UK
 The UK is experiencing a period of *economic* change. This is happening as a result of several factors, including globalisation, government policies and deindustrialisation.

- **Globalisation**- global trade, foreign investment and communication is more interconnected
- **Government policies**- privatised companies (BT/ British Gas), markets deregulated (government less involved), factories/ coal pits closed in 1990s
- **Deindustrialisation**- decrease in secondary sector (moved in the global shift to NEEs), mechanisation (using more machinery)

3:

- Science (Cambridge) and Business (Cobalt) Parks- attract university graduates, helped to grow finance and research sectors, found on edges of cities for transport links
- Finance and research- Financial jobs are to do with money. In the UK, these types of jobs include accountancy, working in banks and building societies, financial planning, *insurance, investments* and *pensions*. Large financial employers in the UK include Barclays, Aviva and KPMG. The government believes that science and research are important for the UK's growth because they help discover new ways for the country to move forward in a sustainable way.

2:

Post-industrial era/ economy
 The UK has now entered a post-industrial era. This is a time when traditional industries have declined, and new jobs have had to take their place. This is mainly an increase in jobs in the tertiary and quaternary sector. This has happened because:

- Development of IT (worth £58 billion a year), 100,000 software companies (Microsoft), largest mobile device market in Europe
- Increase in service industries- $\frac{3}{4}$ of UK's economy. Can be exported (tourism/ education)

Questions

1. What is globalisation?
2. What is market deregulation in an economy?
3. What % of jobs in the UK are in the service industry?
4. Where are Science and Business Parks usually located?
5. What is the tertiary sector?
6. Why does the UK government like science and research jobs?



Word Revolution	Heavy industry	Factories and mills that were prevalent during the industrial revolution
	Sustainable	Meeting the needs of today without compromising the needs of future generations.
	RERF	Leeds Recycling and Energy Recovery Facility (RERF)

1: The UK has seen massive industrial growth in the last 100 years. It has transitioned from a preindustrial economy, to an industrial economy and finally to a post-industrial economy.

There is a big difference between the north and the south. The north has experienced a massive decline in heavy industry, such as the closure of factories and mills and the south has seen the opening of new industries in places like Silicon Fen in Cambridge.

2: Impacts of heavy industry

- Water pollution from dumping waste-water into river courses. This can enter our drinking water supplies.
- Air pollution from factory emissions can impact breathing and overall health.
- Dumping of hazardous chemicals can lead to land and soil pollution.
- Traffic congestion from lorries and trucks.
- Damage to wildlife, habitats and beaches.
- Manufacturing can have a negative visual impact on the landscape
- The transport of the necessary raw products is usually by road which increases the rate of air pollution. It can also further damage the environment as new roads might need to be built.

3: Sustainable industry
 Traditional UK industries often caused a lot of pollution. Modern industrial development aims to be more environmentally *sustainable*. Some developments are leading the way with new ideas and technologies. Sustainable means meeting the needs of today without compromising the needs of future generations.

Case study – Leeds Recycling and Energy Recovery Facility (RERF)
 Leeds RERF is in South East Leeds on a former brown-field site. It is designed to remove and sort recyclables before the remaining material is burnt to make energy. The facility can power 22000 homes and recycles 40% of Leeds waste.

- Questions**
1. What sort of economy do we have now?
 2. Why has the north experienced a massive decline in heavy industry?
 3. Name 2 impacts of heavy industry
 4. Which environmental impact of heavy industry is the worst and why?
 5. What is a sustainable economy?
 6. Name 2 benefits of the Leeds RERF



Word Revolution	Rural	Places in the countryside such as villages and small towns, mostly dominated by agriculture
	Agriculture	Farming that includes arable (crops), pastoral (animals) and mixed.
	Population density	The number of people who live in a certain area

1: Rural areas are places in the countryside. Rural areas are normally classed as areas with less than 10 000 people including small towns and villages. The economy of rural areas are generally dominated by primary industry such as agriculture. Some rural areas are declining with people moving out to more urban areas, industry closing and limited job opportunities, which means population in those areas are decreasing. An example of this is the Outer Hebrides. Other rural locations are making positive economic changes, and the area is improving, meaning their population is increasing. An example of this is South Cambridgeshire.

2: South Cambridgeshire – rural growth (positive)
 Cambridgeshire is located in South-East of England, just north of London.
 People want to live in this area because of the tranquil, slow pace of life, educational opportunities (e.g. Cambridge University) and excellent services such as hospitals.
Economic impacts
 Commuters use services where they work (e.g. London) rather than where they live so services close in those areas
 Farmers sell land for housing development causing the decline of agriculture opportunities
Environmental impacts
 Traffic congestion on small country roads
Social impacts
 Lack of affordable housing meaning younger people have to move away.

2: Outer Hebrides – rural decline (negative)
 The Outer Hebrides are islands located off the west coast of Scotland.
 People are moving away from the area, especially young families due to lack of opportunities and services, such as schools and doctor's surgeries closing-down. A major factor driving this is the remoteness of the islands.
Social impacts
 The number of school children expected to fall leading to further school closures
 An aging population
Economic impacts
 People of working age moving away due to lack of opportunities
 Increased demand for tourism but not the infrastructure to support it
 Main economy is crofting (small farms) which does not support a lot of workers
Environmental
 Extra tourists put pressure on the environment

- Questions**
- 1. What is the definition of rural?**
 - 2. Give an example of a rural area in decline**
 - 3. Why are people moving away from the Outer Hebrides?**
 - 4. Explain the economic impacts of rural decline**
 - 5. Why are people moving into South Cambridgeshire?**
 - 6. Describe the social impacts of rural growth**



Word Revolution	Infrastructure	The basic structures that are needed to make a society function including transport and buildings.
	Congestion	Somewhere that is too blocked o crowded which can lead to problems.
	Ports	Where boats land to transfer their imports and exports.

1: The UK currently has many problems including the following:

- Traffic congestion on our roads
- Crowding of schools
- Pressure on services such as doctors
- Poor infrastructure such as roads
- Lack of affordable housing.

There are many solutions in place to try and help these problems, especially infrastructure improvements. Investing in infrastructure in the UK, such as in high-speed rail or airports, can increase economic growth and help more regions of the country develop. This is especially needed in the north of the country which has historically been seen as less developed as the south.

3:

Airports
Airports are a major contributor to the UK's economy. Within the UK, there are over 75000 flights, 200 million passengers in and out of the UK and 2 million tonnes of freight each year. Heathrow, in London is the UK's largest airport, with 80 million passengers alone. In 2016, the government proposed a new runway to Heathrow which would reduce congestion and increase capacity, operate to 40 new destinations, create jobs and boost the economy. However, environmentalists are concerned about the impact on the local area and residents re worried about the increased noise pollution.

Ports
Ports allow goods to be transported in and out of the UK. They link the UK to the rest of the Europe and the world. Liverpool 2 is a £400 million investment that would accommodate the world's largest vessels, connects the UK to the rest of the World and is turning into a major tourist attraction.

2:

Improving roads
In 2014, the government launched a £15 billion improvement strategy to reduce traffic and improve the condition of roads. This included creating smart motorways that reduces traffic congestion and reduces the speed of vehicles, building 400 new roads that link up with existing roads, and creating new lanes on busy motorways and major roads.

Railways
High Speed 1 (HS1) is a high-speed train that links London up with Paris in France. High Speed 2 (HS2) is the second project and is planned to link London with cities in the North of England such as Manchester and Leeds. Benefits of HS2 are that it creates new jobs in railway construction, cut journey times and reduces the North-South divide. However, lots of people are opposed to HS2 due to the environmental concerns.

- Questions**
- 1. Describe 3 problems the UK currently faces**
 - 2. Define the key term infrastructure**
 - 3. How have roads been improved in the UK?**
 - 4. What are the disadvantages of HS2?**
 - 5. Give a benefit of improving Heathrow**
 - 6. What could be a negative impact of expanding ports in the UK?**



Word Revolution	Science park	Group of scientific businesses located on a single site.
	Business park	Area of land occupied by a cluster of businesses.
	Economy	An economy is an area of the production, distribution and trade, as well as consumption of goods and services.

1:

The development of research

- Research and development is part of the rapidly expanding quaternary sector. It contributes over £3 billion to the UK economy and employs over 60,000 educated people.
- Research and development involve biomedical, computer and environmental sectors linked to UK universities. Cyber, artificial intelligence, and cleantech businesses are now employing substantial numbers.
- **British Antarctic Survey** employs over 500 people. Research involves ships and aircrafts in polar regions. Research includes Arctic sea ice changes.

3:

Finance parks

Area of land occupied by a cluster of businesses.

- **Cobalt Business Park** is the UK's largest business park. There are several support facilities including retail outlets and opportunities for recreation with a fitness centre, cycleways and green spaces. The park is close to the A1 and 20 minutes from the airport.
- The **northeast of England** have suffered economic decline as traditional industries have closed down. Businesses locating here qualify for government assistance

2:

Science parks

Group of scientific and technical knowledge-based businesses located on a single site usually associated with a university.

Park facilities:

- Transport: cycle storage, electric car charging points, car-share scheme, bus services
- Day nursery and preschool providing childcare
- Communal kitchens
- Cafes

Advantages: encourages the flow of new ideas into the commercial world and drives future innovation, productivity and competitiveness.

Questions

1. **How many people are employed in research and development in the UK?**
2. **What is an advantage of science parks?**
3. **Give an example of a finance park.**
4. **What transport facilities do science parks often have?**
5. **What does the British Antarctic Survey research?**
6. **Why has the northeast of England suffered economic decline?**



Word Revolution	North-South divide	An imaginary line which splits the UK into the 'poor' North and 'rich' South.
	Development Indicators	Measure the level of development of countries or regions.
	Median	The value in the middle of a data set.

1:

- The **North-South divide** is an imaginary line which splits the UK into the 'poor' North and 'rich' South.
- The divide shows the **social, economic and cultural** disparities between the North and the South.
- People in the South typically have longer **life expectancies**, higher **incomes** and better **standard of living** (development indicators).

3:

Why does the North-South divide exist?

- During the **Industrial revolution** the UK's growth was centred on the coalfields of Wales, N.England & Scotland.
- Heavy industries** and engineering thrived in cities like Manchester, Sheffield & Glasgow = wealth
- Since the 1970s many industries have declined (**deindustrialisation**) = unemployment increased
- London and the SE developed rapidly due to a fast growing **service sector**.
- London is a major **global financial centre** and has grown faster than the rest of the UK.
- This has led to high **house prices** across the South

2:

- Wages** are generally lower in the north than the south of the UK: in 2014, the average weekly wage was 40% lower in Huddersfield than London.
- Health** in generally worse in the north of the UK: life expectancy for male babies born in Glasgow in 2012 was 72.6 years. In East Dorset, it was 82.9 years. They live 10 years longer!
- Education** is generally worse in the north of the UK: GCSE results are generally higher in the south compared to the Midlands and the north.

Questions

- Which part of the UK is the richest?
- How many years longer do people in Dorset live compared to people in Glasgow?
- When did deindustrialisation begin?
- What sector rapidly grew in London and the Southeast?
- How much lower is the average weekly wage in Huddersfield compared to London?
- Give 3 examples of development indicators.



Word Revolution	Economy	An economy is an area of the production, distribution and trade, as well as consumption of goods and services.
	Trade	The movement of goods and services from producers to consumers.
	Commonwealth	A voluntary association of 53 independent and equal sovereign states, which were mostly territories of the former British Empire.

1:

- The UK has strong political links with many countries.
- For example, the UK is a member of the Commonwealth, which is one of the world's oldest political groups. The Commonwealth is a group of 53 countries and it began when those countries were ruled by Britain. Current membership is optional.
- The UK also has other political links, such as the Group of Seven (G7). The G7 is made up of the United States, Canada, France, Germany, Italy, Japan, and the United Kingdom. They meet yearly to discuss global economic issues.

2:

- Culture** – UK literature, music, cinema, sport, television, history and architecture are important globally. Books, such as the Harry Potter series, are sold worldwide. UK sports are showcased through events such as the Olympics, the World Cup, Wimbledon, the Premier League and the London Marathon. UK architecture can be seen in many commonwealth countries. Tourists visit the UK to experience the culture and many UK cities have been labelled 'cities of culture'.

2:

- Trade** – the UK imports and exports goods from many countries. Over 50% of UK trade is with EU countries. The UK's next biggest trading partners are found in Asia and Oceania. Foreign exports also include money spent by tourists visiting the country. The UK's biggest exports are machinery and transport equipment.
- Transport** – increasing air travel is strengthening the UK's links with other countries. In addition to this, the UK has modern port facilities and a high speed rail link to Europe.

- Questions**
- How many countries are in the Commonwealth?
 - What % of the UK's trade is with EU countries?
 - What are the UK's biggest exports?
 - Give 3 UK sports events which are showcased around the world.
 - Give 3 ways the UK is connected to the wider world through transport.
 - How often do the G7 meet to discuss global economic issues?



Word Revolution	Economy	An economy is an area of the production, distribution and trade, as well as consumption of goods and services.
	Infrastructure	The basic structures that are needed to make a society function including transport and buildings.
	Business park	Area of land occupied by a cluster of businesses.

1:

Causes of economic change in the UK
 The UK is experiencing a period of *economic* change. This is happening as a result of several factors, including globalisation, government policies and deindustrialisation.

- **Globalisation**- global trade, foreign investment and communication is more interconnected
- **Government policies**- privatised companies (BT/ British Gas), markets deregulated (government less involved), factories/ coal pits closed in 1990s
- **Deindustrialisation**- decrease in secondary sector (moved in the global shift to NEEs), mechanisation (using more machinery)

2:

- The **North-South divide** is an imaginary line which splits the UK into the 'poor' North and 'rich' South.
- The divide shows the **social, economic and cultural** disparities between the North and the South.
- People in the South typically have longer **life expectancies**, higher **incomes** and better **standard of living** (development indicators).

2:

The UK currently has many problems including the following:

- Traffic congestion on our roads
- Crowding of schools
- Pressure on services such as doctors
- Poor infrastructure such as roads
- Lack of affordable housing.

Investing in infrastructure in the UK, such as in high-speed rail or airports, can increase economic growth and help more regions of the country develop. This is especially needed in the north of the country which has historically been seen as less developed as the south.

Questions

1. What does globalisation mean?
2. What does deindustrialisation mean?
3. What is one problem in the UK?
4. What can help the UK develop?
5. What is the north-south divide?
6. What is one difference between the north and south of the UK?



Creating a climate for great learning, success and opportunity