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91240



912400



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SUPERVISOR'S USE ONLY

Level 2 Geography, 2018

91240 Demonstrate geographic understanding of a large natural environment

2.00 p.m. Thursday 15 November 2018
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate geographic understanding of a large natural environment.	Demonstrate in-depth geographic understanding of a large natural environment.	Demonstrate comprehensive geographic understanding of a large natural environment.

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should attempt ALL parts of the question in this booklet.

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–12 in the correct order and that none of these pages is blank.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

Achievement

TOTAL

3

ASSESSOR'S USE ONLY

INSTRUCTIONS

A **large natural environment** means a distinctive part of the Earth's surface defined by its common natural characteristics (e.g. mountain, desert, forest, river valley) that occurs at a national, regional, or continental scale. The environment can be in New Zealand or overseas.

Natural characteristics (elements) of an environment include landforms (relief), climate, soils, and vegetation.

Name the **large natural environment** you have studied this year:

Tongariro Volcanic Centre (TVC)

Refer to this environment when answering parts (a) and (b) of the question.

In your answer, you need to integrate case study evidence as well as geographic terminology and concepts.

Geographic concepts you may choose to use in your answer include:

Environments

May be natural and / or cultural. They have particular characteristics and features which can be the result of natural and / or cultural processes.

Location

Where something is found. Location can be an advantage or a constraint. Location can be described in absolute or relative terms.

Perspectives

Ways of seeing the world that help explain differences in decisions about, responses to, and interactions with environments. Perspectives are bodies of thought, theories, or world views that shape people's values and have built up over time.

Change

Involves any alteration to the natural or cultural environment. Change can be spatial and / or temporal. Change is a normal process in both natural and cultural environments. It occurs at varying rates, at different times, and in different places.

Interaction

Involves elements of an environment affecting each other and being linked together. Interaction incorporates movement, flows, connections, links and, interrelationships which work together and may be one- or two-way interactions. Landscapes are the visible outcome of interactions. Interaction can bring about environmental change.

QUESTION**(a) Characteristics of the environment**

Fully explain how the characteristics of your chosen large natural environment have formed and changed over time.

Natural characteristics (elements) of an environment include landforms (relief), climate, soils, and vegetation.

You may include maps and/or diagrams to support your explanation. (Space is provided on page 7.)

PLANNING (OPTIONAL)

(Diagram 1)

- How the land form of the TVC came about is the plates underneath New Zealand are subducting so while the Indo-Australian plate causes friction against the Pacific plate the edges will melt causing magma, the magma causes CO_2 / gas, the gas needs to escape through the fissures (cracks) in the crust caused by earthquakes and once it reaches the surface it explodes bringing the magma with it ^{making} ~~causing~~ a volcano. And overtime from more explosions the volcanoes become larger.

(Diagram 2)

- The relief of the TVC has its 4 boundaries, Northern ends at Lake Taupo shores, Eastern ends at the edges of Rangipo Dessert, Southern ~~end~~ ends at SH49 and Western ends at SH4. The TVC consists of 3 mountains and is located in the North Island of New Zealand. The biggest Mt Ruapehu then Mt Ngauruhoe in the middle and at the top/smallest is Mt Tongariro.

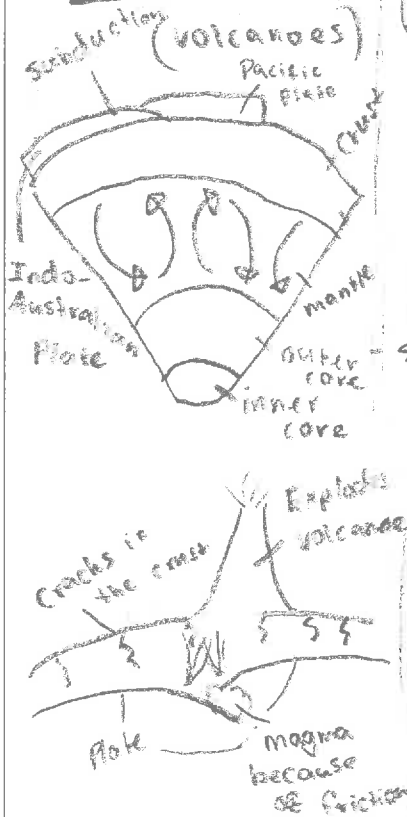
(Diagram 3) //

- The TVC has a mild wet climate because of its 40° latitude which means Mt Ruapehu being the tallest out of the mountains ^{and} experiences orographic rainfall. As the prevailing winds push the warm moist air from the Tasman sea upwards to the top of the mountain boundary, its too heavy to cross the other side so it releases its water making the west side the wet side and the east side (Rangipo dessert) experiences rain shadow effect making the east side the dry side. Therefore the west side has more vegetation compared to the east side that has less because theres less wet with warmer ~~than~~ climate. //

(Diagram 4)

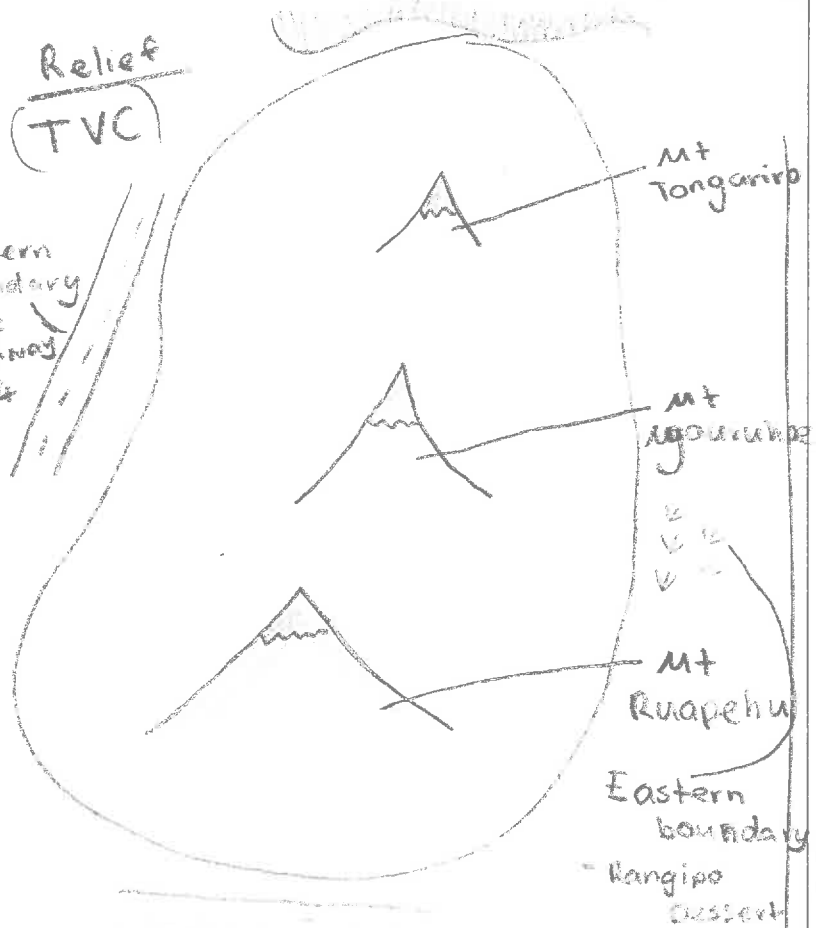
Because ~~the~~ of explosions and lava flow the volcanic soil (that is generally very fertile) ^{overtime has become} ~~is no longer~~ less fertile at the top of the mountains because it is filled with volcanic rock / snow ^{that arrives} in the winter. So higher the altitude the vegetation decreases and lower the altitude the vegetation increases. This means at the bottom of the mountains there are forests and farmland and at the top there only grows tuff plants that can endure extreme climate like tussock.

① Land form



MAPS/DIAGRAMS (OPTIONAL)

②

Relief
(TVC)Western
boundary
State
highway

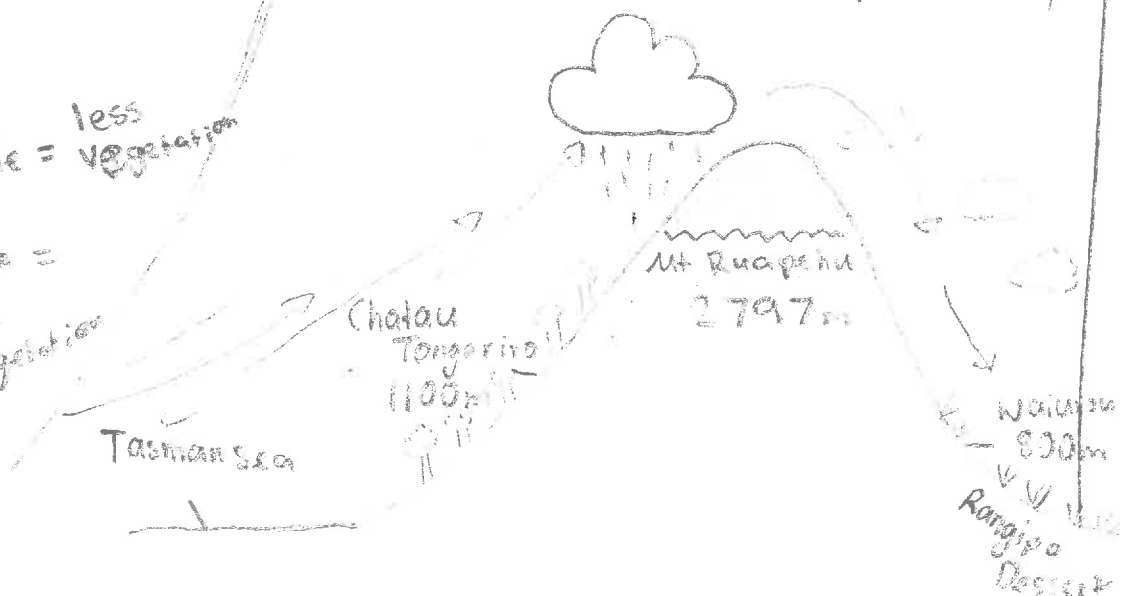
④ Vegetation/soil



③ Climate

(Orographic Rainfall)

higher altitude = less vegetation
low altitude = more vegetation



(b) Perception and use of the environmentASSESSOR'S
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Different groups of people or individuals have different perceptions of the natural environment. Perceptions can change over time and include cultural, economic and political. People's perceptions affect their use of the environment.

Perceptions are outcomes of people's background, experiences, or involvement with the natural environment.

Name ONE group or individual whose perception of your chosen large natural environment has changed over time.

Maori Tribes (Iwi)

Fully explain how the perception of the large natural environment by this group or individual has changed over time, and how this has affected their use of the large natural environment.

PLANNING (OPTIONAL)

had a cultural perspective and

The Maori Tribes (Iwi) that are local to the TVC area considered the mountains to be Tapu which is sacred - in this case, land. It was and still is significant to their culture in what it means to them. Over time as New Zealand's population grew and the tourism lever rose, the Department of Conservation (DOC) worked together with the Iwi of the land to make sure the TVC ~~area~~^{environment} stayed as protected and pure as possible while local residents and tourists could enjoy New Zealand's national park. The Iwis agreed to work along side DOC because they realised they would get economic gain so they could still prosper in their sacred land. The TVC still has cultural meaning to the tribes to this present day so anything has to change or be added, it needs to go through DOC and the iwi / procedures to make sure the land stays peaceful and as pure as possible. For example: The walking track (Tongariro Crossing) is as natural as possible with just a dirt track, wooden steps wherever needed, no bins or houses/cates etc. The toilets are camoflage so they don't stand out and get taken away by helicopter for the winter. The top of Ruapehu Ski fields have a limited amount of hnts/~~huts~~ cabins so the enviroment stays fresh and natural. In amongst Rangipo Dessert the Military has a sectioned off area where they are allowed to do military procedures in that enviroment, it is closed off ~~to~~ to people to keep the land/dessert untouched as possible.

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A3

Achievement Exemplar 2018

Subject	Geography		Standard	91240	Total score	3
Q	Grade score	Annotation				
	A3	<p>This answer covers the Tongariro Volcanic Centre. Part A provides discussion of the formation of the relief of the area and changes over time. Diagrams illustrate various characteristics and some case study material is provided.</p> <p>Part B provides information on how the perception of one group has changed over time. The iwi's perception has changed over time and they are now involved with a variety of different organisations. Some case study material is provided.</p>				