

L1-CHEMR



NEW ZEALAND QUALIFICATIONS AUTHORITY
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Level 1 Chemistry, 2013

9.30 am Thursday 21 November 2013

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

Solubility rules

nitrates, NO_3^-	All soluble
chlorides, Cl^-	All soluble except AgCl , PbCl_2
iodides, I^-	All soluble except AgI , PbI_2
sulfates, SO_4^{2-}	All soluble except BaSO_4 , PbSO_4 , CaSO_4
hydroxides, OH^-	All insoluble except KOH , NaOH
carbonates, CO_3^{2-}	All insoluble except K_2CO_3 , Na_2CO_3

Table of ions

+1	+2	+3	-3	-2	-1
NH_4^+	Ca^{2+}	Al^{3+}		O^{2-}	OH^-
Na^+	Mg^{2+}	Fe^{3+}		S^{2-}	Cl^-
K^+	Cu^{2+}			CO_3^{2-}	I^-
Ag^+	Pb^{2+}			SO_4^{2-}	NO_3^-
H^+	Fe^{2+}				HCO_3^-
Li^+	Ba^{2+}				
	Zn^{2+}				

PERIODIC TABLE OF THE ELEMENTS

Atomic number																		1 H	18																	
1																		13	14	15	16	17	18													
2																		5	6	7	8	9	10													
3	4																13	14	15	16	17	18														
3	Li	Be																B	C	N	O	F	Ne													
11	Na	Mg																Al	Si	P	S	Cl	Ar													
19	K	Ca	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36																	
19	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr																		
37	Rb	Sr	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54																
37	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe																		
55	Cs	Ba	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86		
55	Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn																		
87	Fr	Ra	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118		
87	Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Fl	Lv																						

57	La	58	59	60	61	62	63	64	65	66	67	68	69	70	
57	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	
89	Ac	89	90	91	92	93	94	95	96	97	98	99	100	101	102
89	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	

