

Name _____

Graphing Periodic Properties

1. Launch Internet Explorer:



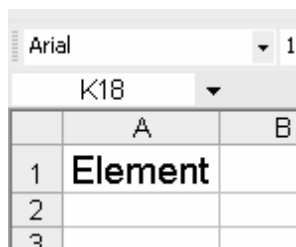
2. Go to <http://www.chemicalelements.com/index.html>



3. Open the Excel spreadsheet program:



4. In Cell A1, type in "Element." You may use any font or color you like.



5. Fill in the rest of row 1 like this :

	A	B	C	D	E	F	G	H	I
1	Element	Symbol	Atomic Number	Atomic Mass	Boiling Point	Melting Point	Density	Period	Group
2									
3									

6. In Cells A2 - A19, type in the names of the first 18 elements on the periodic table. Use the Chemical Elements webpage to find the information you need.

Arial	
J12	
A	
1	Element
2	Hydrogen
3	Helium
4	Lithium
5	Beryllium
6	Boron
7	Carbon
8	Nitrogen

7. Use the information on the Chemical Elements webpage to fill in the spread sheet as shown below. Use the Celsius temperature. Do not put units in the cells, only numbers:

	A	B	C	D	E	F	G	H	I
1	Element	Symbol	Atomic Number	Atomic Mass	Boiling Point	Melting Point	Density	Period	Group
2	Hydrogen	H	1	1.007	-252.87	-259.14	0.08988	1	1

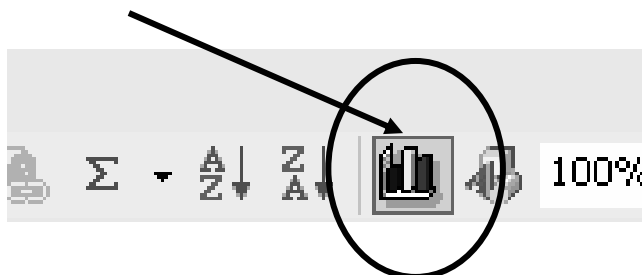
8. Make a graph to compare the **Atomic Numbers** of the **Elements**:
- Hold down the left mouse button and drag down to highlight the list of element symbols:

B1		fx	
A		B	
1	Element	Symbol	
2	Hydrogen	H	
3	Helium	He	
4	Lithium	Li	

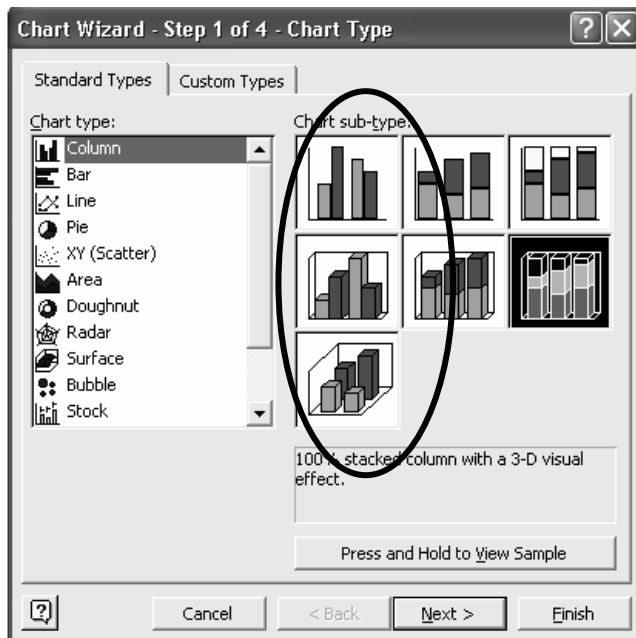
- b. Hold down the Control key and highlight the list of Atomic Numbers:

	A	B	C
1	Element	Symbol	Atomic Number
2	Hydrogen	H	1
3	Helium	He	2
4	Lithium	Li	3

- c. Click the Chart Wizard icon on the toolbar:



- d. Select Column (I know we call them *bar graphs*). Any of the graphs on the left-hand side are appropriate. Choose one of them.



e. Choose Press and Hold to View Sample. If you see a

reasonable graph choose Next >

f. At step 2, choose Next > again.

g. Give the graph an appropriate title and label Use data labels as needed

Chart Wizard - Step 3 of 4 - Chart Options

Titles | Axes | Gridlines | Legend | Data Labels | Data Table

Chart title: Atomic Number

Category (X) axis:

Series (Y) axis:

Value (Z) axis:

Atomic Number

H He Li

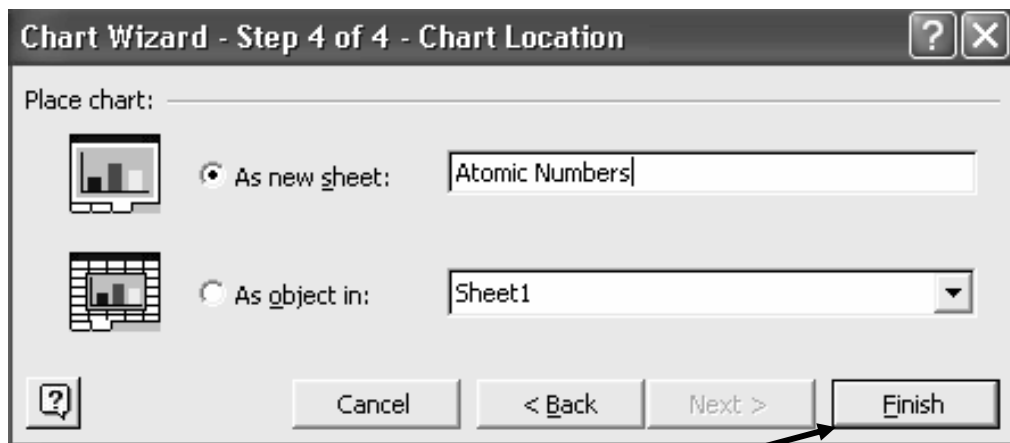
Atomic Number

Cancel < Back Next > Finish

3 – dimensional graphs will have a Z-axis instead of a Y-axis

h. Choose next. Next >

- i. Save your graph as a New Sheet Called Atomic Numbers:



- j. Choose Finish.
9. Save your spreadsheet in SCommon → Poarch → Periodic Table → Your class period.
10. Create and save graphs that show the following:
- The atomic number of all elements in period 2
 - A *comparison* of atomic mass and atomic number
 - The *relationship* of atomic number and boiling point
 - A *comparison* of atomic numbers, atomic mass, and density
 - The *relationship* of mass number and density
12. Print your data sheet and your graphs and staple them together. Keep them in your binder until tomorrow.