

L2-CHEMMR



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

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

Te Mātauranga Matū, Kaupae 2, 2015

9.30 i te ata Rāhina 23 Whiringa-ā-rangi 2015

PUKA RAUEMI
mō 91164M, 91165M, 91166M

Tirohia tēnei puka hei whakatutuki i ngā tūmahi o tō Pukapuka Tuhinga, Tūmahi hoki.

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 PUKA TE PUPURI HEI TE MUTUNGA O TE WHAKAMĀTAUTAU.

PERIODIC TABLE OF THE ELEMENTS

Atomic number		Molar mass/g mol ⁻¹																																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18																		
1	2																	3	4																
H 1.0	He 4.0																	Li 6.9	Be 9.0																
																		Na 23.0	Mg 24.3																
																		K 39.1	Ca 40.1																
																		Sc 45.0	Ti 47.9	V 50.9	Cr 52.0	Mn 54.9	Fe 55.9	Co 58.9	Ni 58.7	Cu 63.5	Zn 65.4	Ga 69.7	Ge 72.6	As 74.9	Se 79.0	Br 79.9	Kr 83.8		
																		Y 88.9	Zr 91.2	Nb 92.9	Mo 95.9	Tc 98.9	Ru 101	Rh 103	Pd 106	Ag 108	Cd 112	In 115	Sn 119	Sb 122	Te 128	I 127	Xe 131		
																		Lu 175	Hf 179	Ta 181	W 184	Re 186	Os 190	Ir 192	Pt 195	Au 197	Hg 201	Tl 204	Pb 207	Bi 209	Po 210	At 210	Rn 222		
																		La 139	Ce 140	Pr 141	Nd 144	Pm 147	Sm 150	Gd 157	Tb 159	Dy 163	Ho 165	Er 167	Tm 169	Yb 173					
																		Ac 227	Th 232	Pa 231	U 238	Np 237	Pu 239	Cm 244	Bk 249	Cf 251	Es 252	Fm 257	Md 258	No 259					
																		Rb 85.5	Sr 87.6	Y 88.9	Zr 91.2	Nb 92.9	Mo 95.9	Tc 98.9	Ru 101	Rh 103	Pd 106	Ag 108	Cd 112	In 115	Sn 119	Sb 122	Te 128	I 127	Xe 131
																		Fr 223	Ra 226	Ac 227	Th 232	Pa 231	U 238	Np 237	Pu 239	Cm 244	Bk 249	Cf 251	Es 252	Fm 257	Md 258	No 259			
																		Cs 133	Ba 137	La 139	Ce 140	Pr 141	Nd 144	Pm 147	Sm 150	Gd 157	Tb 159	Dy 163	Ho 165	Er 167	Tm 169	Yb 173			
																		Fr 223	Ra 226	Ac 227	Th 232	Pa 231	U 238	Np 237	Pu 239	Cm 244	Bk 249	Cf 251	Es 252	Fm 257	Md 258	No 259			
																		Li 6.9	Be 9.0	Sc 45.0	Ti 47.9	V 50.9	Cr 52.0	Mn 54.9	Fe 55.9	Co 58.9	Ni 58.7	Cu 63.5	Zn 65.4	Ga 69.7	Ge 72.6	As 74.9	Se 79.0	Br 79.9	Kr 83.8
																		La 139	Ce 140	Pr 141	Nd 144	Pm 147	Sm 150	Gd 157	Tb 159	Dy 163	Ho 165	Er 167	Tm 169	Yb 173					
																		Fr 223	Ra 226	Ac 227	Th 232	Pa 231	U 238	Np 237	Pu 239	Cm 244	Bk 249	Cf 251	Es 252	Fm 257	Md 258	No 259			
																		Li 6.9	Be 9.0	Sc 45.0	Ti 47.9	V 50.9	Cr 52.0	Mn 54.9	Fe 55.9	Co 58.9	Ni 58.7	Cu 63.5	Zn 65.4	Ga 69.7	Ge 72.6	As 74.9	Se 79.0	Br 79.9	Kr 83.8
																		La 139	Ce 140	Pr 141	Nd 144	Pm 147	Sm 150	Gd 157	Tb 159	Dy 163	Ho 165	Er 167	Tm 169	Yb 173					
																		Fr 223	Ra 226	Ac 227	Th 232	Pa 231	U 238	Np 237	Pu 239	Cm 244	Bk 249	Cf 251	Es 252	Fm 257	Md 258	No 259			

English translation of the wording on the front cover

L2-CHEMMR

Level 2 Chemistry, 2015

9.30 a.m. Monday 23 November 2015

RESOURCE SHEET
for 91164, 91165, 91166

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

Check that this booklet has pages 2–5 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS SHEET AT THE END OF THE EXAMINATION.