

No part of the candidate's evidence in this exemplar material may be presented in an external assessment for the purpose of gaining an NZQA qualification or award.

# 2

91243



912430



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

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

SUPERVISOR'S USE ONLY

Tick this box if you  
have NOT written  
in this booklet

## Level 2 Geography 2022

### 91243 Apply geography concepts and skills to demonstrate understanding of a given environment

Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Apply geography concepts and skills to demonstrate understanding of a given environment.	Apply geography concepts and skills with precision to demonstrate in-depth understanding of a given environment.	Apply geography concepts and skills with precision 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 parts of the question in this booklet.**

Pull out Resource Booklet 91243R 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.

Do not write in any cross-hatched area (✂). This area may be cut off when the booklet is marked.

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

**Achievement**

**TOTAL**

**04**

ASSESSOR'S USE ONLY

## INSTRUCTIONS

Read the resource booklet about the Dead Sea before answering the question in this booklet.

Completing parts (a) to (c) using the related resources should enable you to gain an understanding of the Dead Sea. In part (d) you are required to explain the interaction between people and the environment, and how this affects the sustainability of the Dead Sea.

## QUESTION

- (a) Refer to **Resource A** (Figures 1 to 4) on pages 4 and 5 of the resource booklet, which show features of the Dead Sea.

(i) **Précis map of the Dead Sea**

Complete the map on the page opposite by accurately locating and labelling the following:

- the Mediterranean Sea ✓
- the Jordan River and its direction of flow ✓
- the boundaries of the Jordan Rift Valley
- the present-day area of the Southern Basin (evaporation ponds) ✓
- the present-day area of the Northern Basin. ✓

Give the map a suitable title, scale, north arrow, and complete the key. ✓

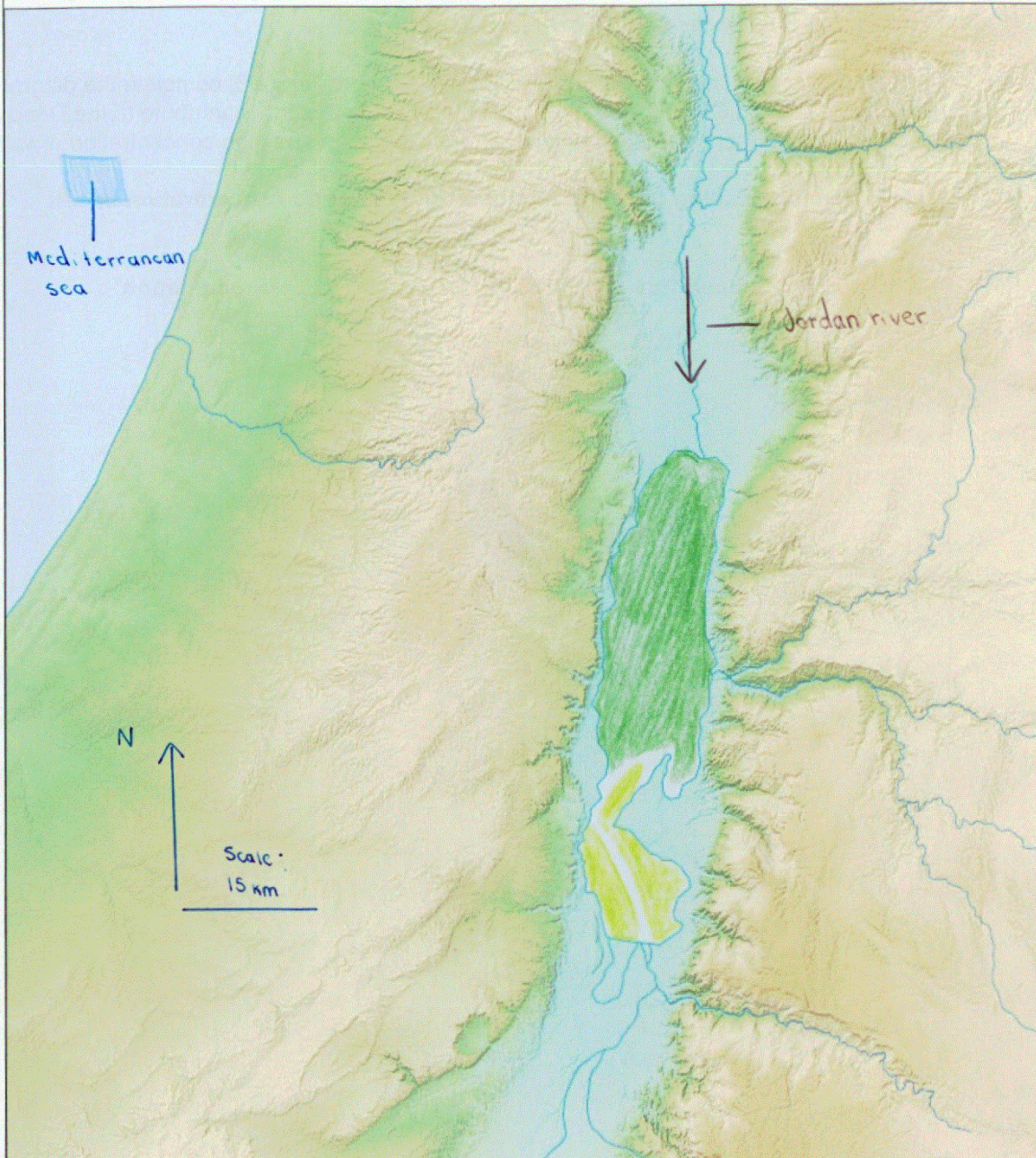
(ii) **Key features of the Jordan Rift Valley**

Using specific information, describe the key physical features of the Jordan Rift Valley and surrounding area.

The valley was formed by an earthquake and is below sea level. The surface area has been shrinking, due to water being taken for variety of uses. Southern basin is reduced to a number of ponds in which salt water is collected and then evaporated, leaving salt that is harvested.



Title: Précis map of the Deadsea



Key:



Dead Sea 1931



- mediterranean sea



- Jordan river Flows from the north to the dead sea in the south



- Present-day area of southern basin



- Present-day area of southern basin

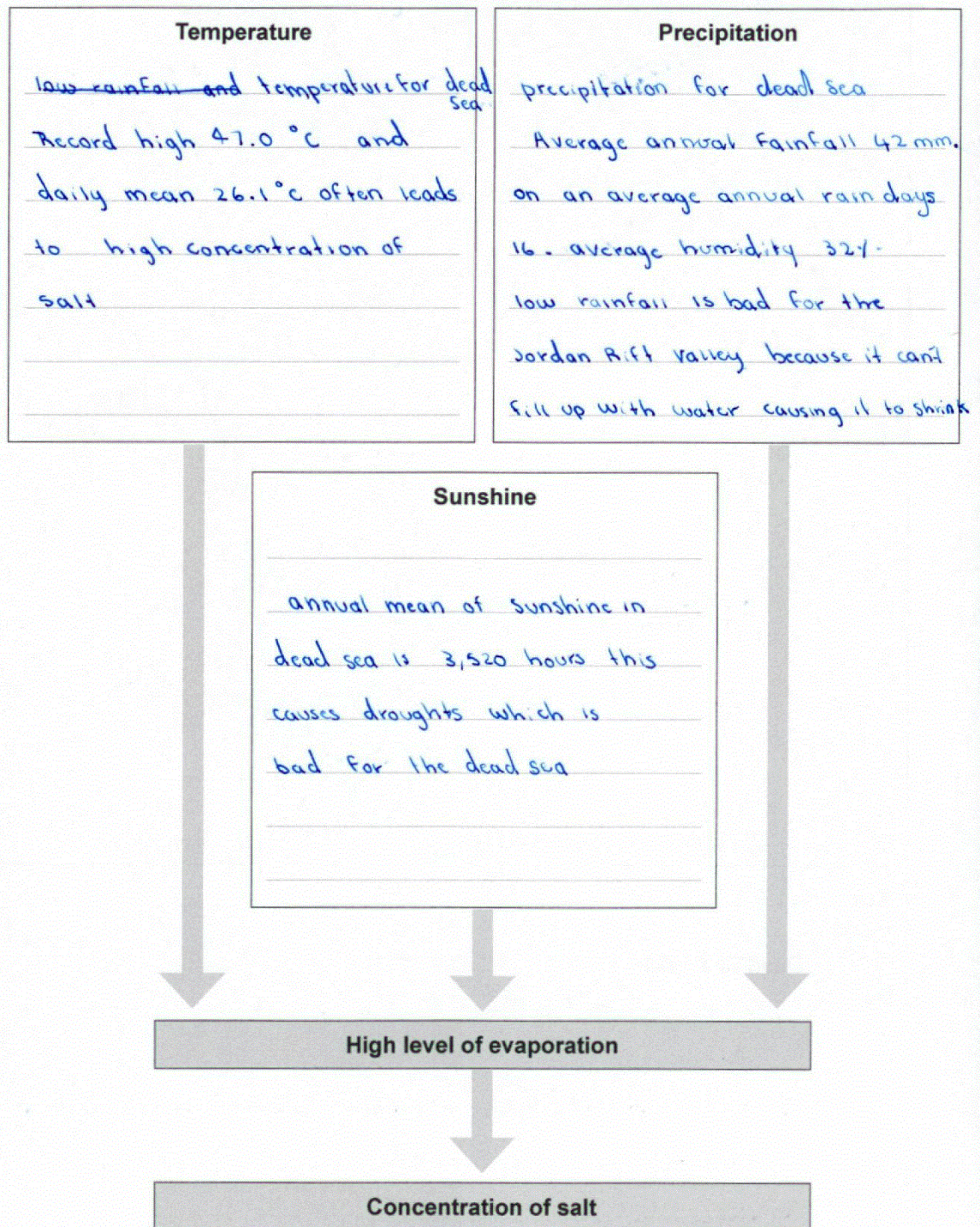


(b) **Climate and the Dead Sea environment**

Refer to **Resource B** on pages 6 and 7 of the resource booklet.

- (i) Using specific information on Sedom (the Dead Sea) from Figure 6, complete the diagram below by describing ONE feature of each of the three factors that contribute to the Dead Sea having an environment with a very high rate of evaporation and high concentration of salt.

**Factors leading to a high rate of evaporation and concentration of salt in the Dead Sea**





- (ii) Using specific information from Figure 7, describe the pattern of rainfall in the Dead Sea catchment (drainage area) and explain why the Jordan River is important to the supply of water to the Dead Sea.

The pattern described of the rainfall in the dead sea catchment is a spatial pattern which is the arrangement of features on the earth's surface. because of the low rainfall the Jordan river is an important source of water to the dead sea

- (iii) Refer to the concepts of **environment** and **pattern** on page 2 of the resource booklet.

Choose (✓) ONE concept and explain how it relates to either part (b)(i) or (b)(ii).



Environment



Pattern

Environment relates to part (b)(i) because ~~due to~~ depending on the climate effects the environment for example for the environment where the dead sea is located in it is critical for more rainfall and less sunshine. otherwise the dead sea will continue to shrink. which would negatively effect the people. because the dead sea is a supply of salt and a tourist attraction.



(c) **Shrinkage of the Dead Sea**

Refer to **Resource C** on pages 8 and 9 of the resource booklet.

- (i) Using specific information from Figure 8, describe the changing rate of decline in the level of the Dead Sea from 1930 to 2012.

The ~~decline~~ changing rate decreases slowly throughout the years however in 1960 ~~the decline~~ the shrinkage decreases rapidly. ~~in 1960~~

- (ii) Using specific information from Figure 9, state the following:

- The total percentage of water diverted from the Jordan River for drinking water:

33%

- The total percentage of water diverted from the Jordan River for each of the two countries taking the most water.

Israel: 36%

Jordan: 33%



- (iii) Using specific information from Figure 10, describe the consequences for the Dead Sea of water being diverted away from the Jordan River.

700 MCM gets evaporated and Human use is at 285 MCM annual in a total of 985 MCM loss the consequences of the dead sea of water being diverted away from the Jordan river is water diverted from the Jordan river is 1700 MCM.

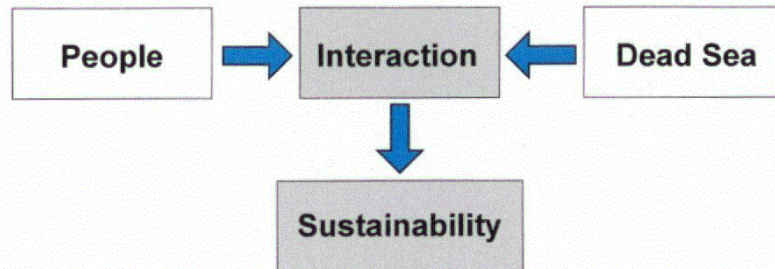


(d) **How people affect the sustainability of the Dead Sea**

Explain the interaction between people and the environment, and how this affects the sustainability of the Dead Sea.

In your answer, refer to and integrate information from:

- the geographic concepts of **interaction** and **sustainability**, as well as other concepts on page 2 of the resource booklet
- **Resource D** and all other resources
- information from your answers in parts (a) to (c).

**PLANNING**

Economic benefit  
environment and issue



The dead sea provides a water supply, which is important to the economy, agriculture and salt production.

The dead sea is one of Israel's top tourist attractions, this was because of the many activities the dead sea provided for example tourists were able to enjoy the salt-rich water in front of their hotel. Tourists were also able to take mud baths which was beneficial for their skin and provided health benefits. Prior to COVID-19, 2 million international tourists and 650,000 local tourists visited the dead sea each year. There are 4,000 hotel rooms and tourism is worth over \$300 million annually, which supports thousands of jobs in a part of the country that otherwise offers limited opportunities. The dead sea also provides water for irrigation. This is beneficial for agriculture because it allows farmers to produce crops which then can then be sold which is good for the economy.

Salt production is an important use of the dead sea. Salt water is collected ~~for~~ and then evaporated, leaving salt that is then harvested. This is beneficial for the people living in the location of the dead sea. However due to ~~the~~ 1,000 large sinkholes have formed in the newly exposed shore, ~~the sink~~ as the underlying layers of salt are dissolved by fresh rainwater. ~~This~~



The interactions between the climate and the dead sea is not looking good for the people in Israel. In a few years the dead is going

**Acknowledgements**

Material from the following source has been adapted for use in this assessment:

**Page 3**

[https://commons.wikimedia.org/wiki/File:Dead\\_Sea\\_terrain\\_location\\_map.jpg](https://commons.wikimedia.org/wiki/File:Dead_Sea_terrain_location_map.jpg). CC by SA 3.0.



## Achievement Exemplar 2022

Subject	Level 2 Geography		Standard	91243	Total score	04
Q	Grade score	Annotation				
1	A4	<ul style="list-style-type: none"> <li>A: Map has incorrect scale, poor symbol for Mediterranean Sea, rift valley is missing. N and S basins are good.</li> <li>B i and ii: Climate clearly linked to evaporation/salt concentration with detail. ii does not describe a pattern or give any evidence of one. iii: Concept is explicit but lacking detail to reach M or E level. This answer is at the A level.</li> <li>C: Graph identifies a change without any detail. Maths is wrong. Diversion is described with some detail but not clearly linked to consequences.</li> <li>D: The link between people and the Dead Sea is explained. Interaction is used explicitly but not applied at all. Sustainability is implied but not explicit.</li> </ul>				