Name: _____ **Date:** _____ **Block:** _____

Element Data for Graphing Activity (Science 9 Pathways)

Element Symbol	Element Name	Atomic Number	Atomic Mass (amu)	Atomic Radius (Å)	Melting Point (°C)	Boiling Point (°C)	Density (g/cm³)
H	Hydrogen	1	1.01	0.53	-259	-253	0.0000899
He	Helium	2	4.00	0.31	-272	-269	0.000179
Li	Lithium	3	6.94	1.67	181	1342	0.534
Be	Beryllium	4	9.01	1.12	1287	2471	1.85
B	Boron	5	10.81	0.87	2075	4000	2.37
C	Carbon	6	12.01	0.67	3550	3825	2.27
N	Nitrogen	7	14.01	0.56	-210	-196	0.00125
O	Oxygen	8	16.00	0.48	-219	-183	0.00143
F	Fluorine	9	19.00	0.42	-220	-188	0.00170
Ne	Neon	10	20.18	0.38	-249	-246	0.899
Na	Sodium	11	22.99	1.90	98	883	0.971
Mg	Magnesium	12	24.31	1.45	649	1090	1.74
Al	Aluminum	13	26.98	1.18	660	2519	2.70
Si	Silicon	14	28.09	1.11	1414	3265	2.33
P	Phosphorus	15	30.97	0.98	44	281	1.82
S	Sulfur	16	32.07	0.88	115	445	2.07
Cl	Chlorine	17	35.45	0.79	-102	-34	0.00321
Ar	Argon	18	39.95100.	0.71	-189	-186	0.00178

Using the graphing guidelines we learned in class:

1)
   a. Graph atomic mass vs atomic number. Draw a best-fit line through the graph.
   b. Calculate the slope of the graph, and determine the y-intercept. Write the graph's equation (with units!). What does this graph tell you?
2) Graph atomic radius vs atomic number. Describe the trend(s) that you see.
3) Create a graph of your choice using any 2 of the variables provided. Describe the trend(s) that you see.