

L1-CHEMR



NEW ZEALAND QUALIFICATIONS AUTHORITY  
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## Level 1 Chemistry, 2012

9.30 am Thursday 22 November 2012

### RESOURCE BOOKLET for 90933 and 90934

Refer to this booklet to answer the questions in your Question and Answer Booklets.

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.**

### Activity series

Ca Mg Al Zn Fe Pb (H) Cu Ag
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### Solubility rules

nitrates, $\text{NO}_3^-$	All <b>soluble</b>
chlorides, $\text{Cl}^-$	All <b>soluble</b> except $\text{AgCl}$ , $\text{PbCl}_2$
sulfates, $\text{SO}_4^{2-}$	All <b>soluble</b> except $\text{BaSO}_4$ , $\text{PbSO}_4$ , $\text{CaSO}_4$
hydroxides, $\text{OH}^-$	All <b>insoluble</b> except $\text{KOH}$ , $\text{NaOH}$
carbonates, $\text{CO}_3^{2-}$	All <b>insoluble</b> except $\text{K}_2\text{CO}_3$ , $\text{Na}_2\text{CO}_3$

### Table of ions

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



