

90933



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
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SUPERVISOR'S USE ONLY

Level 1 Chemistry, 2019

90933 Demonstrate understanding of aspects of selected elements

9.30 a.m. Monday 18 November 2019
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of aspects of selected elements.	Demonstrate in-depth understanding of aspects of selected elements.	Demonstrate comprehensive understanding of aspects of selected elements.

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.

A periodic table and other reference material are provided in the Resource Booklet L1–CHEMR.

If you need more room for any answer, use the extra space provided at the back of this booklet and clearly number the question.

Check that this booklet has pages 2–8 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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Diagram:



- (ii) Other forms of brass contain lead and aluminium.

How could lead and aluminium each affect the properties of brass?

(b) Sulfur will react with oxygen.

Elaborate on this reaction.

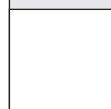
In your answer, you should:

- describe any conditions required
- give observations and link these to the species involved
- write a balanced symbol equation.

Balanced symbol equation:

(c) Pure water is a poor conductor of electricity, but a solution of sulfuric acid in water is a good electrical conductor.

Why is a sulfuric acid solution a good electrical conductor, whereas pure water is not?



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

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QUESTION
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