

Material in the tables on pages 10 and 11 may be useful in answering the questions in this examination.

DO NOT DETACH FROM BOOK.

1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18																																																																																																																																																																													
1	H 1.008	3	Li 6.94	11	Na 22.99	19	K 39.10	37	Rb 85.47	55	Cs 132.91	87	Fr (223)	20	Ca 40.08	38	Sr 87.62	56	Ba 137.33	88	Ra 226.02	21	Sc 44.96	39	Y 88.91	57	*La 138.91	89	†Ac 227.03	22	Ti 47.90	40	Zr 91.22	72	Hf 178.49	104	Rf (261)	23	V 50.94	41	Nb 92.91	73	Ta 180.95	105	Db (262)	24	Cr 52.00	42	Mo 95.94	74	W 183.85	106	Sg (266)	25	Mn 54.94	43	Tc (98)	75	Re 186.21	107	Bh (264)	26	Fe 55.85	44	Ru 101.1	76	Os 190.2	108	Hs (277)	27	Co 58.93	45	Rh 102.91	77	Ir 192.2	109	Mt (268)	28	Ni 58.69	46	Pd 106.42	78	Pt 195.08	110	Ds (271)	29	Cu 63.55	47	Ag 107.87	79	Au 196.97	111	Rg (272)	30	Zn 65.39	48	Cd 112.41	80	Hg 200.59	31	Ga 69.72	49	In 114.82	81	Tl 204.38	32	Ge 72.59	50	Sn 118.71	82	Pb 207.2	33	As 74.92	51	Sb 121.75	83	Bi 208.98	34	Se 78.96	52	Te 127.60	84	Po (209)	35	Br 79.90	53	I 126.91	85	At (210)	36	Kr 83.80	54	Xe 131.29	86	Rn (222)	4	Be 9.01	12	Mg 24.30	20	Ca 40.08	38	Sr 87.62	56	Ba 137.33	88	Ra 226.02	5	B 10.81	13	Al 26.98	31	Ga 69.72	49	In 114.82	81	Tl 204.38	6	C 12.01	14	Si 28.09	32	Ge 72.59	50	Sn 118.71	82	Pb 207.2	7	N 14.01	15	P 30.97	33	As 74.92	51	Sb 121.75	83	Bi 208.98	8	O 16.00	16	S 32.06	34	Se 78.96	52	Te 127.60	84	Po (209)	9	F 19.00	17	Cl 35.45	35	Br 79.90	53	I 126.91	85	At (210)	10	Ne 20.18	18	Ar 39.95	36	Kr 83.80	54	Xe 131.29	86	Rn (222)

* Lanthanide Series	58	Ce 140.12	59	Pr 140.91	60	Nd 144.24	61	Pm (145)	62	Sm 150.4	63	Eu 151.97	64	Gd 157.25	65	Tb 158.93	66	Dy 162.50	67	Ho 164.93	68	Er 167.26	69	Tm 168.93	70	Yb 173.04	71	Lu 174.97
† Actinide Series	90	Th 232.04	91	Pa 231.04	92	U 238.03	93	Np (237)	94	Pu (244)	95	Am (243)	96	Cm (247)	97	Bk (247)	98	Cf (251)	99	Es (252)	100	Fm (257)	101	Md (258)	102	No (259)	103	Lr (262)