

91010



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD  
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

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SUPERVISOR'S USE ONLY

## Level 1 Geography, 2018

### 91010 Apply concepts and basic geographic skills to demonstrate understanding of a given environment

2.00 p.m. Friday 9 November 2018  
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Apply concepts and basic geographic skills to demonstrate understanding of a given environment.	Apply concepts and basic geographic skills to demonstrate in-depth understanding of a given environment.	Apply concepts and basic geographic skills to demonstrate comprehensive understanding of a given 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 the questions in this booklet.**

Pull out Resource Booklet 91010R from the centre of 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 2–11 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.**

Merit

TOTAL

16

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## QUESTION ONE: THE GRAND CANYON ENVIRONMENT

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Refer to **Resources A, B, and C** on pages 2 and 3 of the resource booklet when answering this question.

(a) Describe, in detail, the location of Grand Canyon National Park.

The Grand Canyon National Park is located on the Western Side on the United States of America<sup>in Arizona</sup>. Its surrounding states are Utah, New Mexico and Nevada. It is not far from the Mexican border.

(b) Name three settlements that are located **inside** Grand Canyon National Park.

(1) Grand Canyon Village //

(2) ~~North Rim~~ ~~South Rim~~ ~~Jacob Lake~~ //

(3) ~~Desert View~~ Desert View //

(c) Complete the précis sketch below to identify the following natural features of the Grand Canyon. Ensure you use geographic conventions.

- North Rim/plateau
- South Rim/plateau
- the steep, layered walls of the canyon
- Colorado River.

**Title:** Features of Grand Canyon National Park and surrounding area.

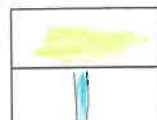


**Key:**



North Rim/plateau

Steep, layered walls of the canyon



South Rim/plateau

Colorado River

Read the geographic concept below and refer to it, as well as **Resources A, B, and C**, when answering part (d).

**Geographic concept: Environments**

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

- (d) Fully explain how the Grand Canyon National Park and surrounding area can be considered BOTH a natural AND a cultural environment.

It can be considered a natural environment because:

The Grand Canyon ~~is~~ was ~~it~~ formed over 6 million years ago by geological activity and erosion of the Colorado River. The ongoing erosion by the river and tributaries creates waterfalls, this means that there are no humans involved in this process or environment, therefore making it natural. //

It can be considered a cultural environment because:

There are a lot of Native American Tribes who live there, and who also manage some of the land areas. There is also a village which has been made by humans and a desert view which you have to get to by a road. //

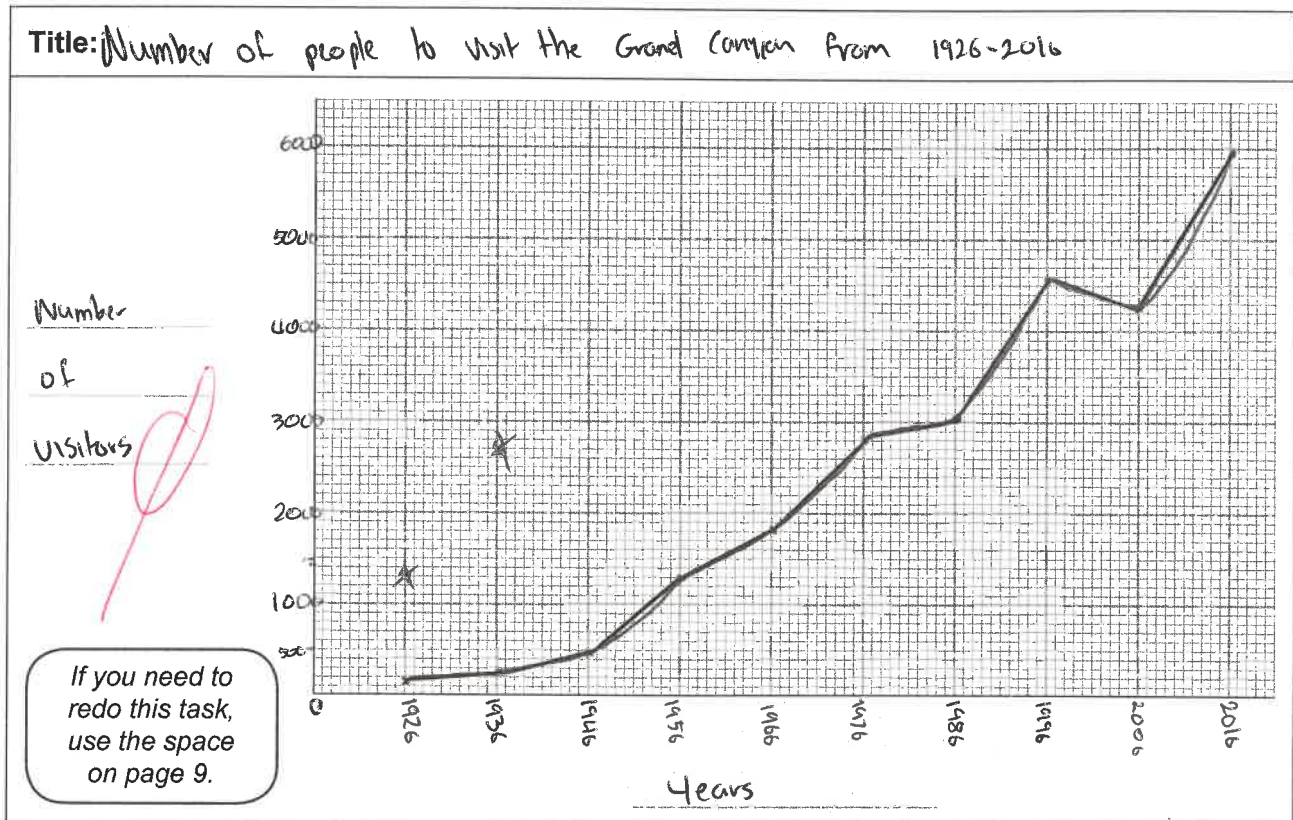
## QUESTION TWO: THE GRAND CANYON AND PATTERNS

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- (a) Draw a line graph to represent the information in the following table. Ensure you use geographic conventions.

Visitor numbers to Grand Canyon National Park (1926–2016)

Year	1926	1936	1946	1956	1966	1976	1986	1996	2006	2016
Number of visitors (000s)	140	270	490	1030	1800	2800	3040	4540	4280	5970



Refer to **Resources D and E** on page 4 of the resource booklet when answering parts (b) and (c).

- (b) (i) Identify the month in which the Grand Canyon National Park experiences its **highest** tourism flow. How many visitors does it get in that month?

Month: July //

Number of visitors: 341,000 //

- (ii) Identify the month in which the Grand Canyon National Park experiences its **lowest** tourism flow. How many visitors does it get in that month?

Month: ~~1996~~ January //

Number of visitors: 192,000 //

- (c) Describe, in detail, the range (annual variation) in temperature in Grand Canyon National Park.

The range in temperature in Grand Canyon National Park is varied. Just like the number of visitors, the average temperature increases from a low of 5°C to a high of 28°C <sup>in summer</sup> ~~in summer~~, and decreases back to 5°C <sup>in winter</sup>.

Read the geographic concept below and refer to it when answering part (d).

**Geographic concept: Patterns**

**Patterns** may be **spatial** – the arrangement of features on the earth's surface; or **temporal** – how characteristics differ over time in recognisable ways.

- (d) Fully explain the pattern(s) of visitor numbers to Grand Canyon National Park between 1926 and 2016, including seasonal variations.

In your answer, include the geographic concept of patterns, as well as specific evidence from your graph in part (a) and **Resources D, E, and F** on pages 4 and 5 of the resource booklet.

Pattern of visitor numbers between 1926 and 2016:

The patterns ~~between~~ in the number of people who visit the Grand Canyon from 1926-2016 is temporal. The number of people increased over the years. It ~~has~~ has increased ~~to~~ by 583,000 in the space of a hundred years. This makes sense because in resource F, it shows how much the activities you could do have been so modernised and more appealing to all ages.

Seasonal pattern of visitor numbers:

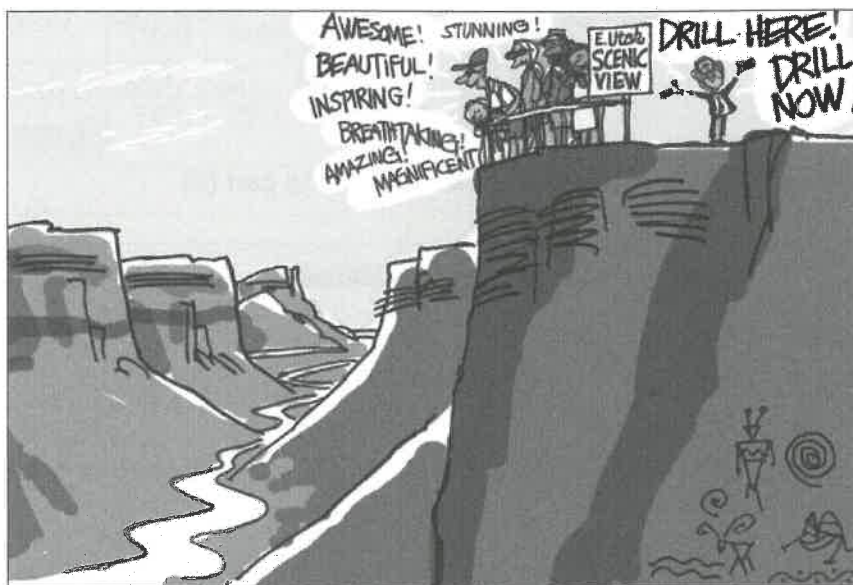
The seasonal pattern of visitor numbers is spatial because the graph shows that in the winter months, it has its lowest amount of visitors a year which is 473000 visitors, it then peaks in the summer and gets 2290000 visitors, and drops back to 298000 winter numbers. This makes sense because most tourists follow the sun and the conditions would be much better in summer.

### QUESTION THREE: PERSPECTIVES ON FUTURE DEVELOPMENT

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Refer to **Resources G, H, and I** on pages 6 and 7 of the resource booklet when answering parts (a), (b) and (c).

Use the cartoon below to answer part (a).



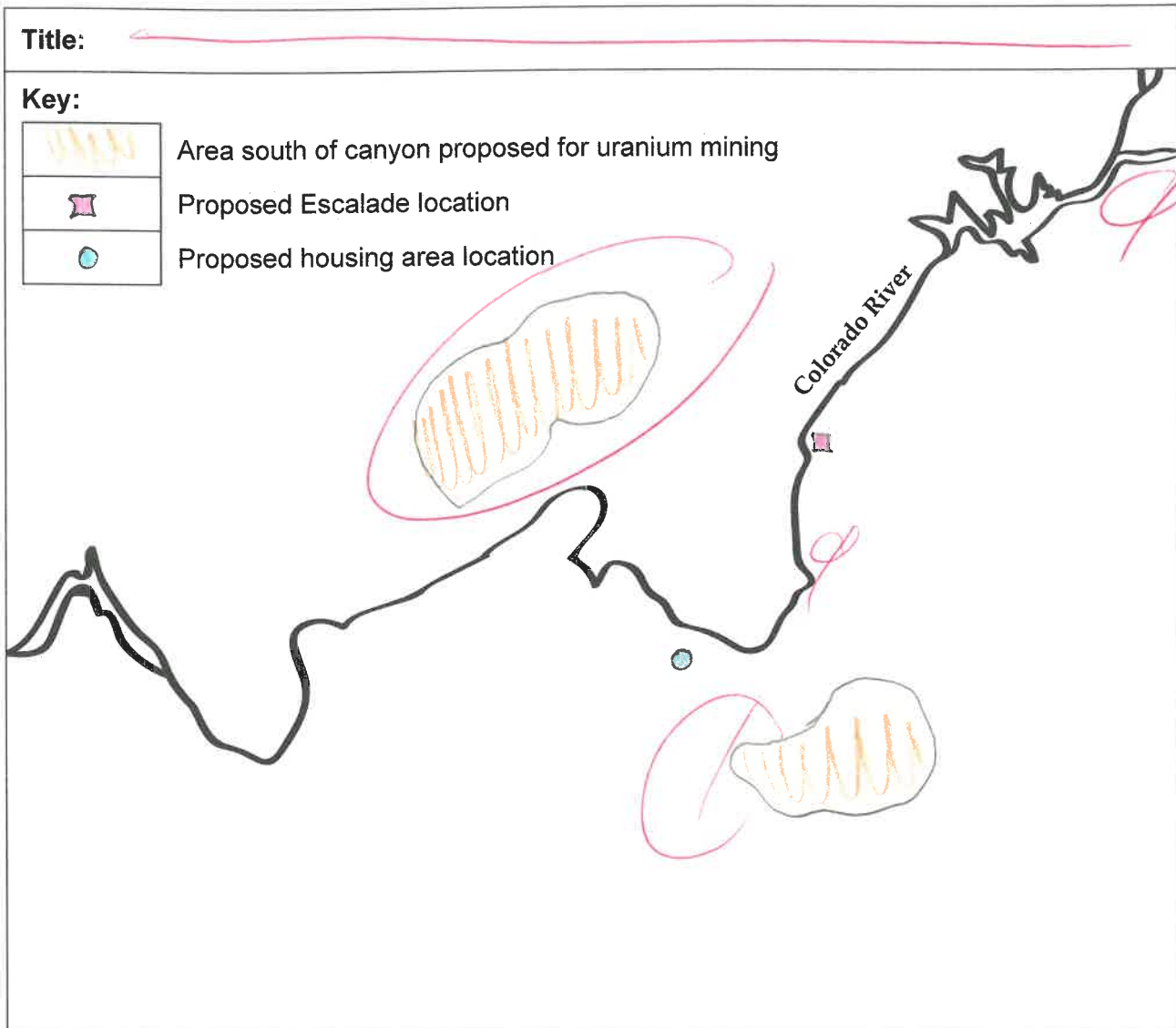
Source: <http://monticello-walden.blogspot.co.nz/2012/01/ecobama-saves-grand-canyon.html>

- (a) List the three groups of people represented in the cartoon above who have an interest in Grand Canyon National Park.

- (1) Tourists //
- (2) ~~Tourists~~ Uranium Mines //
- (3) ~~Government~~ Housing developers //

- (b) On the précis map on the ~~opposite~~ page, identify the following areas of Grand Canyon National Park that are being considered for future development. Ensure you use geographic conventions.

- the area south of the canyon proposed for uranium mining
- the location of the proposed Escalade
- the location of the proposed housing development.



- (c) Name the two developments you have identified on your map that are likely to be in conflict with each other, and explain why they would be in conflict.

Development (1): The Grand Canyon Escalade //

Development (2): The Tusayan housing development //

Why they would be in conflict:

I think these two would be in conflict because one is trying to make houses, while the other is trying to make flash accommodation. This means that people are either going to want to just visit or live. Which could bump each other out of business. They both cater for tourists and this could be a cause for conflict. //

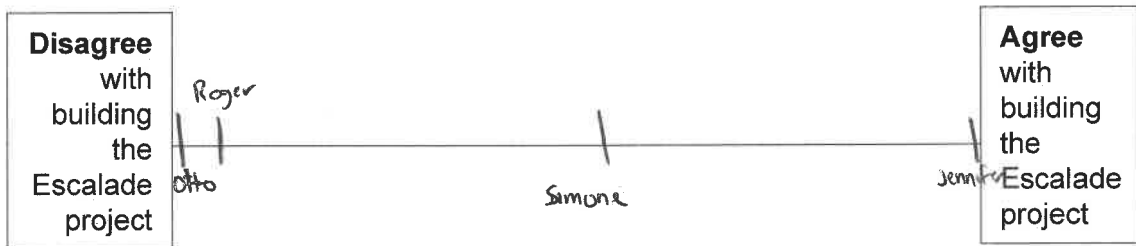
Question 3 continues on page 8 ►

Read the following geographic concept and refer to it, as well as **Resources G, H, and J** on pages 6–8 of the resource booklet, when answering part (d).

### Geographic concept: Perspectives

**Perspectives** involve the way people view and interpret environments. Perspectives and values may be influenced by culture, environment, social systems, technology, economic and political ideas. They may influence how people interact with environments, and the decisions and responses that they make.

- (d) (i) Place the four speakers from the quotes in **Resource J** onto the values continuum below.



- (ii) Fully explain TWO of these speakers' perspectives on the Escalade project.

Speaker (1): Otto T

Perspective: Otto is a Navajo representative. He is strongly against the idea of the Escalade and has a very good reason. Otto clearly cares about his culture, and worries about how it would take away their sacred grounds, and treasured moments and history they have there. This is in a way similar to how New Zealand was taken over by the Pakeha, and the Maoris land was taken.

Speaker (2): Jennifer M

Perspective: Jennifer is a project developer and has expressed that she only sees the good in this plan. Jennifer is only looking at the money side of things and how it will benefit everyone as there will be 3500 jobs available and would make 40 million - 70 million US dollars. I can see where she is coming from, but I don't 100% agree with her.

MS



## Merit Exemplar 2018

<b>Subject</b>	Geography	<b>Standard</b>	91010	<b>Total score</b>	16
<b>Q</b>	<b>Grade score</b>	<b>Annotation</b>			
1	M5	Greater accuracy when locating features on the précis map. Some correct conventions such as use of the key and title. The student has included some specific detail when explaining the difference between natural and cultural environments.			
2	M6	Most conventions when graphing are accurate, such as the labelling of the axis and title. Correct plotting of data. A greater depth of explanation as to why temporal patterns in visitor numbers exist although some specific detail is lacking.			
3	M5	While perspectives are not specifically named, they are implied. Specific data is included in the evidence to support perspectives. Some correct conventions are utilised when completing the précis map, although the student does not show complete accuracy when locating features.			