

Name: _____ Section: _____

periodic Table's



Most Wanted

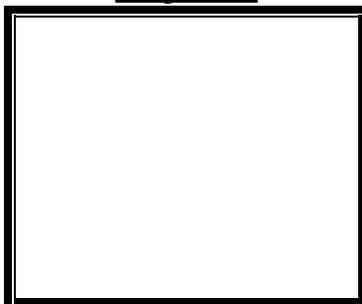
Directions: There is an element on the periodic table that does not want to be located. Actually, this element is "hiding out." In an effort to elude you, the element has provided many false identities and it is your job to follow-up on all of these to locate it. However, the element is not as smart as it thinks; we know that all of these false identities are connected to each other. Therefore, providing the correct identity for each clue below will ultimately help you find the element (this means you should use each answer as a reference to get the next one). So, if you make just one mistake it will affect all clues and identities that follow; thus allowing this perpetrator to get away.

BE SAFE, BE SMART, BE VIGILANT!!!

- Period two group one is where I sit - _____
- The # of valence electrons in the previous answer plus 23 is my atomic number - _____
- Five groups to the right of the previous answer, in period five, is my location - _____
- the # of neutral particles in the previous answer is my atomic #
- _____

- if you reverse the atomic number of the previous answer, you will know my mass - _____
 - Draw a "mug shot" (atomic structure w/protons, neutrons, electrons) of me including my correct electron configuration (2,8,etc)

Mug Shot



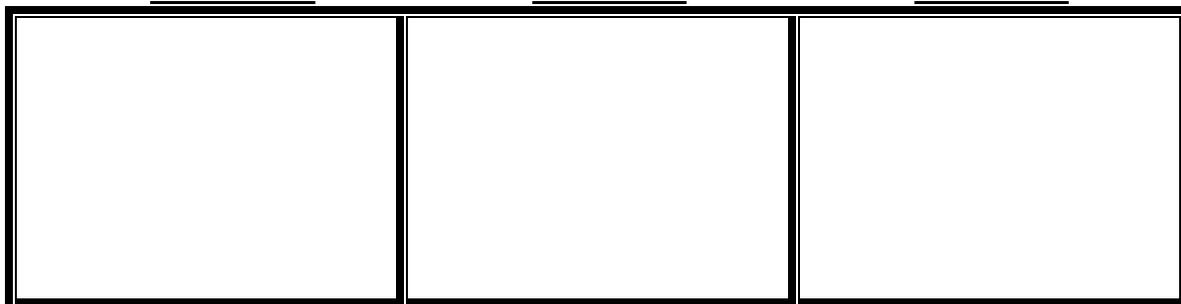
- the number of negative particles in the second energy level of my "mug shot," divided by two and multiplied by 10 is equal to my atomic # - _____
- the previous answer's group # represents my atomic mass - _____
- the previous answer's family # and period 6 is where I reside - _____
- The first # of the previous answer's mass represents my atomic # - _____
 - Draw the "mug shot" (atomic structure w/protons, neutrons, electrons) of my three family members that come directly after me.

Mug Shots

Member 1

Member 2

Member 3



- The **total #** of valence electrons for the three members drawn represents my mass - _____
 - Calculate the # of Protons, neutrons, and electrons for the members of the previous answer's family that reside in periods 4, 5, and 6, if they are all ions with a 3- charge

Ion <small>(symbol w/charge)</small>	Protons	Neutrons	Electrons
Total			

Sum of all three columns combined (Protons, Neutrons, Electrons) = _____

- The sum of the protons, neutrons, and electrons for all of the ions in the table, divided by 4 represents my atomic # once you reverse the two digits - _____
- Go to the website www.chemicalelements.com (or use any other resource available) to find out how many valence electrons I have and then you will be able to identify the one you have been searching for because the # of valence electrons I possess is equal to the number that makes the one you have been searching for unique

WHO AM I? - _____