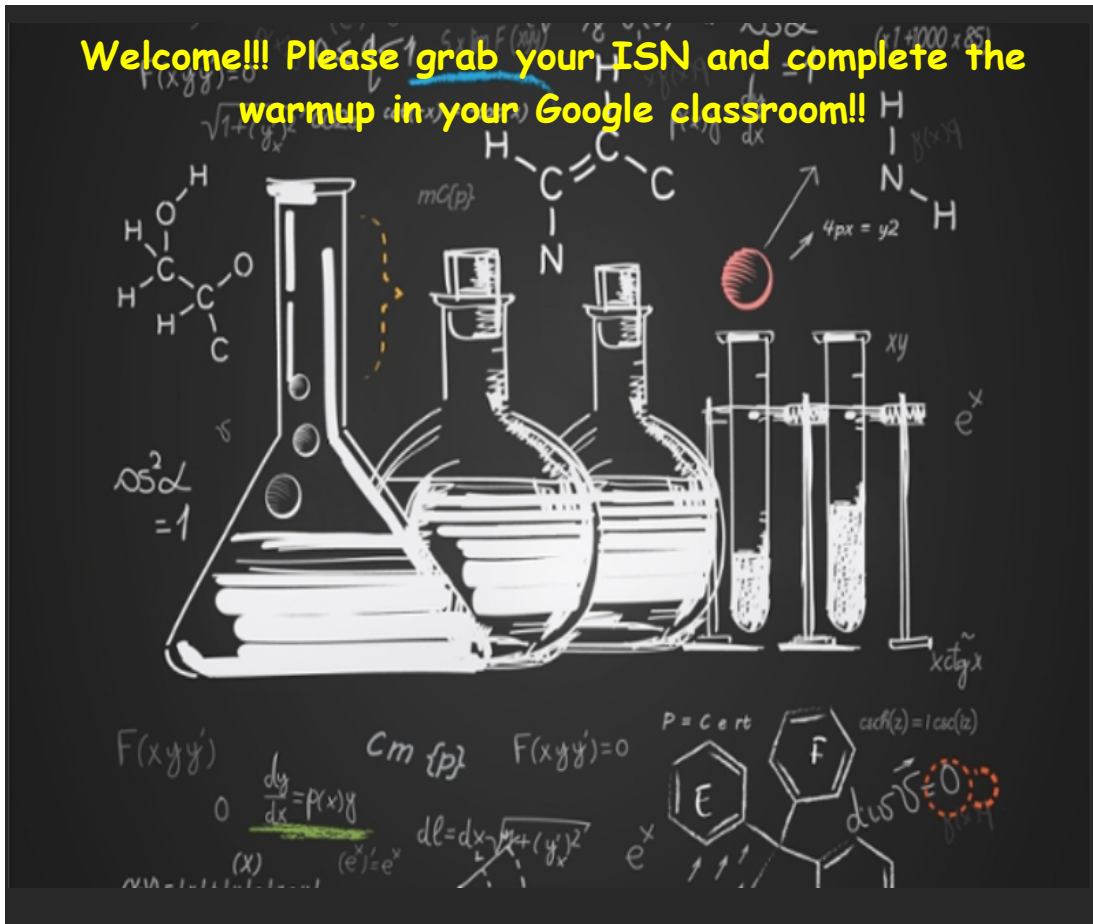
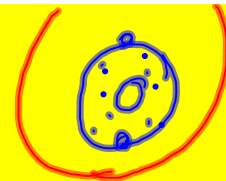


Welcome!!! Please grab your ISN and complete the warmup in your Google classroom!!



Oct 7-2:53 PM

WWWK (PG. 33)



14. electron configuration- written notation that describes the energy and location of electrons by using quantum numbers.

15. ground state- electrons having the lowest possible energy state.

16- excited state- electron gains energy and moves up an energy level

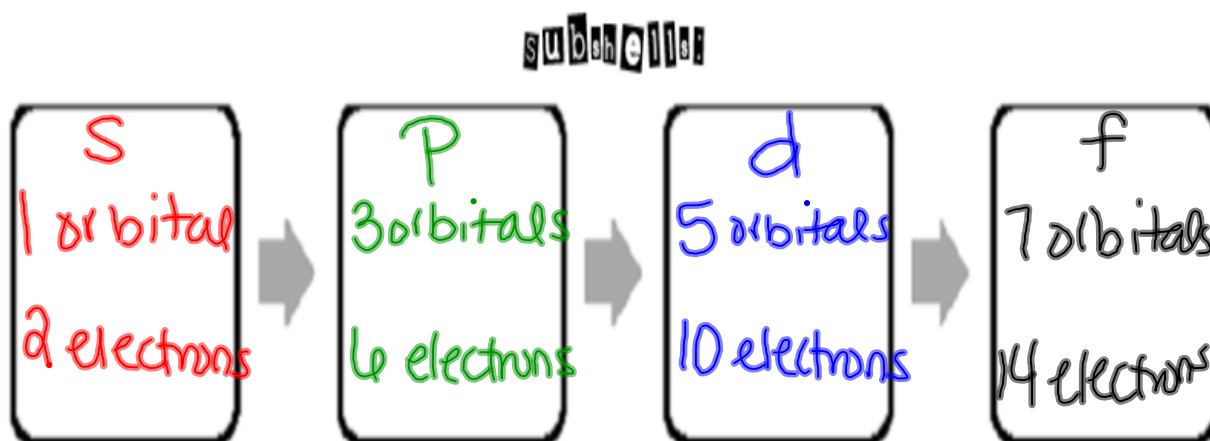
Oct 7-3:20 PM

TOC pg 45-46 Electron Configuration

1. Electron arrangement determines chemical behavior & bonding.
2. The electron shells that surround the nucleus can be broken down into subshells.
3. Each subshell can be broken down into individual orbitals.
4. The number of orbitals a subshell has determines the energy level of the subshell.

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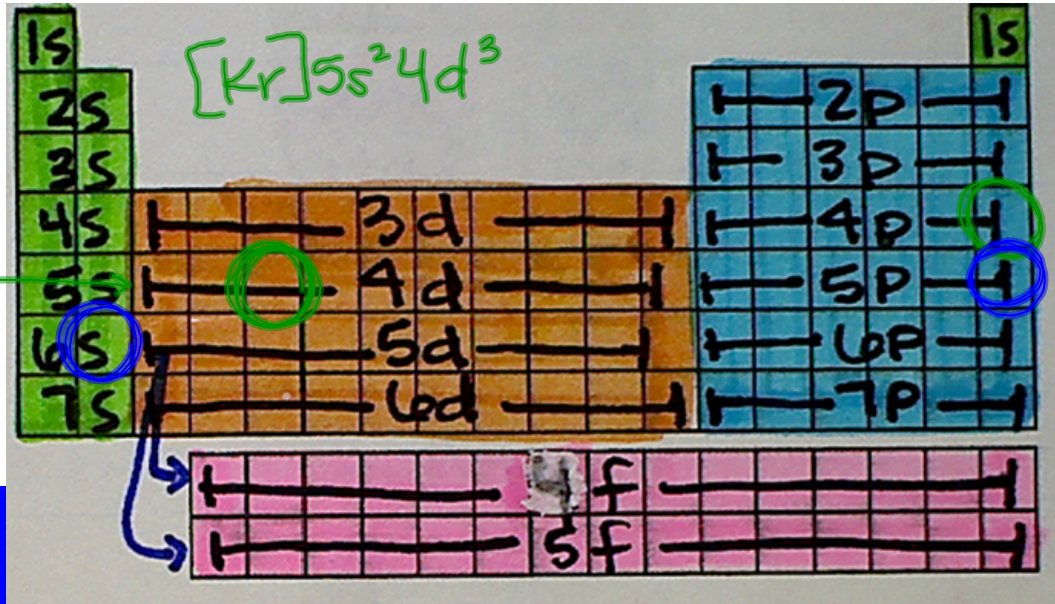
TOC pg 45-46 Electron Configuration



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TOC pg 45-46 Electron Configuration

Periodically, energy levels fill in a horizontal direction.



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TOC pg 45-46 Electron Configuration



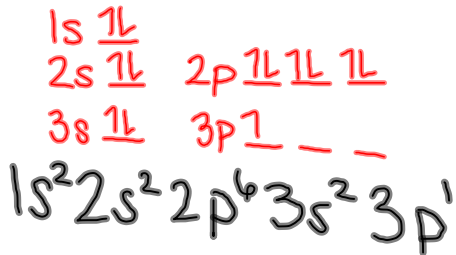
Electron Configuration Rules:

Aufbau Principle	Hund's Rules	Pauli's Exclusion Principle
<p>electrons must fill the lowest energy subshells first before filling higher energy subshells</p>	<p>electrons must fill all orbitals in the same subshell singly before filling them doubly.</p> <p> $\uparrow\downarrow$ $\uparrow\downarrow$ \uparrow </p>	<p>If two electrons occupy a single orbital, then the electrons must spin in different directions.</p> <p>$\uparrow\downarrow$</p>

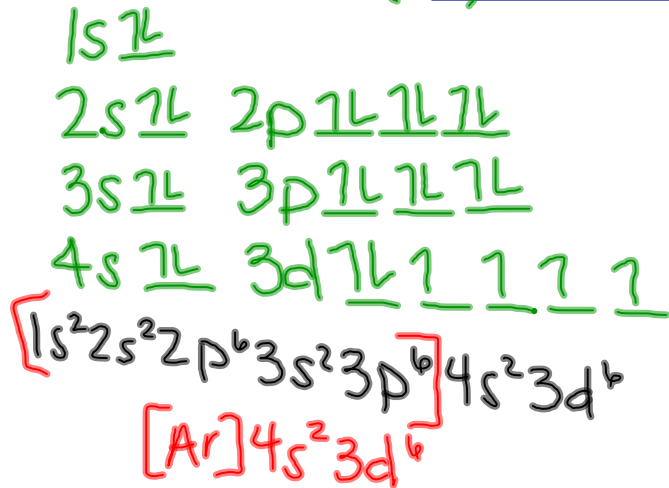
Oct 7-3:25 PM

pg 46 examples under graphic organizer

Aluminum (13)



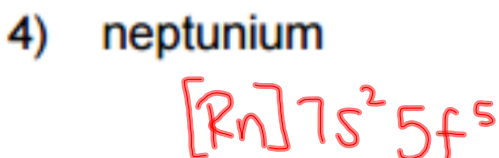
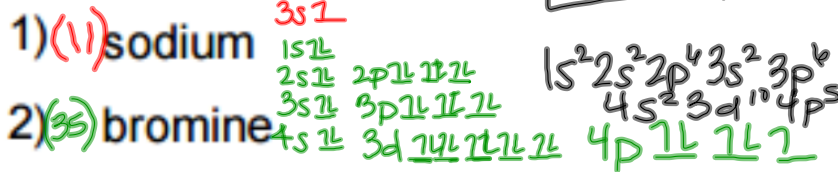
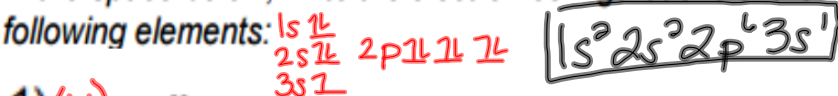
(26) Iron



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pg 45 examples

In the space below, write the electron configurations of the following elements:



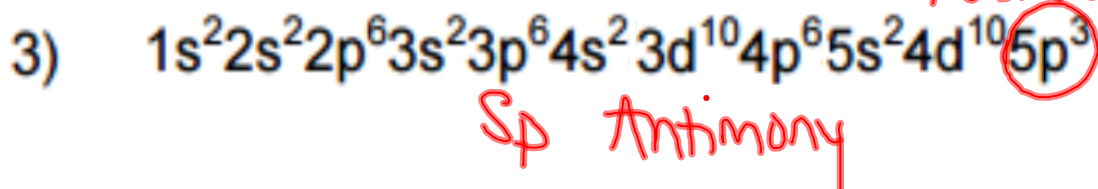
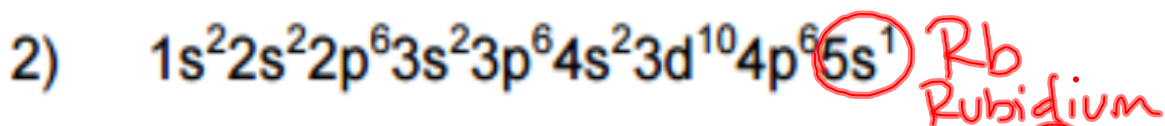
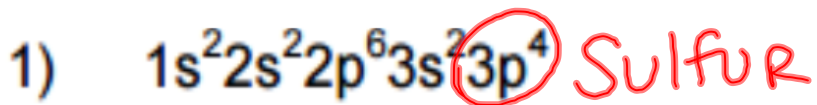
Oct 7-3:28 PM

H																	He														
Li	Be											B	C	N	O	F	Ne														
Na	Mg											Al	Si	P	S	Cl	Ar														
K	Ca					Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr										
Rb	Sr					Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe										
Cs	Ba	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Uub	Uut	Uuq	Uup	Uuh	Uus	Uuo

Oct 12-12:18 PM

pg 45 examples

Determine what elements are denoted by the following electron configurations:



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Homework

Chemistry I Practice - "Electron Configurations"

Use the following electron configurations and your periodic table to identify the element:

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

4. Describe the method that you used to solve problems 1 - 3. Be specific.

Use the following clues to identify the element. Show any figuring in the space below.

5. This element has a 3p sublevel that contains 3 electrons.
6. This element has a 4s sublevel with 2 electrons for its outermost electrons.
7. This element has 1 electron in its 3d sublevel.
8. This element has 5 electrons in its 5p sublevel

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Oct 7-3:34 PM