

90944MR



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

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

## Pūtaiao, Kaupae 1, 2018

### 90944M Te whakaatu māramatanga ki ngā āhuatanga o te waikawa me te pāpāhua<sup>1</sup>

9.30 i te ata Rāpare 15 Whiringa-ā-rangi 2018  
Whiwhinga: Whā

#### PUKAPUKA RAUEMI

Tirohia tēnei pukapuka hei whakatutuki i ngā tūmahi mō 90944M.

Tirohia mēnā e tika ana te raupapatanga o ngā whārangi 2–3 kei roto i tēnei pukapuka, ka mutu, kāore tētahi o aua whārangi i te takoto kau.

**KA TAEA TĒNEI PUKAPUKA TE PUPURI HEI TE MUTUNGA O TE WHAKAMĀTAUTAU.**

<sup>1</sup> kawakore

**Taka Katote**  
**Table of Ions**

<b>+1</b>	<b>+2</b>	<b>+3</b>	<b>-3</b>	<b>-2</b>	<b>-1</b>
$\text{NH}_4^+$	$\text{Ca}^{2+}$	$\text{Al}^{3+}$		$\text{O}^{2-}$	$\text{OH}^-$
$\text{Na}^+$	$\text{Mg}^{2+}$	$\text{Fe}^{3+}$		$\text{S}^{2-}$	$\text{Cl}^-$
$\text{K}^+$	$\text{Cu}^{2+}$			$\text{CO}_3^{2-}$	$\text{NO}_3^-$
$\text{Ag}^+$	$\text{Pb}^{2+}$			$\text{SO}_4^{2-}$	$\text{HCO}_3^-$
$\text{H}^+$	$\text{Fe}^{2+}$				$\text{F}^-$
	$\text{Ba}^{2+}$				
	$\text{Zn}^{2+}$				



*English translation of the wording on the front cover*

## **Level 1 Science, 2018**

### **90944 Demonstrate understanding of aspects of acids and bases**

9.30 a.m. Thursday 15 November 2018  
Credits: Four

## **RESOURCE BOOKLET**

Refer to this booklet to answer the questions for 90944.

Check that this booklet has pages 2 and 3 in the correct order and that neither of these pages is blank.

**YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.**