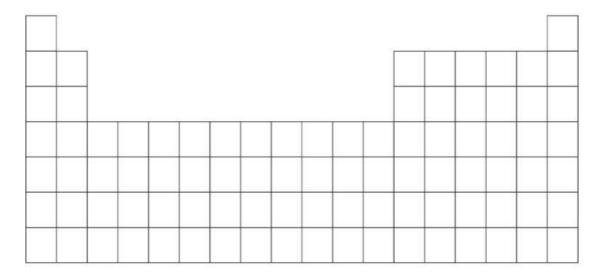
The Periodic Table

<u>Directions:</u> Leave no blanks. Guess if you must. This exam is out of 46 possible points. There are 4 pages in this assessment, 19 questions in all.

- 1. Based on what we have learned in class, describe the origin of the periodic table. Please use your own words. (3 points)
- 2. How does the "original" differ from today's? (1pt)
- 3. "Key" the three general areas for <u>metals</u>, <u>nonmetals</u> and <u>metalloids</u> on the blank periodic table below: (3 points)

PERIODIC TABLE OF ELEMENTS



- 4. Number the Groups. (1pt)
- 5. Number the Periods. (1pt)
- 6. What do all the elements in a given row have in common? (1pt)
- 7. What do all the elements in a given column have in common? (1pt)

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ŀ		2	ř										13	14	15	16	17	10
E	3 B Bananium	4 L lemonium											Nu nutmegon	Sp spinon	Br	Mu shroomium	Po potatine	B
ŀ	11	12											13	14	15	16	17	1
	BI blueberic	Li Limium	3	4	5	6	7	8	9	10	11	12	Gi gingerium	To tomaton	Ba	Pe peasium	E eggplantine	cam
İ	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	3
•	Ch Cherrium	Or orangium	Su sugarium	Fu fudgium	Do donutium	Tr troutium	Fi fishium	La lambium	Cs cheesium	W wasabium	S sageium	Va vanillalum	Cm cuminium	Ya yamium	Cu	Sn snapium	Sr sproutine	Celei
ŀ	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	5
c	Cr cranberium	P	FI	J jellium	Ta tartium	EI ellium	Sh shrimpium	Ve vealium	Bt butterium	Mn	CI	Th thymeium	Pp paprikium	Bu brusslium	Pr pepperium	Tu turnipium	C	Fend
	55	56		72	73	74	75	76	77	78	79	80	81	82	83	84	85	8
	F Figium	Pu		Tf taffium	Pi pieium	H herrium	Cb crabium	T	Mi milkium	Ci chilium	Cv	Ps parslium	Ga garlicium	Ar artichon	Ka kaleium	Z zucchinium	O	Parsi
	87	88		104	105	106	107	108	109	110	111	112	113	114	115	116	117	11
	Gr	St		N	Ec	Ma	Lo	Du	G	An	Di	Bs	Og	D	Le	Sq	Ok	R

Apply your knowledge: Base your answers to questions 8 - 14 using the "Periodic Table of Foods"

- 8. Describe one characteristic you would expect the element **Li** to display, based on its location in the table. (1pt)
- 9. Describe one characteristic you would expect the element **Ca** to display, based on its location in the table. (1 pt)
- 10. Which atom, **B, Bl, Ch, or Cr,** would you expect to have the greatest ionization energy?(1pt) Give one reason to support your answer. (2 pt)
- 11. Which atom, **Sp**, **Br**, **Mu**, **or Nu**, would you expect to have the greatest electronegativity?(1) Give one reason to support your answer. (2 pt)
- 12. Which atom, **Gi, Li, E, or Pe,** would you expect to have the smallest atomic radius? (1 pt) Give one reason to support your answer. (2 pt)

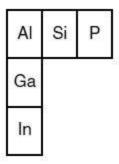
13.	Which atom, Po, Br, Fe, or Bl , would you expect to be the least chemically reactive ?(1) Give one reason to support your answer. (2 pt)
14.	Which atom, St, As, Mu or Po, would you expect to have the greatest metallic character?(1) Give one reason to support your answer. (2 pt)
Use th	e Periodic Table found in your Chemistry Reference Tables to answer questions 15 -
15.	When an atom gains an electron, what is its overall charge? (1 pt)
	Give an example of an element whose atoms would easily gain an electron(s). (1 pt)
	What do you think happens to the radius of that atom when it becomes an ion? (1 pt)
16.	Compare Zn to C .
	Which one would you expect to be brittle? (1 pt) Why? (1 pt)
	Which one would you expect to be a good conductor of electricity? (1pt) Why?(1pt)

- 17a) Write the electron configuration of an element of your choice from period 3.

 Do <u>not</u> choose a Noble Gas. (2 pt)
 - b) Name the element. (1 pt)
 - c) Does an atom of the element have a tendency to gain or lose electrons? (1)
 - d) How does an atom of the element compare in size to its ion? (1)

Examine the diagram below.

18. What happens to ionization energy when moving from right to left? (1 pt) Why? (2pt)



19. What happens to electronegativity when moving from right to left? (1 pt) Why? (2 pts)