

SUPERVISOR'S USE ONLY

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93104



Draw a cross through the box (X) if you have NOT written in this booklet



Mana Tohu Mātauranga o Aotearoa  
New Zealand Qualifications Authority

## Scholarship 2024 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	

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Furthermore, explore how atmospheric rivers would be affected by the El Niño Southern Oscillation (ENSO), and discuss some measures that could be taken in the way we use land to minimise the effects of atmospheric rivers.







Explore why the geological history of New Zealand is different between the North Island and the South Island, considering tectonic and volcanic evidence.









Explore the possibility of having basic forms of life on the planets in the TOI 270 system, considering surface temperature, composition, likelihood of an atmosphere, and interaction with the star they orbit.







**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

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QUESTION  
NUMBER

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