PREPARATION and PROPERTIES of OXYGEN

A	QUESTION DATA		X	Y	Z	(1.5 l.)
B	EQUATION		$2KClO_3$ ==(heat, MnO_2)==>	$2KCl$ +	$3O_2$	(gas)
C	EQUATION DATA	MOLECULAR WEIGHTS (VOLUMES)	122.5 g.	74.5 g.	32 g.	(24.45 l.) (standard temp. and pressure)
		COEFFICIENT	X 2	X 2	X 3	(X 3)
		TIMES COEFFICIENT	245 g.	149 g.	96 g.	(73.35 l.)
D	Q.data / E.data	HENCE:	X / 245 g.	= Y / 149 g.	X / 96 g.	1.5 liters / 73.35 liters
E	WORKING		X = 1.5 liters x 245 g. / 73.35 liters			
F	SOLVING: SO WE NEED:		X = 4.5 g.			

PERIODIC CHART

* *These elements are only known in a radioactive form.*
Their atomic weights are not accurately known.
Atomic weights of stable elements are rounded to one place.

ATOMIC NUMBERS
SYMBOLS
ATOMIC WEIGHTS
ELECTRONEGATIVITIES

I A	II A	IIIB	IVB	VB	VIB	VIIB	VIII B	IB	IIB	IIIA	IVA	VA	VIA	VIIA	0
1 H 1.0 2.2															2 He 4.0 -
3 Li 7.0 1.0	4 Be 9.0 1.5									5 B 10.8 2.0	6 C 12.0 2.5	7 N 14.0 3.0	8 O 16.0 3.5	9 F 19.0 4.0	10 Ne 20.0 -
11 Na 23.0 0.9	12 Mg 24.3 1.2									13 Al 27.0 1.5	14 Si 28.0 1.8	15 P 31.0 2.1	16 S 32.0 2.5	17 Cl 35.5 3.0	18 Ar 40.0 -
19 K 39.0 0.8	20 Ca 40.0 1.0	21 Sc 45.0 1.3	22 Ti 48.0	23 V 51.0	24 Cr 52.0	25 Mn 55.0	26 Fe 55.9	27 Co 58.9	28 Ni 58.7	29 Cu 63.5	30 Zn 65.4	31 Ga 69.7	32 Ge 72.6 1.8	33 As 74.9 2.0	34 Se 79.0 2.4	35 Br 79.9 2.8	36 Kr 83.8 -
			← 1.7 ± 0.2 →														
37 Rb 85.5 0.8	38 Sr 87.6 1.0	39 Y 88.9 1.2	40 Zr 91.2	41 Nb 92.9	42 Mo 95.9	43 Tc* 98.9	44 Ru 101.1	45 Rh 102.9	46 Pd 106.4	47 Ag 107.9	48 Cd 112.4	49 In 114.8	50 Sn 118.7 1.8	51 Sb 121.8 1.9	52 Te 127.6 2.1	53 I 126.9 2.5	54 Xe 131.3 -
			← 1.9 ± 0.3 →														
55 Cs 132.9 0.7	56 Ba 137.3 0.9	57 La 138.9 1.1	72 Hf 178.5	73 Ta 181.0	74 W 183.9	75 Re 186.2	76 Os 190.2	77 Ir 192.2	78 Pt 195.1	79 Au 197.0	80 Hg 200.6	81 Tl 204.4	82 Pb 207.2 1.8	83 Bi 209.0 1.9	84 Po* 210 2.0	85 At* 210 2.2	86 Rn* 222 -
			← 1.9 ± 0.4 →														
87 Fr* 223 0.7	88 Ra 226 0.9	89 Ac* 227 1.1	104 Rf ?	105 Ha ?	106 Unh ?	107 Uns ?	108	109 Une ?									

58 Ce 140.1	59 Pr 140.9	60 Nd 144.2	61 Pm* 147	62 Sm 150.4	63 Eu 152.0	64 Gd 157.3	65 Tb 158.9	66 Du 162.5	67 Ho 164.9	68 Er 167.3	69 Tm 168.9	70 Yb 173.0	71 Lu 175.0
← 1.9 ± 0.4 →													

90 Th 232.0	91 Pa 231.0	92 U 238.0	93 Np 237.0	94 Pu* 242	95 Am* 243	96 Cm* 247	97 Bk* 247	98 Cf* 251	99 Es* 254	100 Fm* 253	101 Md* 256	102 No* 254	103 Lr* 257
1.3 ± ? →													

There are two or three chapters using the concept ELECTRONEGATIVITY. Keep this handy while reading those chapters. This table may be used during any QUIZ or FINAL.