## Changing Economic World

**ECONOMIC FUTURES IN THE UK**

<table>
<thead>
<tr>
<th>Key idea</th>
<th>Specification content</th>
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<tbody>
<tr>
<td>Major changes in the economy of the UK have affected, and will continue</td>
<td>Economic futures in the UK:</td>
</tr>
<tr>
<td>to affect, employment patterns and regional growth.</td>
<td>- causes of economic change: de-industrialisation and decline of traditional industrial base, globalisation and government policies</td>
</tr>
<tr>
<td></td>
<td>- moving towards a post-industrial economy: development of information technology, service industries, finance, research, science and business parks</td>
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<td></td>
<td>- impacts of industry on the physical environment. An example of how modern industrial development can be more environmentally sustainable</td>
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<td></td>
<td>- social and economic changes in the rural landscape in one area of population growth and one area of population decline</td>
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<tr>
<td></td>
<td>- improvements and new developments in road and rail infrastructure, port and airport capacity</td>
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<tr>
<td></td>
<td>- the north–south divide. Strategies used in an attempt to resolve regional differences</td>
</tr>
<tr>
<td></td>
<td>- the place of the UK in the wider world. Links through trade, culture, transport, and electronic communication. Economic and political links: the European Union (EU) and Commonwealth.</td>
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</tbody>
</table>
Describe the patterns on the graph, what happens to each of the 4 lines over time?

**WHY HAS THE UK ECONOMY CHANGED?**
1. Sort the cards on the next page into the various reasons for the changes described on your graph.
2. Now sort these reasons into deindustrialisation, globalisation and government policies
1. Mechanisation (the use of machines) has taken place as businesses and farms began to replace many workers for machines as they are generally more reliable and cheaper to run.

2. The UK Government in the 1970s and 1980s sold or turned many of its secondary and primary industries to companies in a process called privatisation. This cost many jobs in steel making and coal in particular.

3. Many factories in the UK have shut down and production has continued in low income countries, which have less educated workforces, limited health and safety or no minimum wage laws. This makes costs cheaper.

4. Some resources such as iron ore and coal have declined in availability in the UK or become uneconomic to mine, so employment declined.

5. Many industries like coal have shut down as firms chose to import this and other resources from abroad where both labour and land were cheaper.

6. Some primary industries have been affected by laws and treaties – fishing is limited by quotas imposed by the European Union.

7. Newly Emerging economies like China opened their countries to global business in the 1980s and many UK firms chose to move there.

8. Many of the UK’s secondary industries like arms manufacture and coal heavily polluted the environment.

9. Much cheaper crops can be imported from countries overseas where mass production bring costs down and labour and land are both cheaper than in the UK.

10. The average annual wage of a farmer in the UK is £9000 or less, making this an unlikely occupation for a highly educated skilled workforce.

11. The UK government pumped nearly £5billion into high tech research and development in 2015.

12. The UK and EU have very strict laws for environmental pollution for businesses; this makes it expensive to make products here.

13. Compared to other countries the UK’s manufacturing sector is less productive.

14. Many UK governments have invested in the “knowledge economy” rather than primary and secondary industries.

15. In 2013 nearly 50% of young people in the UK entered university, and results in a very high demand and high aspirations for graduate level jobs often in services and the quaternary sector.

16. The UK has to follow European Union law. Policies limiting fishing and helping farmers mechanise cost jobs in primary industries.

IS THIS THE FUTURE FOR THE UK? - https://www.youtube.com/watch?v=7Pq-S557XQU
## POST-INDUSTRIAL ECONOMY - IT, Service, Finance, Research, Science and Business Parks

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<thead>
<tr>
<th>POST-INDUSTRIAL ECONOMY</th>
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<tr>
<th>SUSTAINABILITY</th>
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<tr>
<th>BUSINESS AND SCIENCE PARKS</th>
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<tr>
<th>RESEARCH ACTIVITY: SCIENCE AND BUSINESS PARKS NEAR ME......</th>
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<th>LOCATION</th>
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<th>CHARACTERISTICS</th>
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<th>ENVIRONMENTALLY SUSTAINABLE?</th>
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<tr>
<th>RESEARCH AND DEVELOPMENT ACTIVITIES DONE THERE</th>
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<th>BUSINESS TYPES LOCATED THERE</th>
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<th>LOCAL LINKS, INSTITUTIONS and COUNCIL</th>
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### WHICH WOULD YOU PREFER TO LIVE NEXT TO AND WHY, A SCIENCE PARK OR A HEAVY INDUSTRIAL PLANT?.
<table>
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<th>Name</th>
<th>Location</th>
<th>Sq ft</th>
<th>Uses</th>
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<tbody>
<tr>
<td>Birmingham Science Park Aston</td>
<td>Birmingham</td>
<td>2,500,000</td>
<td>Science &amp; Technology, innovation</td>
</tr>
<tr>
<td>Loughborough University Science and Enterprise Park</td>
<td>Loughborough</td>
<td>2,152,782</td>
<td>Science and enterprise</td>
</tr>
<tr>
<td>University of Cambridge, West Cambridge Site</td>
<td>Cambridge</td>
<td>1,937,504</td>
<td>Academic, research institute, residential sports and other facilities, including 41,000 m² of new commercial research accommodation</td>
</tr>
<tr>
<td>The Bridge</td>
<td>Dartford</td>
<td>1,800,000</td>
<td>264-acre mixed use business and innovation park that has been designed to encourage an entrepreneurial culture and the development of knowledge-based industries in the Thames Gateway</td>
</tr>
<tr>
<td>Anglia Ruskin MedTech Campus and MedBic</td>
<td>Chelmsford</td>
<td>1,700,000</td>
<td>Health innovation</td>
</tr>
<tr>
<td>Cambridge Science Park</td>
<td>Cambridge</td>
<td>1,650,000</td>
<td>R&amp;D owned and operated by Cambridge University</td>
</tr>
<tr>
<td>Loughborough Technology Park</td>
<td>Loughborough</td>
<td>1,300,000</td>
<td>Pharmaceutical, pharmacology, bio-sciences, heath &amp; medical, scientific research &amp; development, forensic, medical devices, test laboratories, sterile or scientific manufacturing &amp; distrubution and pilot plants.</td>
</tr>
<tr>
<td>The Nucleus Business and Innovation Centre</td>
<td>Dartford</td>
<td>1,000,000</td>
<td>Science and technology</td>
</tr>
<tr>
<td>Granta Park</td>
<td>Cambridge</td>
<td>990,000</td>
<td>Life science research park</td>
</tr>
<tr>
<td>Stoneleigh Park</td>
<td>Kenilworth</td>
<td>862,943</td>
<td>Food production, equine and livestock husbandry, sustainability, renewable energy, and the wider rural economy.</td>
</tr>
</tbody>
</table>

MAP THE LOCATION OF THE 10 LARGEST SCIENCE PARKS ONTO THE MAP.

DESCRIBE THE DISTRIBUTION AND JUSTIFY ANY PATTERNS YOU SEE:

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IMPACTS OF INDUSTRY ON THE PHYSICAL ENVIRONMENT.

**IMPACTS OF INDUSTRY**

1. Manufacturing plants can create aesthetic pollution.
2. Industrial processes can cause air and water pollution as well as degrading the soil.
3. The waste products from manufacturing industries are often taken to landfill and this can pollute the air, water and soil.
4. Manufacturing processes can emit harmful chemicals that pollute the atmosphere.

**IMPACTS OF QUARRYING INDUSTRY**

1. Quarries are an eyesore and destroy the habitat of many different animals.
2. To break the rock the quarry uses explosives which cause noise pollution and add dust to the surrounding air.
3. Lorries transport the limestone which adds to the traffic coming in and out of the town.
4. With more lorries more carbon dioxide is released which is a greenhouse gas.
5. Quarrying can pollute nearby water sources.

**QUESTION:** Suggest how manufacturing industries can create environmental challenges [4 marks]

ENVIRONMENTALLY SUSTAINABLE BUSINESS?? Can modern industry be more Environmentally friendly?

**SUSTAINABILITY/SUSTAINABLE DEVELOPMENT**

MORE SUSTAINABLE INDUSTRY

1. Heavy fines imposed when an industrial pollution incident occurs.
2. Stricter environmental targets put in place for industry on water quality, air pollution and landscape damage.
3. Desulphurisation can remove harmful gases such as sulphur dioxide and nitrogen oxide from power station chimneys.
4. Quarrying - expect companies to restore or improve quarries after they have been used. This can be through agriculture, habitat

MORE ENVIRONMENTALLY SUSTAINABLE QUARRYING

1. Quarries can be restored to create wildlife lakes for recreation and water supply.
2. Limestone features can be recreated to make the landscape look natural.
3. Regular monitoring of noise, vibration, air borne emissions and water quality.
4. Rail transport used to minimise congestion on local roads.

EXAMPLE OF AN INDUSTRY THAT AIMS TO BE ENVIRONMENTALLY SUSTAINABLE IS Nissan.
EXAM QUESTION – The passage below gives information about the Rouge Ford car factory in the USA. Using the passage, describe how planning and management can make large-scale industry more sustainable. Use Fig 17 to help you. (6)

Instead of abandoning the large and ageing Rouge car factory on a brownfield site, the Ford car company is rebuilding it in ways that are good for business as well as the environment. The new buildings will:

- be energy efficient
- recycle water and other materials
- protect the environment
- create a healthy working environment
- improve market image.

The living roof on top of the new Dearborn Truck Plant within the Rouge Ford car factory is one of the largest living roofs in the world with 100,000 square metres of roof covered with sedum (a low-growing plant) capable of cleansing 20 billion gallons of rainwater annually – for free.
Study Figure 12. Figure 12 gives information about a factory that has been designed to manage the impacts of industrial development sustainably.

Figure 12

- Carbon neutral.
- Uses 25% less energy than other factories of the same size.
- Designed to stay comfortably cool in the hot, tropical climate.
- ‘Bricks’ made of local earth trap less heat in the building than other materials would.

EXAM QUESTION - Explain how the factory in Figure 12 is an example of sustainable industrial development. (6)
Rural landscapes in the UK are changing. E.g. South Cambridgeshire is experiencing rapid population growth as people move out of Cambridge and London to enjoy a different pace of life in the countryside. However, remote rural areas such as the Outer Hebrides in North West Scotland are experiencing population decline.

Use an example to demonstrate how modern industry can be more environmentally sustainable (6 marks)

Watch the BBC video – what is happening to the rural economy in the UK?

Use Figures 8a, 8b and 8c to outline why the features shown in the photographs are typical of expanding villages.

3 (c) Study Figure 9, two newspaper article headings about remote rural areas.

**Figure 9**

<table>
<thead>
<tr>
<th>Housing worries for communities in Scotland’s Moray area</th>
<th>Countryside broadband speeds remain slow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for low-cost homes highlighted</td>
<td>Many areas still digitally isolated say experts</td>
</tr>
</tbody>
</table>

With the help of Figure 9, explain why living in rural areas can be difficult. [4 marks]
Study Figure 8, a newspaper headline about rural areas.

**Figure 8**

Village life “will die within a generation” as costs force young people to cities

Use Figure 8 and a case study to explain the causes of decline in remote rural areas.

[8 marks]

[SPaG 3 marks]

ANOTHER BIG QUESTION COULD BE:

Use a case study to explain the social and economic changes caused by depopulation.

(8 marks + 3SPG)
IMPROVEMENTS TO TRANSPORT/INFRASTRUCTURE – Road, Rail, Air and Sea

Transport developments involve affect both employment and regional growth.

DEFINE INFRASTRUCTURE

DEFINE TRANSPORT

ROAD IMPROVEMENTS

In 2014 the Government announced a £15 billion road investment scheme:

- 100 new road schemes
- 1300 new lane miles added to motorways and major roads
- Extra lanes on motorways
- Develop smart motorways to keep traffic moving


RAILWAY IMPROVEMENTS

Investment in Railways is vital to improve links between UK regions as well as the rest of Europe. Such investment includes:

* Electrification of Trans-Pennine Expressway by 2020
* Electrification of Midland mainline between London and Sheffield by 2023
* HS2 (High Speed 2) – Connecting London – Sheffield – Leeds – Manchester and then on to Scotland worth £50 billion between 2017 and 2033. A controversial plan due to loss of countryside and nearness to homes.

http://www.crossrail.co.uk/about-us/

When the Elizabeth line opens fully in 2019, 1.5 million more people will be able to get to central London within 45 minutes.

Crossrail is a very important and exciting project for rail users in and around London and the South East. It’s also the biggest civil construction project in Europe today.

The Crossrail Project is building the Elizabeth line to link Reading and Heathrow in the west with Shenfield and Abbey Wood in the east, via new 21km tunnels under central London. This will increase London’s rail capacity, cut passenger journey times across the city, encourage regeneration and generate significant employment opportunities.

DEVELOPING UK SEAPORTS

About 32 million passengers pass through UK ports annually and employs 120,000 people.

- The UK port industry is the largest in Europe, due to the long coastline and trading history
- Some ports specialise in passenger ferries others in cargo transporters
- Most are all-purpose with a range of goods and services
- Dover is the UK’s main port for freight (lorries, cars etc.)
- Felixstowe is the largest container port

INVESTMENT INCLUDES:

* LIVERPOOL 2 – A new container terminal £300 million
It will DOUBLE the ports capacity and will create 000s jobs, boost the North-West’s economy and reduce road freight.

AIR TRAVEL DEVELOPMENT

- Airports are vital to the economy of the modern UK
- Airports employ over 300,000 people
- Over 2 million tonnes of freight pass through the UK’s airports each year
- More than 750,000 international flights depart from the UK annually to 400 airports in 114 countries around the world!

EXPANDING LONDON'S AIRPORTS:

In 2012 a government body looked at 3 options to increase air travel at Heathrow and Gatwick but in 2015 – a 3rd runway at Heathrow was recommended. This could yet change due to objections. Heathrow is one of Worlds major airports handling over 73 million passengers and employing 76,000 people.

Soundproofing homes and schools as well as no night-time flights were recommended.
<table>
<thead>
<tr>
<th>Developing the UK's port capacity</th>
<th>Airport Capacity - Expanding London's Airports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label some of the UK's major ports on the UK outline. Add facts on the UK ports – biggest, busiest etc.</td>
<td>Why are airports important to the economy of the UK?</td>
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<tr>
<td>Should Heathrow Airport expand or not? Discuss the advantages and disadvantages of expanding Heathrow airport.</td>
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</table>

### Infrastructure - The framework of transport and energy networks, including roads, railways, ports and airports, plus energy distribution.

<table>
<thead>
<tr>
<th>Port capacity</th>
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<tbody>
<tr>
<td>Describe developments to the UK's port industry:</td>
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<tr>
<td>Describe the recent port developments at Liverpool2. What benefits will the new development bring to the region?</td>
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</tbody>
</table>
Railway Improvements

What railway improvements are planned to help stimulate economic growth in the north of the UK?

Railway improvements – HS2

Describe the project (dates, costs, location etc.) What are the advantages and disadvantages of Crossrail?
**NORTH:SOUTH DIVIDE AND REGIONAL DIFFERENCES**

https://www.youtube.com/watch?v=HoQsU0En-7o

<table>
<thead>
<tr>
<th>WHAT IS THE NORTH-SOUTH DIVIDE?</th>
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<tr>
<th>WHY IS THERE A N/S DIVIDE?</th>
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During the ______ the UK’s growth was centred on coalfields in Northern England and Scotland. Heavy industries and ________ thrived in cities such as Liverpool, Manchester, Sheffield and Glasgow. Since the 1970’s many industries have ______ due to loss of resources or competition abroad and as a result ______ has risen in these areas. London and the South East prospered with a rapidly growing ________ sector leading to faster growth than the rest of the UK.

<table>
<thead>
<tr>
<th>engineering</th>
<th>unemployment</th>
<th>tertiary</th>
<th>Industrial Revolution</th>
<th>declined</th>
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<tr>
<th>WHAT ARE LOCAL ENTERPRISE PARTNERSHIPS?</th>
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<th>WHAT ARE ENTERPRISE ZONES?</th>
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Strategies used in an attempt to resolve regional differences

- The Northern Powerhouse  https://northernpowerhouse.gov.uk/
- What is the idea behind the Northern Powerhouse?
- Is it the solution to the North South Divide in the UK?
- http://www.bbc.co.uk/news/magazine-32720462

Watch the first 15 minutes of Mind the Gap  https://www.youtube.com/watch?v=DIpakXL6F6I

1. What is London Gateway? What does it show about the Power of London?
2. Why has this development taken place?
3. What is a hub? Why is this important?
4. What Impact does London have on the Population of the UK? Mention migration
5. What does the map reveal about the density of workers in London?
6. How “productive” is London?

**QUESTION:** DISCUSS how transport strategies help to resolve regional differences? [6 MARKS]
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Web link</th>
<th>Map</th>
<th>Major patterns</th>
<th>Proof that there is a North South Divide?</th>
</tr>
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UK IN THE WIDER WORLD: Trade, Culture, Transport, electronic communications, Economic and Political links - The EU and the COMMONWEALTH

WATCH: https://www.youtube.com/watch?v=8G1cds52Ko0

WHAT IS THE EU and WHY DID THE UK JOIN?

<table>
<thead>
<tr>
<th>How does the EU affect the UK?</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Low prices of goods – there exists a ‘Single Market’ for all member countries wherein products are low-priced and there are no charges when it comes to custom tax; custom tax is usually charged when goods are transported or sold between states/countries but this is not applied among member countries</td>
<td>Not all policies are efficient – a good example is that of the Common Agricultural Policy which resulted to oversupply and higher prices of goods</td>
<td>Overcrowding – it was mentioned earlier that the citizens of member countries are free to move from one place to another; this has led to overcrowding in the major cities of UK and it has increased prices of houses, as well as congestion on the roads</td>
</tr>
<tr>
<td>It is costly to be a member of the EU – different sources claim that the cost per head ranges from £300 to £873</td>
<td>Citizens are free to move from one member country to another – citizens can freely travel, study, work, or live in any European country of their choice</td>
<td>More jobs are generated – more or less than 3.5 million jobs have been generated over the years</td>
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<td></td>
<td></td>
<td>The ‘single currency’ poses a great problem – not all member countries are using the Euro though the EU emphasized its use; still, many problems have risen over the years</td>
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UK AND THE COMMONWEALTH

https://www.youtube.com/watch?v=Z0ebCRJODtQ
• What is the Commonwealth and what are its key features?
• How does the UK benefit from being part of the Commonwealth?

WATCH:  
https://www.youtube.com/user/Commonwealthtube  
https://www.youtube.com/watch?v=zYP0Yzf6Usw  
https://www.youtube.com/watch?v=nLdAFKtNLkA  

QUESTION:  
DISCUSS the importance of the UKs relationship with the COMMONWEALTH and the UK [9 marks]

Suggest how the UK benefits economically and politically from its membership of the EU and / or the Commonwealth. (6 marks)
**WHAT ARE THE UKS GENERAL LINKS WITH THE REST OF THE WORLD**

<table>
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<th>TRADE</th>
<th>CULTURE</th>
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<th>COMMUNICATIONS</th>
<th>TRANSPORT</th>
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**QUESTION:** Explain how trade links create wealth for the UK  
(4 MARKS)

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