
GEOGRAPHY

This is a list of everything we have covered up until Urbanisation; any other case studies that you can think of that fit within this list can be used.

Part 1: Physics Geography

UK Physical Landscapes – Rivers

Understanding a river's drainage basin

- To understand how a drainage basin leads to a river and drains the land.

Fluvial Processes that operate in a river

- How do rivers erode, transport and deposit material and how this leads to landforms.

Understanding the formation of Erosional Landforms

- To be able to describe the way in which waterfalls, gorges and valleys are formed by vertical erosion in the upper course.

Explaining the Formation of a meander

- To be able to describe and explain how lateral erosion and deposition allows meanders to form in the middle course of the river.

What are Levees and Floodplains?

- To be able to describe and explain how this depositional landform is constructed naturally through flooding.

Case Study: The long profile of the River Tees.

- To know the route in which the River Tees takes from source to mouth and the specific landforms that are found on it.

What factors increase Flood Risk?

- To know the human and physical factors that affect the risk of flooding and the way in which they can cause negative impacts.

How do hydrographs work and why are they useful?

- To understand and plot hydrographs and explain how these link to river catchments and conditions.

Managing flooding with Hard Engineering.

- Have an understanding of which techniques are commonly used to reduce the impact or likelihood of flooding.

Natural Hazards – Tectonic, Climatic and meteorological Hazards

What is a Hazard

- Definition of a "hazard" as a natural event that has the potential to cause harm to people, property, and the environment.

Earth's Global Atmospheric System

- Core concepts include the composition of the atmosphere (troposphere, stratosphere, etc.), the water cycle, and the factors that influence climate, such as the Sun's energy, ocean currents, and the Earth's tilt. Understanding the relationship between atmospheric processes and weather events is key.

Tropical Storm Characteristics

- Formation, structure, and characteristics of tropical storms (e.g., hurricanes, typhoons). Key concepts include the conditions needed for storm formation, the structure of a tropical storm (eye, eye wall, rainbands).

Typhoon Haiyan Case Study

- Typhoon Haiyan, one of the most powerful storms ever recorded. causes, effects, and responses to the disaster. Core concepts affected populations, and the immediate and long-term responses (local, national, and international). effectiveness of the responses and mitigation strategies.

Reducing the Impact of Tropical Storms

- strategies to reduce the impacts of tropical storms, including prediction, preparation, and protection measures.. The focus is on understanding how different strategies can be implemented at various scales (local, national, international).

Evidence for Climate Change

- Scientific evidence for climate change. Key concepts include the role of ice cores, tree rings, and fossil records in providing evidence of historical climate patterns, as well as modern data such as global temperature records and sea-level rise. relationship between human activity and recent climate change, particularly the role of greenhouse gases.

Natural Causes of Climate Change

- Natural factors that contribute to climate change, such as volcanic eruptions, solar radiation, and variations in Earth's orbit. natural and anthropogenic (human-induced) causes of climate change.

Human Causes of Climate Change

- How human activities that contribute to climate change, particularly the burning of fossil fuels, deforestation, and agricultural practices. Key concepts include the greenhouse effect, carbon emissions, and the role of industrialisation.

Effects and Impacts of Climate Change

- Key concepts include rising sea levels, extreme weather events, droughts, and the effects on biodiversity. mitigation and adaption to climate change. Mitigation involves reducing greenhouse gas emissions through measures such as renewable energy, carbon capture, and reforestation.

International Agreements on Climate Change

- international agreements in addressing climate change. Key concepts include the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement.

Is the UK Climate Becoming More Extreme?

- UK's weather patterns, with a focus on increasing frequency of extreme weather events (flooding, heatwaves, storms).

Beast from the East Case Study

- "Beast from the East" cold weather event of 2018. Students analyse the causes, impacts, and responses to the extreme weather event. Core concepts include the influence of the jet stream and polar vortex, the effects on transportation, infrastructure, and daily life, and the short- and long-term responses by the UK government and communities to such extreme weather.

Distribution of Tectonic Hazards and Plate Boundaries

- global distribution of tectonic hazards (earthquakes, volcanoes, and tsunamis) and the relationship between these hazards and plate boundaries.

Haiti, a Multi-Hazard LIC Case Study

- This case study focuses on Haiti, a low-income country (LIC) that faces multiple natural hazards, such as earthquakes, hurricanes, and landslides.

Christchurch, New Zealand HIC Case Study

- A high-income country (HIC), and its response to the 2011 earthquake. Core concepts include the role of preparation, resilience, and recovery in reducing the impacts of natural disasters. The lesson examines the effective emergency responses, the role of government, and the differences in resilience between LICs and HICs when facing similar hazards.

Managing and Mitigating the Effects of Tectonic Hazards

- Strategies for managing and mitigating the impacts of tectonic hazards. These include prediction (earthquake monitoring, volcano activity), protection (building regulations, early warning systems), and preparedness (evacuation plans).

Why Do People Live in Hazard Zones?

- This lesson explores why people continue to live in areas prone to natural hazards despite the risks.

Part 2: Human Geography

The Changing Economic World

An introduction to Development.

- Understanding what it means to be developed and making accurate comparisons against other nations.

How do we measure a country's development?

- Understanding development indicators and what factors contribute to the human development index.

What is Demographic Transition and why is it useful?

- Having the ability to understand the DTM and the nuance of population change through the different stages and what this means in terms of quality of life.

How do the structures of a country's population change?

- Looking at population pyramids and their structures to assess the changes taking place and how this links to the DTM and overall development.

What makes the development of countries so different?

- Understanding current, historical and physical factors that have affected the development of nations and how this is changing.

Consequences of Health and Wealth.

- How do the differing levels of important development indicator affect the quality of life in differing nations and how could this hold back sustainable development?

Consequences of migration on development.

- Understanding the positive and negative impacts of global migration on countries.

How can we reduce the global development divide?

- What can be done to increase the development of the world's poorest nations and reduce the gap in key indicators.

Is Aid effective at reducing the development gap?

- An assessment of the usefulness and downfalls of aid usage on poorer nations and how it can be used sustainably.

Is Fairtrade effective at reducing the development gap?

- An assessment of the usefulness and downfalls of Fairtrade usage in poorer nations and how it can be used sustainably.

Is tourism a good solution to reduce the development gap?

- An assessment of the usefulness and downfalls of tourism promotion in poorer nations and how it can be used sustainably.

Nigeria Case Study: A rapidly developing nation and a newly emerging economy. (NEE)

- An in depth locational, cultural, political and economic assessment of Nigeria and its emergence onto the world stage as an NEE.