

Name: _____

PINNER

HIGH SCHOOL

GCSE to A Level Geography Summer Transition Booklet



Welcome to A-Level Geography!

You will bridge the gap between GCSE and A-Level AQA Geography by mastering core physical and human processes, applying A-Level assessment techniques, and designing a rigorous Non-Examined Assessment (NEA) project framework.

Expectations:

- Treat anything you don't know not as a barrier, but as an **opportunity for research** and reading.
- Independent study is the hallmark of a successful A-Level student. If a term is unfamiliar, look it up!
- Complete all tasks to the best of your ability before our first lesson.

Useful Websites for Research:

- Physics and Maths Tutor (Geography Section)
- Coolgeography.co.uk
- Save My Exams
- Royal Geographical Society (RGS)

You will be assessed on the quality of your transition work so do not forget to bring your completed booklet to your first lesson

Required Textbooks:

You will need the following resources for this course:

- **CGP AQA A-Level Geography: The Complete Revision & Practice (Green Cover)**
- **Oxford AQA Physical Geography: AS and A Level Textbook**

A-Level Geography: Water and Carbon Cycles

Goal Setting: What do you hope to master in this section on Water and Carbon Cycles?

Reflection

Guidance: Identify one concept you found challenging and one piece of independent research you conducted to clarify it.

Retrieval Practice: GCSE Knowledge Check

1. Which of the following is an 'output' in a drainage basin system?

- a) Precipitation
- b) Evapotranspiration
- c) Infiltration
- d) Groundwater Storage

Complete the chemical formula for photosynthesis:
 $6\text{CO}_2 + 6\text{H}_2\text{O} + \text{light energy} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$

Define 'interception' in the context of the water cycle:

Independent Study: Complex Hydrograph Analysis

Analyse a flood hydrograph for a flashier vs. a subdued catchment. Explain how land use changes (e.g., urbanisation) impact the 'lag time' and 'peak discharge' using A-Level terminology (throughflow, stemflow, impermeable surfaces).

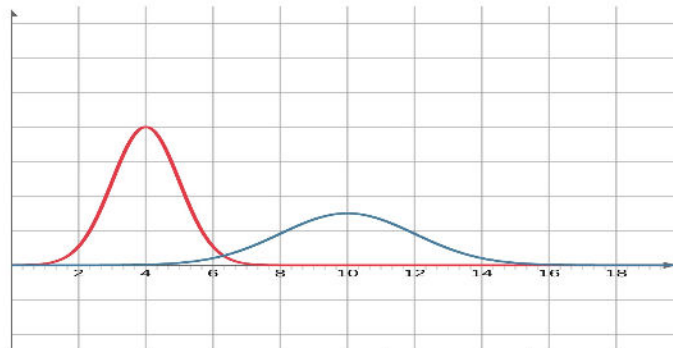


Figure 1: Comparative Hydrograph (Red = Urban/Flashy; Blue = Rural/Subdued)

Annotate the hydrographs above (Red: Flashy, Blue: Subdued). Identify peak discharge and lag time for both.

Analysis and evaluation (6-mark style):

Climate Change and Tropical Rainforests: Feedback Loops

Goal Setting: Define your personal success criteria for analyzing feedback loops.

Guidance: How has your understanding of feedback loops changed? Note any connections to the water cycle.

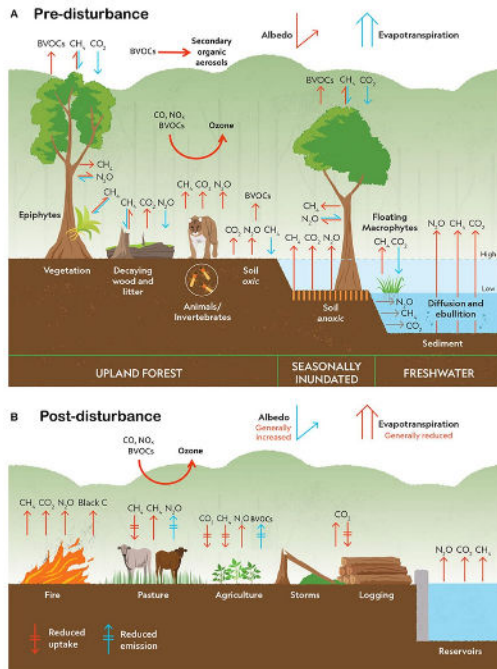


Figure 1: Interactions between carbon cycles and ecosystem processes.

Examining Feedback Loops

Explain the difference between positive and negative feedback in the context of the Amazon rainforest carbon cycle. Consider how deforestation affects regional precipitation and surface albedo.

Extended Response: 20-Mark Evaluation Task

'The Amazon Rainforest is the most critical component of the global carbon cycle.'

Assess this statement using evidence of regional and global carbon sequestration. (20 Marks)

Write an introduction and 1 paragraph

Writing Frame: Introduction (Global context) → Argument 1 (Regional role) → Argument 2 (Comparative role of Oceans/Peatlands) → Evaluation (Feedback loops) → Conclusion.

See page _ for more guidance

Rivers and Coasts: Landform Evolution

Goal Setting: Which specific landform will you focus on mastering today?

Reflection

Guidance: Which landform evolution process is the most complex to explain? Why?

Comparative Analysis: High-Energy vs Low-Energy Coastal Environments

High-Energy (e.g., Stack, Wave-Cut Platform)

Low-Energy (e.g., Spit/Sand Dune)

Exam Practice: 6-Mark Question

Explain how transportation leads to the development of depositional landforms downstream. (6 Marks)

Produce an annotated diagram of a specific landform (can be either coastal or fluvial):

Tectonic Hazards: Plate Mechanics & Management

Goal Setting: Identify one case study you will use to evaluate mitigation strategies.

Reflection

Guidance: Reflect on the role of governance in disaster mitigation vs. natural magnitude.

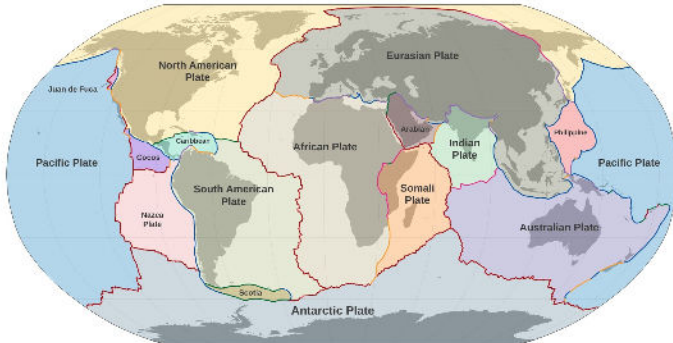


Figure 2: Global tectonic plates and major boundary zones.

Plate Boundary Mechanics

Describe the seismic risk associated with conservative (transform) plate boundaries compared to destructive (subduction) boundaries.

Challenge Task: Evaluating Mitigation Strategies (LICs vs HICs)

Using seismic risk data (consider magnitude vs frequency) and hazard density maps, evaluate the effectiveness of mitigation strategies (Protection, Prediction, Preparation) in a High-Income Country (e.g., Japan/Italy) compared to a Low-Income Country (e.g., Haiti/Nepal). Use specific case study facts.

Hazard mitigation analysis and evaluation:

Global Systems and Governance: Power and Trade

Goal Setting: What is your target mark for analyzing global power structures?

Reflection

Guidance: Synthesis - how does global governance interact with national sovereignty?

Conceptualising Global Power Structures

Concept	Core Definition (AQA Standard)	Non-Example / Misconception
Neo-Colonialism	The use of economic or cultural pressure to control or influence other countries.	Direct military rule or formal administrative governance.
Trade Liberalisation	The removal or reduction of restrictions on the free exchange of goods between nations.	Fair Trade initiatives (which focus on social standards over free markets).

Primary Source Annotation Task: WTO Report Snippet

"The acceleration of global trade has widened the gap between the 'super-producers' in the Global North and primary commodity exporters in the Global South. While the IMF promotes structural adjustment as a pathway to stability, many developing nations argue that the current WTO framework disproportionately favors nations with established technological monopolies, creating a systemic barrier to entry for emerging markets. This has led to a reliance on low-value exports and increasing debt-to-GDP ratios."

Analysis Task: Annotate the source above for examples of *unequal power relations* and *economic dependency*. Use the space below to summarise and evaluate your findings.

Economic Structures: Comparative Urbanisation

Goal Setting: Identify one specific urban case study you intend to use.

Reflection

Guidance: Compare the speed of urbanization in NEEs vs. the historical speed in HICs.

Data Analysis: Urban Population Growth Rate (%)

Region/Category	1950	2000	2025 (Projected)
HICs (Europe/N. America)	54%	74%	81%
LICs (Sub-Saharan Africa)	11%	34%	50%
NEEs (South/East Asia)	17%	40%	62%

Identify one trend shown in the data and suggest one reason for the difference in growth between HICs and LICs.

Synthesis Prompt: The Economic Transition

Evaluate the extent to which urbanisation in LICs is driven by economic opportunity rather than environmental distress (6 marks).

AQA Criteria (6 marks):

- AO1: Knowledge of push/pull factors.
- AO2: Evaluation of relative importance.

Mixed Assessment Review: Physical & Human Geography

Goal Setting: Which unit (1-6) do you feel most confident in starting?

Reflection

Guidance: Evaluate your progress across all units. Where is your biggest knowledge gap?

Q1: Explain the concept of 'Carbon Sequestration' in the context of the carbon cycle (4 marks).

Q2: Define 'Diaspora' and explain its influence on global cultural patterns (4 marks).

Metacognitive Check: Model Response Comparison

Level 4 Model Answer Extract (Q1): "Carbon sequestration involves the long-term storage of carbon in 'sinks' such as oceans or forests. For example, terrestrial sequestration occurs through photosynthesis where plants convert atmospheric CO₂ into biomass. To reach full marks, you must link the process to the mitigation of the enhanced greenhouse effect."

Task: Highlight two elements in your answer that match the model, and two things you need to add to reach the next mark band.

Final Self-Reflection for Units 1-5

The NEA Inquiry: Designing Your Investigation

Goal Setting

Define your primary goal for the NEA section:

AQA Criteria: Section A (Marks: 10)

- Contextualise investigation with theory (AO1).
- Clear research questions and/or hypotheses.
- Evidence of individual research/background study.
- Links to the specification core themes.

Step-by-Step Hypothesis Formulation

- 1. Broad Theme:** Choose a specification area (e.g., Coastal Landscapes or Urban Environments).
- 2. Geographical Context:** Choose a specific location (e.g., The River Tees or Stratford, London).
- 3. Identifying Variables:** Select two measurable factors (e.g., Distance downstream vs. Bedload size).
- 4. The Relationship:** State how you expect them to interact.
- 5. Refinement:** Ensure the question is 'open' enough for analysis but 'closed' enough to be finished in time.

Practice Activity: Focused Research Questions

Critique the following 'weak' research questions and propose a more rigorous, academically focused A-Level version for each. Consider how you would make them *measurable* and *theoretical*.

Weak Question	The Problem	Draft a Strong Question
Example 1: 'Do people like the new regeneration in Stratford?'		
Example 2: 'Is the river dirty near the town?'		
Example 3: 'How do the sand dunes change as you walk away from the sea?'		

Theoretical Case Study Analysis: Connecting Variables

Scenario: You are investigating the impact of hard engineering (sea walls) on longshore drift and beach morphology. List 3 potential variables and describe the expected relationship between them using geographical terminology.

Reflection & Viability

Reflect on: Why is it important for an NEA to be rooted in existing geographical theory rather than just observing a location? How does this change the 'quality' of your inquiry?

A-Level Technique: The 20-Marker

Goal Setting

Reflection

The PEACE Model for Evaluative Writing

- **Point:** A clear, focused statement that directly addresses the question and identifies a specific factor.
- **Evidence:** Precise case study data, facts, or named examples to anchor your point in reality.
- **Application:** Linking the evidence to geographical theory (e.g., specific cycles or feedback loops). Why does this happen?
- **Criticism:** A counter-argument or 'alternatively' statement. Discuss a different scale, factor, or a limitation of your point.
- **Evaluation:** A summary judgment. Weigh the significance of this point against others. Use words like 'critical', 'fundamental', or 'transient'.

Model Paragraph: Amazon Feedback and Scale

At a regional scale, the Amazon rainforest acts as a critical climate regulator through the mechanism of positive feedback loops (**Point**). For instance, the process of 'biotic pumping' ensures that up to 50% of precipitation is recycled via evapotranspiration from the canopy (**Evidence**). This maintains the moisture balance necessary for the carbon cycle to function; however, deforestation disrupts this system, increasing surface albedo and reducing rainfall, which leads to further forest dieback and increased carbon release (**Application**). Conversely, some argue that at a global scale, the significance of the Amazon is being rivalled by the rapid thawing of Arctic permafrost, which threatens to release larger volumes of methane (**Criticism**). Ultimately, while other sinks are substantial, the Amazon's feedback loops are more immediate and geographically concentrated, making its protection fundamental to preventing a global climatic tipping point (**Evaluation**).

Technique Application: Critical Evaluation Practice

Task: Use the PEACE model to write a paragraph evaluating the role of **Oceans** as a carbon sink. Ensure you mention *one* criticism (e.g., ocean acidification or thermal expansion affecting uptake).