



93104



931040



S

SUPERVISOR'S USE ONLY



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

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

Tick this box if you
have NOT written
in this booklet

Scholarship 2022 Earth and Space Science

Time allowed: Three hours
Total score: 24

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 answer ALL the questions in this booklet.

Pull out Resource Booklet 93104R 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 2–16 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.

Question	Score
ONE	
TWO	
THREE	
TOTAL	

ASSESSOR'S USE ONLY

Analyse how wildfires and volcanic eruptions can be affected by human interactions, including management of the environment and impacts of human populations.

Carbon dioxide and methane are the greenhouse gases with the largest worldwide focus. There is much research on the emission and absorption of the greenhouse gases carbon dioxide and methane.

The size and composition of the larger Kuiper Belt objects have been determined using changes in their albedos during their orbit.

Discuss how changes in albedo can be used to analyse the Kuiper Belt objects' surfaces and the shapes of their orbits. Furthermore, discuss the effect that Neptune has on the orbits of hot and cold classical Kuiper Belt objects.

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

QUESTION
NUMBER

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

QUESTION
NUMBER

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

QUESTION
NUMBER

93104