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Level 1 Geography, 2016

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

9.30 a.m. Wednesday 16 November 2016

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 2–12 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.

TOTAL

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QUESTION ONE: Locations and Features

Read the following geographic concept and refer to it, as well as **Resources A and B** on pages 3 and 4 of the resource booklet, when answering (a).

Geographic Concept

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

- (a) (i) In which compass direction does the Clutha River/Mata-Au flow?

- (ii) Name the New Zealand Cycle trail that is graded the most "advanced".

Refer to **Resource C** on page 5 of the resource booklet when answering (b).

- (b) (i) How long is the Clutha Gold Trail?

- (ii) How many bridges cross the Clutha River/Mata-Au between the start and finish of the Clutha Gold Trail?

- (iii) Circle below the section of the Clutha Gold Trail that has the greatest change in altitude:

Roxburgh Dam
to Roxburgh

Roxburgh to
Millers Flat

Millers Flat to
Beaumont

Beaumont to
Lawrence

Refer to **Resource D** on page 6 of the resource booklet, when answering (c).

- (c) (i) What linear feature is found at 122497?

- (ii) What is the area reference (4-figure or AR) for the grid square where the Teviot River joins the Clutha River/Mata-Au?

Read the following geographic concept and refer to it, as well as **Resources D and E** on pages 6 and 7 of the resource booklet, when answering (d).

Geographic Concept

Environments may be natural and / or cultural. They have particular characteristics and features which can be the result of natural and / or cultural processes. The particular characteristics of an environment may be similar to or different from another environment.

Geographers use both maps and photographs when studying environments.

(d) (i) Which of Resource D or Resource E is the more recent?

Give at least ONE piece of evidence from the resources to support your answer.

(ii) Fully explain the usefulness of Resource D OR Resource E for geographers, when looking at the patterns of land use in Roxburgh East.

Include specific evidence from the resource to support your answer.

QUESTION TWO: Climate and Patterns

Read the following geographic concepts and refer to them, as well as **Resource G** on page 8 of the resource booklet, when answering this question.

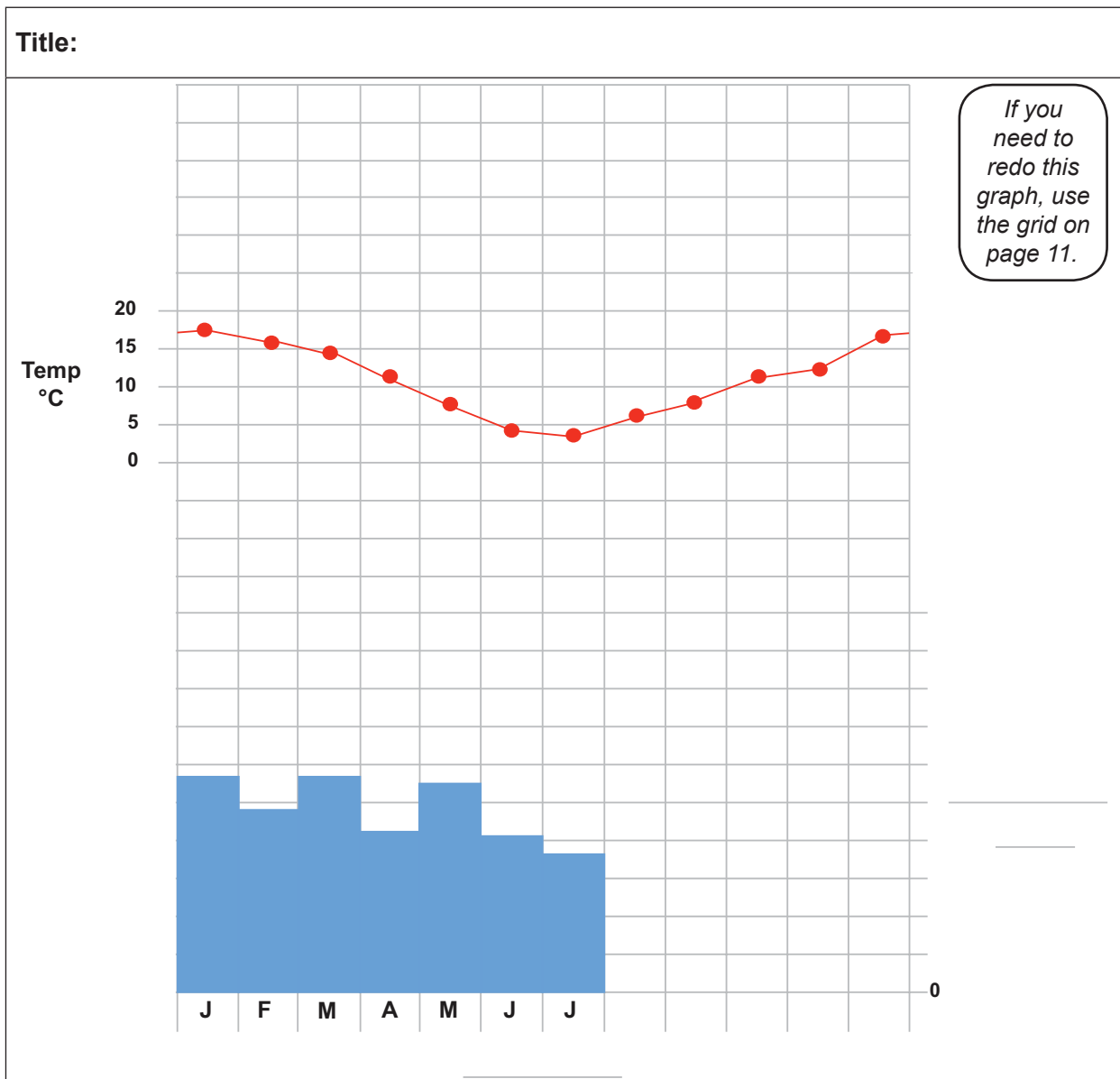
Geographic Concepts

Environments may be natural and / or cultural. They have particular characteristics and features which can be the result of natural and / or cultural processes. The particular characteristics of an environment may be similar to or different from another environment.

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

The climate of Roxburgh is ideal for growing fruits. The first stone fruit trees (red apricots) were planted in 1866. Apples have been grown commercially since the early 1900s. Both these types of fruit require cool winters to allow the fruit to set.

- (a) Complete the climate graph for the Roxburgh area below, using information from Resource G on page 8 of the resource booklet.



- (b) Calculate the total annual rainfall for the Roxburgh area.

- (c) Calculate the average temperature for the Roxburgh area in summer.

- (d) Fully explain the pattern of temperatures and rainfall that the Roxburgh area experiences throughout the seasons.

Include specific information from Resource G on page 8 to support your answer.

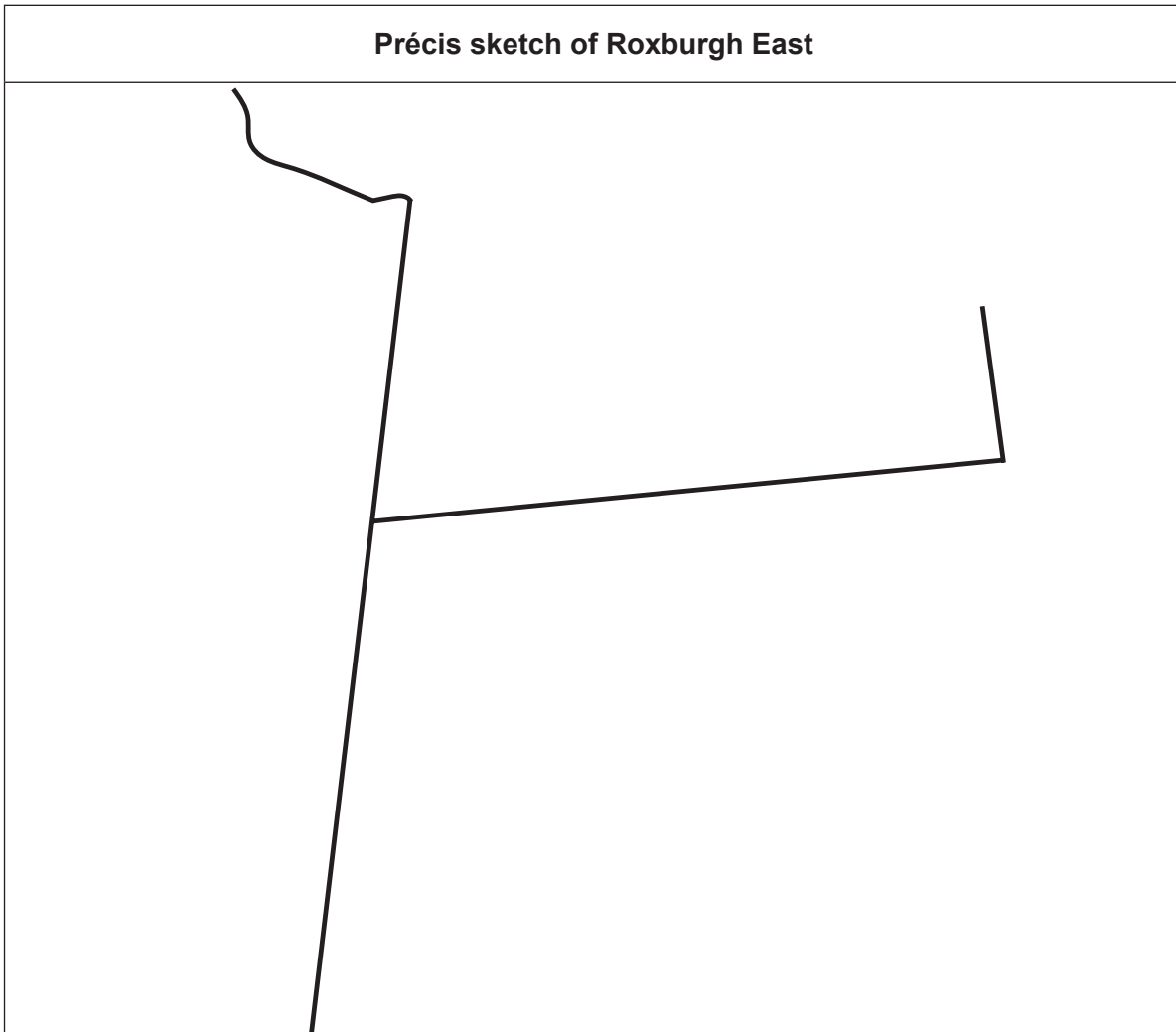
Part (d) continues on the next page

QUESTION THREE: Sustainability

Refer to **Resources D–F** on pages 6 and 7 of the resource booklet, when answering (a).

(a) On the **précis sketch** below, **locate and label**:

- a storage dam north of Kinaston Road
- the Roxburgh Racecourse
- the area of orcharding south of the Roxburgh Racecourse (by shading it in).



Key:

	Storage dam north of Kinaston Road
	Roxburgh Racecourse
	Orchard area south of the Roxburgh Racecourse

Refer to **Resource A** on page 3 of the resource booklet, when answering (b).

The continuum below shows the use of land in the Roxburgh area in historical order.



- (b) Match the letter from the continuum above with the corresponding land use type in the table below.

Note: C and E have been done for you.

Land Use Type	
Apple growing	C
Moa hunting	
Roxburgh Dam and Township	
Clutha Cycle Trail	
Gold dredging	
Canning apricots (ceased)	E

Read the following geographic concepts and refer to them, as well as **Resources A–I** on pages 3–9 of the resource booklet, when answering (c).

Geographic Concepts

Kaitiakitanga means to “care for” the environment: sustainable use, management, and control of natural and physical resources that are carried out to the mutual benefit of people and resources. A kaitiaki is a guardian. This can be a person or group that cares for an area, such as a lake, forest, or river valley.

Sustainability involves adopting ways of thinking and behaving that allow individuals, groups, and societies to meet their needs and aspirations without preventing future generations from meeting theirs. Sustainable interaction with the environment may be achieved by preventing, limiting, minimising, or correcting environmental damage to water, air, and soil, as well as considering ecosystems and problems related to waste, noise, and visual pollution.

- (c) Fully explain how the concepts of kaitiakitanga and/or sustainability can be applied to the different types of land use in the Roxburgh area.

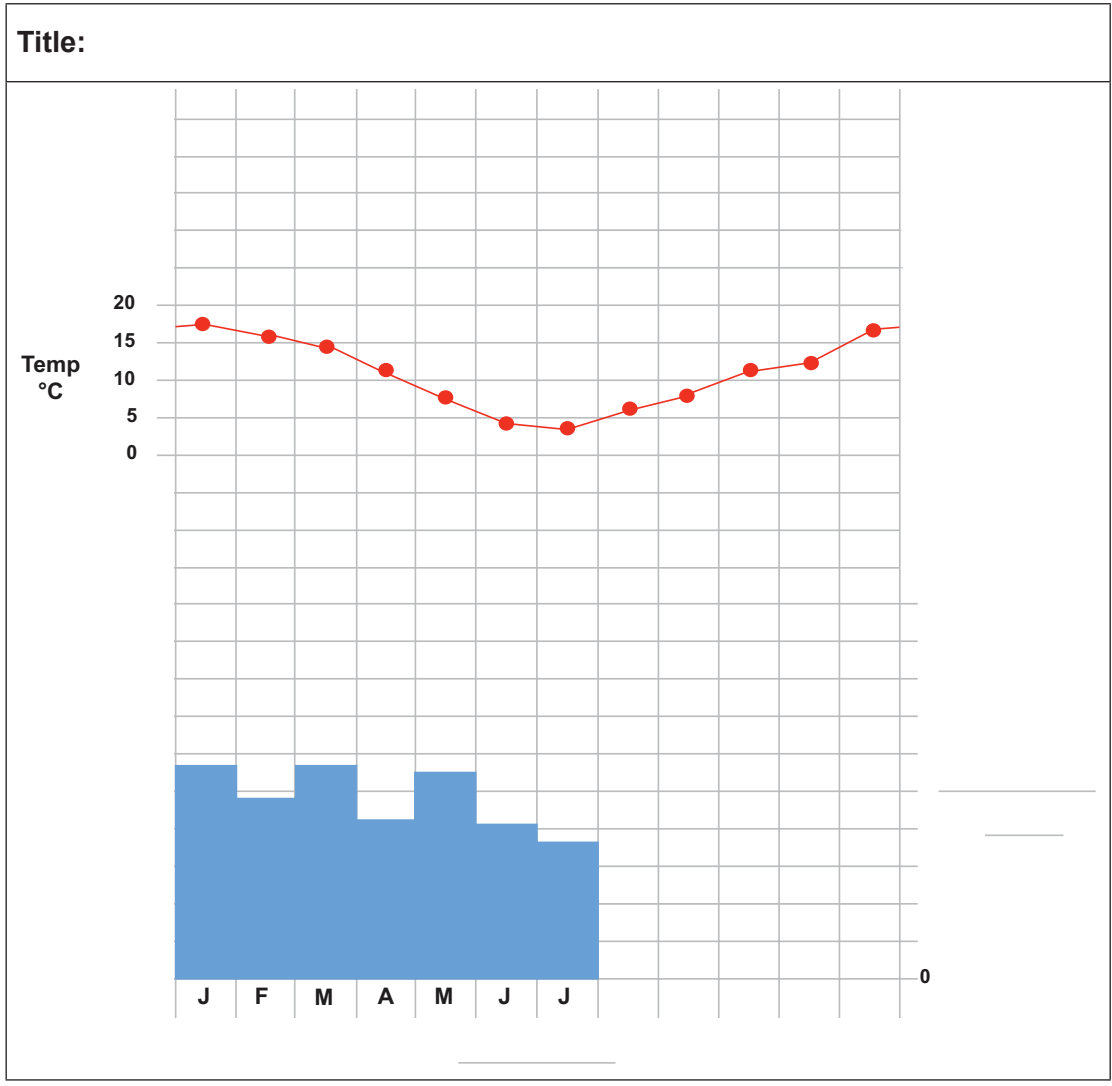
In your answer, include the geographic concept of kaitiakitanga and/or sustainability, and specific evidence from any of the resources on pages 3–9 of the resource booklet.

Lined writing area consisting of 20 horizontal lines for student response.

Part (c) continues on the next page

SPARE GRID

If you need to redo the climate graph from Question Two (a), complete it on the grid below. Make sure it is clear which answer you want marked.



Extra space if required.
Write the part number(s) if applicable.

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QUESTION
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