Student Name:	Instructor:



CHEMISTRY 1210 – AUTUMN 2021 MIDTERM 1 SCRATCH PAPER

Instructions:

- Stow away all personal items except your BuckID, pencil, eraser, and approved calculator.
- Prevent the appearance of academic misconduct by keeping your eyes on your own iPad and scratch paper, using only approved materials, and putting down your pencil when time is called.
- Do not detach pages of the scratch paper booklet.
- Nothing written on the scratch paper will be graded in any way.
- You must turn in your entire scratch paper booklet. Any portions of this scratch paper booklet

•		c Misconduct and pursued as such
The supplemental information in	needed for the exam is listed b	elow:
	SUPPLEMENTAL INFORMA	<u>TION</u>
<u>CONSTAN</u> 1 J = 1 kg•		$\frac{\text{EQUATIONS}}{\text{E}_{k} = (1/2)\text{mv}^{2}}$
STUDENT: Please sign below to a materials or devices, or the discus anyone other than your instructor iperceived violations will be submit	sion of the contents of this exa is considered to be Academic I	am (either verbal or written) with Misconduct. Any violations or
Signature		Date

WHEN COMPLETED, YOU MUST RETURN THIS ENTIRE SCRATCH PAPER BOOKLET TO THE PROCTOR WHO HAS YOUR BUCKID.

Periodic Table of the Elements

	8A 18	2 He	4.002602	01 %	20.1797	18	Ar	39.948	36	Kr	83.80	54	Xe	131.293	98	Rn	[222.02]	118		[294]
ts		4. Y	17	6 1	18.998403	17	ت ت	35.453	35	Br	79.904	53	_	126.90447 131.293	85	At	[209.99]	117	*	[294]
iroup e Elemen		6A	16	∞ ⊂	94	16	S	32.065	34	Se	78.96	52	Te	127.60	84	Po	[208.98]	116	Lv	[293]
Main Group Representative Elements		5A	15	r 2	14.0067	15	Ь	30.973761	33	As	74.92160	51	$^{\mathrm{Sp}}$	121.760	83	Bi	208.98038	115		[288]
Rep		4A	4	ي و	12.0107	14	Si	28.0855	32	Ge	72.64	50	Sn	118.710	82	Pb	207.2	114	E	[289.2]
		3A	13	ر ا	10.811	13	ΙV	26.981538	31	Сa	69.723	46	In	114.818	81	I	204.3833	113		[284]
	_		•				2B	12	30	Zn	65.39	48	рЭ	112.411	80	Hg	200.59	112	Cn	[285]
				tals			11B	11	29	Cu	63.546	47	Ag	107.8682	79	Αu	196.96655	111	Rg	[272.15]
				Nonmetals			Γ	10	28	ï	58.6934	46	Pd	106.42	78	Pt	195.078	110	Ds	[281.15]
							— 8B —	6	27	ပိ	58.933200	45	Rh	102.90550	77	1	192.217	109	Mt	[268.14]
				Metalloids	n metals		L	8	26	Fe	55.845	44	Ru	101.07	92	os	190.23	108	Hs	[269.13]
				Me	Transition metals		7B	7	25	Mn	54.938049	43	Tc	[86]	75	Re	186.207	107	Bh	[264.12]
							6B	9	24	Cr	1966.13	42	Mo	95.94	74	M	183.84	106	So	[266.12]
				Metals			5B	2	23	>	50.9415	41	S	92.90638	73	Ta	180.9479	105	DP	[262.11]
							4B	4	22	Ξ	47.867	40	Zr	91.224	72	Ħ£	178.49	104	R	[261.11]
uts							3B	т	21	Sc	44.955910	39	Y	88.90585	71	Lu	174.967	103	Lr	[262.11]
Main Group	_	2A	2	4 0	9.012182	12	Mg	24.3050	20	Ca	40.078	38	Sr	87.62	56	Ba	137.327	88	Ra	[226.03]
Main Group resentative Ele	1A ³	П Н	1.00794	3	6.941	=	Na	22.989770	19	K	39.0983	37	Rb	85.4678	55	Cs	132.90545	87	Fr	[223.02]
9 I	_ "				<u> </u>		~			-			10						_	

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	57	58	59	09	19	62	63	64	65	99	<i>L</i> 9	89	69	70
Lanthanide series	La	Ce	Pr	PN	Pm	Sm	Eu	P.S		Dy	Ho	Er	Tm	Yb
	138.9055	140.116	140.90765	144.24	[145]	150.36	151.964	157.25		162.50	164.93032	167.259	168.93421	173.04
	68	96	91	92	93	94	95	96	16	86		100	101	102
Actinide series	Ac	Th	Pa	n	Np	Pu	Am	Cm	Bk	CL	Es	Fm	pW	oN N
	[227.03]	232.0381	231.03588 238.0289	138.02891	[237.05]	[244.06]	[243.06]	[247.07]	[247.07]	[251.08]	8	[257.10]	[258.10]	[259.10]

^aThe labels on top (1A, 2A, etc.) are common American usage. The labels below these (1, 2, etc.) are those recommended

by the International Union of Pure and Applied Chemistry (IUPAC). Except for elements 114 and 116, the names and symbols for elements above 113 have not yet been decided. Atomic weights in brackets are the names of the longest-lived or most important isotope of radioactive elements.