

#### **Topic 1: Human Fieldwork**

### Introduction and planning

Aim and hypothesis of our enquiry question. Justification on why the site was chosen – accessibility and location. Risk assessment creation by students. Theory on how Birmingham will compare to the Burgess Model.

#### Methods and data collection

The different types of data collection are primary, secondary, qualitative, quantitative, random sampling, systematic sampling and stratified sampling. Examples of how we collect these types of data. Students to understand how they will be collecting this data for their fieldwork enquiry.

### Human Fieldwork site visit to Birmingham.

Students carry out an investigation into the success of regeneration attempts in Birmingham. Students visit 3 different locations within Birmingham where they undertake a environmental quality survey, questionnaire and pedestrian count.

#### **Data presentation**

Data can be presented in different ways e.g. bar chart, line graph, radial/radar graph and pie chart. Students to assess which data presentation is the most effective and plot their data collected from their fieldwork.

## Data analysis

Data analysis looks at what we did and how we did it. This will encompass the data collection from the fieldwork, how we collected it and why and how this data was presented – how we presented and why we presented it in this way.

### Conclusions

How does the data collected match up with the conclusions that we had originally thought to be true. Does the data support the Burgess Model, how does it support the model and what evidence do we have of this. E.g. The Burgess Model suggests that land use in the CBD will mainly be shopping centres, accommodation and restaurants.

### **Evaluation**

Evaluate the effectiveness of our data collection against our enquiry question. Does the data collected at the fieldwork site prove or disprove the enquiry question set. How effective was the data collection, how could it have been improved.



Multiple exam style questions:



Why did we choose Birmingham City Centre as a location (3 marks)

Explain the advantage of the location used in your fieldwork enquiry (2 marks)

Justify one primary data collection method used in your human geography enquiry (3 marks)

Suggest why one set of data you collected in your human fieldwork enquiry may not have been accurate (2 marks)

Assess the effectiveness of your data presentation technique(s) in your human geography enquiry (6 marks).

Suggest one advantage and one disadvantage of using the technique shown to measure environmental quality (2 marks)

Explain how one data presentation technique used in your human geography enquiry helped you to interpret the data (6 marks)

For one of your fieldwork enquiries, to what extent did the data collected help you to obtain accurate results and reach a valid conclusion? (9 marks) [+3 SPaG marks]



'Turn and talk' opportunity – What did your data tell you about how people feel Birmingham has been regenerated.

'Turn and Talk' oppurtinity – What does your data tell you about the popularity of Birmingham.

## Homework

Homework tasks will be given every week. Homework will support knowledge acquisition and retention. Challenge homework tasks will be provided. All homework will be recorded on EduLink.



### **Topic 2: The Changing Economic World**

Is there a development gap and how do we measure it? Development means positive change. As a country is usually means standard of living and quality of life will improve. The development gap is the widening difference in levels of development between the world's richest and poorest countries. Development is measured using development indicators: GNI per capita, HDI, Infant mortality rate, Literacy rate, Life expectancy, Death rate, Birth rate, Access to clean water and People per doctor.

#### How useful are development indicators?

Social and economic development indicators are useful to showing the development of a country by allowing for comparison to other countries, however they do are limited as they do not show everything happening within a country. For example economic indicators such as GNI per capita are a good economic measure of development as it is done in US dollar allowing countries to be easily compared. However, it only shows an average so inequalities within a country are not shown. It also does not tell us about quality of life.

# <u>How does the Demographic Transition Model teach us about development?</u>

The Demographic Transition Model shows changing birth and death rate patterns over time. There are five stages of the Demographic Transition Model, Stage 1 is categorised as high birth and death rates, whereas stage 5 is categorised as birth rates fall slowly and death rates rise very significantly.

# <u>How do population pyramids teach us about</u> development?

Population pyramids are used to show information about the age and gender of people in a specific country. They are split into three sections: young dependants, the economically active and elderly dependants. A triangular population pyramid (high birth and death rates) is typical of LIC's. A rectangular population pyramid is typica of HIC's

### What are the causes of uneven development?

Causes of uneven development can be physical, economic or historical. Physical factors – some countries have a hostile or difficult landscape, e.g. extreme weather. Economic factors – some countries have very high levels of debt. Historical factors – Some countries



Guided Reading opportunity – What are the development indicators?

Guided Reading opportunity – The Demographic Transitional Model.

Guided Reading opportunity – Causes of uneven development.

Guided Reading opportunity – Case Study: Nigeria.



Extended writing opportnity - Pupils answer exam style questions are the end of the lesson ranging from 1-9 marks.

Extended writing opportunity – Explain how physical and environmental factors have caused uneven development.

Extended writing opportunity – Explain how fairtrade can reduce the development gap.

Extended writing opportunity – Explain how one country's trading relationships with the wider world have changed. Use an LIC/NEE you have studied.

Extended writing opportunity – 'Aid is the best way to reduce the development gap'. To what extent do you agree?' (6 marks)

Extended writing opportunity – Tourism is an effective way of reducing the development gap. Do you agree? (6 marks).

Extended writing opportunity – Using a case study of a LIC or NEE, explain the link between Transnational Corporations (TNCs) and industrial development in the country. (6 marks).

Extended writing opportunity - Suggest how the UK is moving towards a post-industrial economy. (6 marks)

Extended writing opportunity – Assess the importance of transport improvements to the UK economy. (9 marks)



have been negatively affected by colonialism through the exploitation of natural resources.

# <u>How can economic strategies reduce the development gap?</u>

Companies can expand in LICs. Investment can involve: Development of infrastructure, improvement to harbours and ports for shipping, development of new industries. Industrial development creates new jobs which improve the economy.

# <u>How can aid and intermediate technology reduce the</u> development gap?

Aid is when one or more countries give money to other countries. The money has to be spent on things that will benefit the population.

Intermediate technology is sustainable and is appropriate to the needs/skill/knowledge/wealth of the local people. It often takes the form of small scale projects, e.g. to do with agriculture, water or health.

How can Fairtrade reduce the development gap? Fairtrade is trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.

### How can tourism reduce the development gap?

Jamaica Case Study: Countries with beautiful natural landscapes are attractive to tourists who spend money in the country which can be used to invest in infrastructure and housing. This provides employment for locals and strengthens the economy. The physical environment can also be improved.

Why is Nigeria important to Africa and the wider world? Nigeria is a country in West Africa in the northern hemisphere. It has regional and global importance. Nigeria has the largest agricultural output in Africa and ranks as the 5<sup>th</sup> largest contributor to UN peacekeeping missions around the world.

#### How is Nigeria's economy changing?

Nigeria is seeing a decrease in the primary sector and increase in the secondary and tertiary sectors. This is due to: the increasing use of farm machinery, better pay and conditions in other sectors, a stable government increasing employment in manufacturing and production and the growth of communications, retail and finance.

## How do TNCs impact Nigeria?

A transnational corporation is a large company that operates in several countries. A TNC usually has its headquarters in one country with production plants in several others. Shell Oil is one of the world's largest oil companies. It began operating in Nigeria after oil was discovered in the Niger Delta in 1958. Shell Oil brings both positive and negative impacts to Nigeria.

Extended writing opportunity – Evaluate the success or likely success of one or more strategies to resolve reigional differences in the UK. (9 marks)

Extended writing opportunity – Using a cast study of a LIC/NEE. Evaluate the effects of economic development on the population's quality of life. (9 marks).



'Turn and talk' opportunity – Do you believe that there is North-South divide in the UK? How can this divide be seen?

'Turn and talk' opportunity – Why would Transnational Corporations set up their headquarters in HICs but manufacturing industries in LICs?

'Turn and talk' opportunity – Which of the development indicators do you think is the most reliable?

'Turn and talk' opportunity – What are the problems arising from countries becoming dependent on tourism?

'Turn and talk' opportunity – Is debt relief a sustainable way of allowing LICs to develop?

### Homework

Homework tasks will be given every week. Homework will support knowledge acquisition and retention. Challenge homework tasks will be provided. All homework will be recorded on EduLink.

### Subject specialist keywords:

Birth rate

Commonwealth

Death rate

De-industrialisation

Demographic Transition Model (DTM)

Development

Development gap

**Euopean Union** 

Fairtrade

Globalisation

Gross National Incone (GNI)

Human Development Index (HDI)

Industrial structure

Infant mortality

Information technologies

Intermediate technology

International aid

Life expectancy

Literacy rate

Microfinance loans



#### How does aid impact Nigeria?

The benefits of being an NEE are not spread evenly across Nigeria. Infant mortality and death rates are still high. Aid has helped education people about how to protect against HIV/AIDs etc. However, issues with aid include corrupt government officials keeping money for themselves.

# What are the environmental impacts of economic development in Nigeria?

Environmental impacts are usually found in four areas: Industrial growth, Urban growth, Commercial farming and deforestation, Mining and oil extraction. In many cities e.g. Lagos and Kano, pollutants are released. These get into water supplies and create poor air quality. Chemical waste is disposed which can get into water supplies. 70-80% of forests have been destroyed through logging, faming and urbanisation etc.

# <u>How is quality of life in Nigeria affected by economic development?</u>

In 2000 Nigeria was placed amongst the 'least developed nations' in terms of wealth and education. In 2001, Nigeria had one of the highest average HDIs. Factors increasing quality of life include: reliable and well paid employment opportunities and higher disposable income.

### How is the UK's economy changing?

During the Industrial Revolution, many jobs in the UK were in the secondary sector. Deindustrialisation then happened where companies and factories moved abroad. This resulted in the increase in the tertiary sector. This has also increased due to globalisation.

# <u>How is the UK moving towards a post-industrial</u> economy?

A post-industrial economy is where the manufacturing industry declines to be replaced by growth in the service sector and quaternary sector. This is due to: development of IT, service industries and finance and research

# <u>How does industrial development affect the physical environment?</u>

Manufacturing developments make the landscape look dull. Industrial processes lead to soil, water and air pollution. Transportation of resources leads to air pollution.

## How are rural areas changing?

Most people in the UK live in urban areas, but 19% still live in rural areas. But rural areas in the UK is actually growing as a result of counter-urbanisation. E.g. Cambridgeshire and the Outer Hebrides.

How has UK transport been improved?

North-South Divide (UK) Post-industiral economy Science and business parks Service industries (tertiary industries) Trade

Transnational Corporation (TNC)



In 2014 the Government announced a £15 billion road investment scheme. There are plans to encourage economic growth in the north by improving railways (HS2). Improving port facilities and airports.

How can we reduce the UK's regional differences? The North-South divide is defined as a real or imagined cultural and economic difference the south of England and the North of England. During the Industrial Revolution, the UK's growth was centred on coalfields in Wales, Northern England and Scotland, Heavy industries were based in cities such as Hull, Manchester, Sheffield and Glasglow. Since the 1970's, many industries have declined due to loss of resources or competition abroad and as a result unemployment has risen in these areas. London and the South-East were able to survive with a rapidly developing tertiary and quaternary sector leading to faster growth than the rest of the UK.

## How is the UK connected to the wider world?

The UK's most important trading links are with the EU and the USA us a historic trading partner, Television is one of the UK's biggest media exports. The UK has many transport links: air, water, road and rail. The UK is also connected to the Commonwealth.

### **End of Topic Assessment**

Complete an exam style assessment based on learning from 'The Changing Economic World'.

### **British Values:**

Individual liberty: Students are able to have a freedom of expression whilst respecting others during contributions to class discussions.

Students are encouraged as much as possible to develop independent learning skills to help us take control of our own learning.

Students have opportunities to critically examine our own values and attitudes (in debating issues, contributing in class etc.)

Tolerance of different cultures and religions: Students understand the importance of identifying and combating discrimination including tackling stereotypes.

Democracy: Students explore and discuss injustices and inequalities (perceived or real) and challenge and debate these through the exploration of geographical topics.

Mutual respect: Students have opportunities to understand our responsibilities to conserve resources and play our part in sustainable development.

## **Topic 3: The Challenge of Natural Hazards**

#### Are all natural hazards the same?

A natural hazard is a natural process which could cause harm to people and property. There are four types of natural hazards: atmospheric hazards, tectonic hazards, geomorphological hazards and biological hazards.





Guided Reading opportunity – Effects of earthquake in HIC

Guided Reading Opportunity – Effects of earthquake in LIC

Guided Reading opportunity – Effects and response of tropical storm case study.



The Earth has four layers: the crust, the mantle, the outer core and the inner core. There are two types of crust: oceanic and continental.

Convection currents make tectonic plates move. Magma in the mantle is heated by the core. This causes circular movements of heat in the mantle called convection currents. The heated magma rises and then cools. These circular movements cause the plates the move.

How does ridge push and slab pull move tectonic plates? At constructive margins ocean ridges form high above the ocean floor. Beneath ocean ridges the mantle melts: the molten magma rises as the plates move apart and cools down to form new plate material. AS the lava cools, it becomes denser and starts to slide down, away from the ridge, which causes the plates to move away from each other. This is called ridge push.

At destructive margins, the denser plate sinks back into the mantle under the influence of gravity, which pulls the rest of the plate along bending it. This is called slab pull.

#### What direction do plates move in?

There are three types of plate boundary:
Destructive – plates move away from each other.
Constructive – Plates move towards each other.
Conservative – Plates move alongside each other.

#### How do earthquakes happen?

Tectonic plates get stuck due to friction as they move past/towards/away from one another. When they get stuck, pressure builds up until the plates finally move and the pressure is released. These waves of energy released in an earthquake are called seismic waves.

Why did the Christ Church (New Zealand) earthquake happen and what were the effects?

**Christ Church Case Study:** Causes of an earthquake in a HIC Country

Effects of an earthquake in a HIC Country.

What were the responses to the Christ Church earthquake?

**Christ Church Case Study:** Responses to an earthquake in a HIC Country.

Why were the effects of the Nepal earthquake so deadly? **Nepal Case Study:** Causes of an earthquake in a LIC. Effects of an earthquake in a LIC.

What were the responses to the Nepal earthquake? **Nepal Case Study:** Response to an earthquake in a LIC/NEE country.

<u>How do earthquakes vary between areas of contrasting</u> wealth?

The effects of earthquakes can vary due to: building standards, time of the day, population density, location



Extended writing opportunity - Pupils answer exam style questions are the end of the lesson ranging from 1-9 marks.

Extended writing opportunity – Assess the extent to which primary effects are more significant than secondary effects. (9 marks).

Extended writing opportunity – To what extent do the effects of a tectonic hazard vary between areas of contrasting wealth? (6 marks).

Extended writing opportunity – Explain the formation of a tropical storm.

Extended writing opportunity – 'UK weathering is become more extreme'. Do you agre? (6 marks)

Extended writing opportunity – Explain why people choose to live by an active volcano.

Extended writing opportunity – Describe the possible effects of climate change of the UK.



'Turn and talk' opportunity – What are the benefits to living near a volcano?

'Turn and talk' oppprtunity – Why did the LIC earthquake cause more devastation than the HIC earthquake?

'Turm and talk' opportunity – What is the best way to monitor a natural disaster?

## Homework

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### Subject specialist keywords:

Hazard risk
Natural hazard
Conservative plate margin
Constructive plate margin
Destructive plate margin
Earthquake



of epicentre, geology, level of development, prediction and depth of focus.

How can natural hazards be managed to reduce risk?

There are three strategies to try and manage earthquakes to try and reduce the impacts: monitoring and predictions, planning and protection.

# Why do people continue to live in areas that are prone to natural hazards?

People may have always lived there so may mean moving away from family and friends. They're employed in the area so would have to find a new job. Volcanoes are tourist attractions so lots of people live nearby to work in the tourism industry. They're confident of support from the government in the case of a natural disaster. Some think severe natural disasters won't happen. The soil around volcanoes is fertile so is good for agriculture.

### How does global atmospheric circulation work?

The sun heats up air in the Earth's atmosphere. The temperature of the Earth's atmosphere depends on latitude. As the Equator is closest to the sun and the sun's energy is more concentrated the air here is warm and the air at the North and South Pole is cold. Cool air sinking creates high air pressure. This occurs at 30 and 90 degrees. Warm air rising creates low air pressure. This occurs at the Equator and 60 degrees.

### How are tropical storms formed?

Several thunderstorms happen over warm seas. The warm air from the sea surface and thunderstorms combine and rise. More warm air rises and due to the Earth's rotation start to move in a spiral. The warm air cools and condenses forming clouds releasing a lot of energy. The air starts to rise faster and cooler air is sucked downwards creating a calm 'eye' in the middle. Wind speeds start to increase. The tropical storm moves over the sea, picking up warm, moist air. Wind speeds reach more than 120km/h as more cold air is drawn into the eye. The average hurricane moves from east to west due to the trade winds.

What were the effects and responses of Storm Haiyan?

Storm Haiyan Case Study: Primary and secondary effects of a tropical storm.

Immediate and long term response to a tropical storm.

How can tropical storms be managed to reduce risk?

Managing tropical storms to reduce risk involves a combination of preparedness, mitigation and response strategies. Strategies include: early warning systems, infrastructure resilience, coastal protection, evacuation

<u>How will climate change affect tropical storms in the future?</u>

and disaster preparedness.

Immediate responses

Long-term responses

Monitoring

Plate margin

**Planning** 

Prediction

Primary effects

Protection

Secondary effects

Tectonic hazard

Tectonic plate

Volcano

**Economic impact** 

**Environmental impact** 

Extreme weather

Global atmospheric circulation

Management strategies

Social impacts

Tropical storm (hurricane, cyclone, typhoon)

Adaptation

Climate change

Migration

Orbital changes

Quaternary period



Tropical storms will become more intense as higher ocean temperatures will mean more powerful tropical storms. As the oceans warm due to climate change, they will cause the sea level to rise which will make storm surges reach further inland. This will increase the intensity. It is expected that category 1-3 storm frequency will decrease but category 4-5 storms will increase.

How does the UK suffer from extreme weather? The UK extreme weather events include: heatwaves, storms and flooding. UK weather is becoming more extreme.

<u>How does extreme weather in the UK impact human</u> activity?

**Somerset Level Floods Case Study:** Causes. Social, economic and environmental impacts. Management strategies to reduce risk.

How has climate changed in the Quaternary period? The Quaternary period began about 2.6 million years ago, and continues today. In the Quaternary were the glacial episodes known as the Ice Age and interglacial periods. Evidence for climate change includes: tree rings, ice cores, global temperature data and pollen analysis.

<u>How is climate change a natural process?</u>
Orbital changes, volcanic eruptions and solar output.

How have humans impacted climate change? Use of fossil fuels, agriculture and deforestation.

What are the effects of climate change on people and the environment?

Climate change has a wide range of effects on both people and the environment, Some of the key impacts include: Rising temperatures, extreme weather events, sea-level rise, water scarcity, food security, ecosystem disruption, migration and ocean acidification.

How can the effects of climate change be reduced?

Mitigation – alternative energy, carbon capture, planting trees and international agreements.

Adaptation – changing to agriculture, managing water supply, reducing risk from sea levels.

#### **End of Topic Assessment**

Complete an exam style assessment based on learning from 'The Challenge of Natural Hazards'.

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Students have opportunities to critically examine our own values and attitudes (in debating issues, contributing in class etc.)



Democracy: Students explore and discuss injustices and inequalities (perceived or real) and challenge and debate these through the exploration of geographical topics.

Mutual respect: Students have opportunities to understand our responsibilities to conserve resources and play our part in sustainable development.

## **Careers Links:**

Seismologist

Volcanologist

Land use surveyor

Countryside officer

Tour guide

Oceanographer

Cartographer

Climate change analyst

Climatologist

Pollution analyst

Town planner

GIS specialist

<b>Topic 4: Pre-Release topic.</b> AQA to send pre-release topic 12 weeks before the exam		Pre-release booklet.
		Extended writing opportunity - Pupils answer exam style questions are the end of the lesson ranging from 3-9 marks.
		Discussions on the pre-release material.
	Homework	Homework tasks will be given every week. Homework will support knowledge acquisition and retention. Challenge homework tasks will be provided. All homework will be recorded on EduLink.