GCSE Revision List

Physical landscapes in the UK

Coasts (Textbook pgs. 92 -112)

- Wave types and characteristics.
- Weathering processes – mechanical, chemical
- Mass movement – sliding and slumping
- Erosion – hydraulic power, abrasion, attrition and solution
- Transportation – longshore drift, traction, saltation, suspension and solution
- Deposition – why sediment is deposited in coastal areas.
- How geological structure and rock type influence coastal forms.
- Characteristics and formation of landforms resulting from erosion: headlands and bays, cliffs and wave cut platforms, caves, arches and stacks.
- Characteristics and formation of landforms resulting from deposition: beaches, sand dunes, spits and bars.
- **CASE STUDY** - Swanage Bay to Lulworth Cove
- Hard engineering – sea walls, rock armour, gabions and groynes
- Soft engineering – beach nourishment and re-profiling, dune regeneration
- Managed retreat – coastal realignment.
- One example of a coastal management scheme in the UK to show: the reasons for management, the management strategy and the resulting effects and conflicts.
- **CASE STUDY :** Holderness coast, Studland Bay, Barton on Sea and Walton on the Naze

River Landforms (Textbook pgs. 114-130)

- The long profile and changing cross profile of a river and its valley.
- Fluvial processes:
    - Erosion – hydraulic action, abrasion, attrition, solution, vertical and lateral erosion
    - Transportation – traction, saltation, suspension and solution
    - Deposition – why rivers deposit sediment.
- Characteristics and formation of landforms resulting from erosion: interlocking spurs, waterfalls and gorges.
- Characteristics and formation of landforms resulting from erosion and deposition: meanders and ox-bow lakes.
- Characteristics and formation of landforms resulting from deposition: levées, flood plains and estuaries.
- **CASE STUDY:** River Severn
- How physical and human factors affect the flood risk – precipitation, geology, relief and land use.
- The use of hydrographs to show the relationship between precipitation and discharge.
- The costs and benefits of the following management strategies:
    - Hard engineering – dams and reservoirs, straightening, embankments, flood relief channels

    - Soft engineering – flood warnings and preparation, flood plain zoning, planting trees and river restoration.
- One example of a flood management scheme in the UK to show:
    - Why the scheme was required
    - The management strategy
    - The social, economic and environmental issues.
- **CASE STUDY**: Morpeth Floods

Urban Environments

Urban World (Textbook pgs. 146-162)

- The global pattern of urban change.
- Urban trends in different parts of the world including HICs and LICs.
- Factors affecting the rate of urbanisation - migration (push - pull theory), natural increase.
- The emergence of mega-cities.
- A case study of a major city in an LIC or NEE to illustrate:
- The location and importance of the city, regionally, nationally and internationally
- Causes of growth: natural increase and migration
- How urban growth has created opportunities:
    - Social: access to services – health, education; access to resources -water supply, energy
    - Economic: how urban industrial areas can be a stimulus for economic development.
- How urban growth has created challenges:
    - Managing urban growth - slums, squatter settlements
    - Providing clean water, sanitation systems and energy
    - Providing access to services - health and education, reducing unemployment and crime
- Managing environmental issues - waste disposal, air and water pollution, traffic congestion
- **CASE STUDY**: Rio de Janeiro

Urban change in the UK (Textbook pgs. 164-184)

- Overview of the distribution of population and the major cities in the UK.
- A case study of a major city in the UK to illustrate:
    - The location and importance of the city in the UK and the wider world
    - Impacts of national and international migration on the growth and character of the city
- How urban change has created opportunities:
    - Social and economic: cultural mix, recreation and entertainment, employment, integrated transport systems
    - Environmental: urban greening
- How urban change has created challenges:
    - Social and economic: urban deprivation, inequalities in housing, education, health and employment
    - Environmental: dereliction, building on brownfield sites, waste disposal

- The impact of urban sprawl on the rural-urban fringe and the growth of commuter settlements.
- An example of an urban regeneration project to show:
    - Reasons why the area needed regeneration
    - The main features of the project.
- **Case study:** Bristol

Urban Sustainability (Textbook pgs. 186-190)

- Features of sustainable urban living:
- Water and energy conservation
- Waste recycling
- Creating green space.
- How urban transport strategies are used to reduce traffic congestion.
- **CASE STUDY**: Freiburg

The Challenge of Natural Hazards

Natural Hazards (Textbook pgs.6-8)

- Definition of a natural hazard.
- Types of natural hazard.
- Factors affecting hazard risk.

Tectonic Hazards (Textbook pgs. 10-20)

- Plate tectonics theory.
- Global distribution of earthquakes and volcanic eruptions and their relationship to plate margins.
- The physical processes taking place at different types of plate margins (constructive, destructive and conservative) that lead to earthquakes and volcanic activity.
- Primary and secondary effects of a tectonic hazard.
- Immediate and long-term responses to a tectonic hazard.
- **CASE STUDIES**: Kobe & Haiti
- Reasons why people continue to live in areas at risk from a tectonic hazard.
- How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard.

Weather Hazards (Textbook pgs. 22-38)

- General atmospheric circulation model: pressure belts and surface winds

- Global distribution of tropical storms (hurricanes, cyclones, typhoons).
- An understanding of the relationship between tropical storms and general atmospheric circulation.
- Cause of tropical storms and the sequence of their formation and development.
- The structure and features of a tropical storm.
- How climate change might affect the distribution, frequency and intensity of tropical storms.
- Primary and secondary effects of tropical storms.
- Immediate and long-term responses to a tropical storm.
- **CASE STUDY**: Haiyan (2013)
- How monitoring, prediction, protection and planning can reduce the effects of tropical storms.
- Overview of types of weather hazard experienced in the UK
- Extreme weather event in the UK to illustrate:
    - Causes
    - Social, economic and environmental impacts
    - How management strategies can reduce risk
    - Evidence that weather is becoming more extreme in the UK.

CASE STUDY: Boscastle, Somerset & Carlisle