

Week 6 Packet – Honors Chem

This is hopefully all the handouts we will use this week in Honors Chem. Due to the challenging logistics of this year, please offer grace if I miss a handout or if things change during the week. **Please note** – You do not have to print. I am just providing the option to make things easier for those who want to print. All of these pages are on the class website, always! www.mychemistryclass.net

***I will put the glue ins for the notes on the front and/or back of the packet cover page like this – since you don't need the cover page for anything you can always just cut these out and glue them in. Trying to save some paper for those of you who are printing! 😊**

N-13

He: $1s^2$

Ne: $1s^2 2s^2 2p^6$

Ar: $1s^2 2s^2 2p^6 3s^2 3p^6$

Kr: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6$

Xe: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6$

A short cut method of writing configurations

Since noble gases are "special" – reference all configurations against the PREVIOUS noble gas

- 1) Find the previous noble gas
- 2) Write that noble gas in brackets []
- 3) List any remaining electron configuration left over until you get to the element you are trying to write

N-13

Ga: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^1$

Ga⁺: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10}$

Ga²⁺: $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^{10}$

Ga³⁺: $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10}$

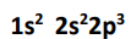
Ga⁴⁺: $1s^2 2s^2 2p^6 3s^2 3p^6 3d^9$

N-13

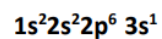
Lithium



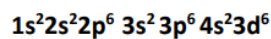
Nitrogen



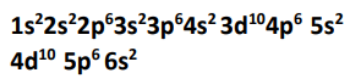
Sodium



Iron



Barium



Krypton

