

GEOGRAPHY TIPS LEVEL 2

A LARGE NATURAL ENVIRONMENT (AS 91240)

**WHAT IS THIS ASSESSMENT ABOUT?**

The aim of this standard is to introduce students to physical geography by looking at the characteristics of a large natural environment and how it has been formed and shaped. It also looks at the interactions between people and this environment and how their perceptions of the environment have changed over time. It is based on AO 1 and 2 at Level 7 that states:

-*understand how the processes that shape natural environments change over time, vary in scale and from place to place, and create spatial patterns.*

*-understand how people’s perceptions of and interactions with natural environments differ and have changed over time.*

**HOW TO CHOOSE A CASE STUDY?**

Only one large environment is expected to be studied. This allows students to look in depth at the characteristics of that environment and so appreciate the interactions that occur. The term ‘large’ natural environment is taken as one that is of a scale to allow patterns and interactions to have meaning. This would not be possible by studying one river valley or beach. It is useful to think of a large landscape as one that can be identified on a map of a country. The larger the region the easier it is for students to cover the intent of the standard. Tongariro Volcanic Centre, South Island High Country, Amazon Basin and the Sahara desert are examples of suitable environments to study.

The choice of a case study will depend on many factors. Student engagement is essential, so consider an environment that the students are interested in. This offers an opportunity for students to investigate some large landscapes overseas that helps their general geographic understanding. It is for this reason that the Amazon Basin is popular. For many students the possibility of fitting this into a field trip to the environment brings it alive. A trip to the Southern Alps for example would allow field observations to be made that will aid understanding.

It is also important to ensure that the choice of environment allows a good coverage of all the aspects of the standard. As well as having a full range of physical elements it also needs to have a history of human use since the way people have perceived and used this environment need to have changed over time. Many very remote physical environments such as Antarctica could be problematic when answering the human use part of the standard.

**STARTING THE UNIT**

While it is not assessed this unit provides an ideal opportunity to give students a broader perspective of their world by starting off with a general investigation into landscapes. Asking what natural landscapes they can name or identify in a quiz will promote discussion. Getting students to classify these is also an interesting exercise. Some will base it on size while others will divide it up according to those based on relief and those based on climate or vegetation.

This will lead easily into an investigation into the characteristics of natural landscapes. You can set the scene by defining terms such as an element, a process and a landform.

There are several slideshows that provide an introduction on You Tube such as: <http://www.youtube.com/watch?v=Yx-siez1iic>

This standard will introduce students to many different terms so it is important that they keep a glossary of the subject specific words they come across.

**ASPECTS TO BE COVERED**

What should be included in each aspect is as follows:

* **The characteristics of a Large Natural Environment -** what the environment is like and the spatial patterns that can be seen.

- Categorise characteristics of an environment into the elements of relief and drainage, climate, vegetation and soils. A good starting point is to use maps and photographs of the environment to identify the characteristics and patterns.

**Relief:** Describe the general relief of the environment before looking at different regions. Where is it highest and where is it lowest? What does a cross section through the environment look like? Annotate this identifying patterns and specific landform features.

**Drainage:** Where are there rivers or lakes in the environment? Are there any patterns with drainage?

**Climate:** Describe the general climate of the environment before looking at different regions. Where is it wettest and hottest and windiest? Where is it driest, coldest and calm? Look at climographs and work out which one applies to which region and what the patterns are.

**Vegetation:** Describe and name the different vegetation that occurs at different parts of the environment. Can patterns such as zonation or stratification be identified?

**Soils:** what type of soil is most common in this environment? In which regions is the soil likely to be most and least fertile? Are there any other patterns that can be identified such as where soils are deepest and thinnest?

**- Draw it together** – based on the patterns identified for all 4 elements divide up the environment into 3-4 general regions. The idea of spatial patterns means that it is like this here and like that there so you need a minimum of 2 regions and their characteristics to be identified.

**What students should be able to do:** Draw an annotated map of their environment identifying the patterns of different characteristics and how they vary in 2 distinct regions. Eg In region one the relief is flat, temperatures are high and soils are deep and fertile. Vegetation in this region consists of dense forest. In region two different patterns exist. Here the relief is steep and mountainous, the temperature is much lower and the rainfall much higher. Soils are thin and infertile and vegetation is sparse consisting of only a few mosses and lichens. As well as this they should be able to write an essay describing the characteristics of relief, climate, vegetation and soils.

* **How the elements interact -** the relationship between elements.

Can students identify which elements are most likely to go together? What reasons can they suggest for this? Build up an interactions model and identify the 2 way relationship between the elements. For example the relief determines that climate in terms of orographic rainfall and temperature while the climate determines the extent of erosion that takes place. The two therefore interact.

**What students should be able to do:** Add to the previous exercise on general characteristics by giving reasons (explaining) the relationship or patterns that exist between the elements.

* **How the processes interact –** the relationship between the processes

Go over what a process is (series of related actions). What processes can they suggest are at work here?

-Divide into earth building and denudation processes and the role these play

-Divide these further into geomorphological processes (tectonic, faulting and folding), hydrological processes (such as rivers/ fluvial and ice/ glaciation), climatological processes (such as weathering and wind /aeolian) and vegetation processes (vegetation growth and succession).

-Choose 2-3 of these processes that are important in shaping this environment. Go over how these operate generally as a series of actions and what results. This does not need the detail as at Level 3 but gives the idea that it is actions at work.

-Look at how these processes interact. For example how climatological processes and glaciation affect each other.

**What students should be able to do:** Write an essay that explains the interaction between 2 processes in the environment.

* **How a Large Natural Landscape is formed and changes over time**

While the previous section looks at the processes acting independently this puts them into time sequence. When did each process occur and what was the result?

**What students should be able to do:** Students should be able to draw a series (minimum of 3) of annotated diagrams showing the formation of their landscape at different stages in time and naming the features that have resulted. They should also be able to write an essay explaining this.

* **How people interact with a large natural environment**

This section looks at the different ways that people interact with the environment. While it does not say ‘groups’ it is easier to think of different groups that operate in this environment. Interaction means that they have some impact on the natural environment so change it in some way. Ensure you choose enough groups to give an example of cultural (indigenous group whose way of life has changed), economic (business or enterprise set up to use the environment to produce money) and political (government or local authority who sets in place restrictions on use or enhances conservation).

**What students should be able to do:** Identify and explain on a map 2 different areas in which people have had an impact on the environment. Be able to draw annotated diagrams showing the nature of the interaction and the results it has had. Write an essay that identifies 3 different uses of the environment and the effect they have had.

* **How People’s perceptions of a large natural environment change over time**

Identify 2 groups of people who were involved in the environment in the past and are still involved today. This is groups like indigenous people or local residents, primary industries (farmers, loggers or miners) and governments. Look at how they perceived the environment in the past and how and why their perceptions have changed to the present day. Change is likely to be the consequence of the greed for money, the increased population, an increase in infrastructure like roads and power and utilities and the growing pressures for conservation as environments become less sustainable. It is important to show a change – the best answers indicate a change such as from environmental to economic.

**What students should be able to do:** Draw a speech bubble for 2 different groups of people and how they perceived this environment in the past and how they perceive it today. Then explain why this perception has changed. Write an essay on this.

**OTHER FACTORS TO CONSIDER**

As well as the content students need to be guided as to how to write good answers both visually and in written form. Visually students need to be able to construct maps of their environment from scratch and be taught to apply the necessary conventions to these (frame, north arrow, use of colour, key, title and scale). They must also understand the instruction to ‘annotate’ or put notes on maps. Students also need to be comfortable at drawing diagrams such as a cross section or star diagrams that can be used to supplement a written answer.

Students also need guidance as to how to write good geography essays at this level. These need an introduction setting out what they intend to cover, a body and a conclusion. It is useful to give writing frames for these in the early stages and to scaffold answers based on a plan.

It is important to appreciate that at all levels students must ‘explain’. This is more than a description so any answer that just describes will not achieve the standard. Keep getting students to use the connector ‘because’ or ‘due to’ in their answers so that the why is given.

For Excellence, students must also include geographic terminology and concepts in an answer. Most students at this level are likely to use those terms that make it an academic answer. It means using terms like V shaped valley, orographic rainfall and fluvial action – the words a student would have in a glossary for the topic. It must also show ‘insight’ or the ‘wow’ factor. In other words it reads well, shows good linkage between parts and seems organized.

It is also good practice to apply the key concepts in geography to each unit. Get students to include this in the paragraphs they write where they both define the concept and put it into context of the answer. In this case several of them stand out as being easy in this respect such as:

**Process** – how each process works as a series of actions

**Environment –** the common natural characteristics of a region in terms of relief, climate, soils and vegetation.

**Pattern –** the pattern of the different elements or how they vary place to place

**Perspective**- How different groups of people view the use of the environment

I**nteraction** – How the elements and processes affect each other or how the people interact with the environment

**Change** – How a natural environment changes over time

**Sustainability** – how the use of the environment will ensure the environment remains for the future.

For higher grades students should also be encouraged to learn about 10 facts (names, dates, statistics) of each case study that they can use in an answer. For Excellence these need to be used throughout.

**WHAT THE PAPER WILL LOOK LIKE**

The format of this paper changed in 2016 so that it now consists of just ONE question that is broken down into parts. The number of parts will very between 2 – 4 each year although 3 is the norm. The parts may or may not be connected in terms of the criteria covered so the paper may be either very narrow all based on one criteria only or consists of each part on a separate criteria so that several are covered. Being broken down into parts means that the parts do not have to be of each size or value so some parts may be very short and others consist of a longer written answer. All parts add up to 8 marks. Generally rather than each part being marked on its own they are looked at as a whole to gauge the standard of the answer overall. Hence a student that is better at writing than visuals and does far better in the written part than a diagram can still be credited with say a Merit overall.

**HOW TO APPLY OTHER ACHIEVEMENT STANDARDS**

By studying this unit students will gain information that can be used in Internal Assessments. For example a 2.5 Research Standard can investigate the processes that have shaped the environment, a 2.6 can look at local use of the environment or a 2.7 global can look at the global pattern of similar environments. This can be especially useful as a reassessment opportunity since much of the content has been taught.

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