

# Junior Cycle Geography Revision Guide

## 1. Structure of the Earth

- Layers of the Earth: Crust, Mantle, Outer Core, Inner Core
- Tectonic Plates: Definition, names of major plates, plate boundaries
- Types of Plate Boundaries:
  - Constructive (e.g., Mid-Atlantic Ridge)
  - Destructive (e.g., Andes Mountains)
  - Conservative (e.g., San Andreas Fault)
- Earthquakes: Causes, focus, epicentre, seismograph, Richter scale
- Volcanoes: Types (active, dormant, extinct), effects (positive & negative), examples

## 2. Rocks

- Types of Rocks:
  - Igneous (e.g., granite, basalt) - formed from cooled magma/lava
  - Sedimentary (e.g., limestone, sandstone) - formed from compressed sediments
  - Metamorphic (e.g., marble, quartzite) - changed by heat/pressure
- Rock Cycle: Processes linking all rock types
- Uses of Rocks: Building materials, fossil fuels, decoration

## 3. Weathering

- Types of Weathering:
  - Mechanical (e.g., freeze-thaw)
  - Chemical (e.g., carbonation)
  - Biological (e.g., roots breaking rock)
- Effects of Weathering: Formation of soil, breaking down of rocks
- Differences between Weathering and Erosion

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## **4. Mass Movement**

- Definition: The movement of weathered material downslope due to gravity
- Types of Mass Movement:
  - Soil creep (slowest)
  - Bog bursts
  - Mudflows
  - Landslides (fastest)
- Factors Affecting Mass Movement: Slope gradient, water content, vegetation, human activity

## **5. Rivers**

- River Stages:
  - Upper course: Features like V-shaped valleys, waterfalls
  - Middle course: Meanders, wider valleys
  - Lower course: Floodplains, deltas
- River Processes:
  - Erosion (hydraulic action, abrasion, etc.)
  - Transportation (traction, saltation, etc.)
  - Deposition
- Landforms of Erosion & Deposition
- Human Interaction with Rivers: Flood control, pollution, dams

## **6. The Sea (Coastal Processes)**

- Processes of Coastal Erosion: Hydraulic action, abrasion, attrition
- Coastal Features:
  - Erosional: Cliffs, sea arches, stacks, bays and headlands
  - Depositional: Beaches, sand spits, tombolos

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- Coastal Protection: Sea walls, groynes, rock armour
- Human Impact on the Coast: Tourism, construction, erosion