Chemistry Guided Review/Questions Standard 1.3

(Periodic Table)

**Periodic Table**



The letters inside the table have no significance here. They are from another worksheet.

1. Horizontal rows are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Columns are called \_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_
3. Name group 1\_\_\_\_\_\_\_\_\_\_\_, 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 3-12\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 17\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 18\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Elements are arranged according to their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Elements within a group have the same number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Name the groups with the following ionic charges: +1\_\_\_\_, +2\_\_\_\_, +3\_\_\_\_, -3\_\_\_\_, -2\_\_\_\_, -1\_\_\_\_.
7. Label Zn and Ag with their charges.
8. As you go across the periodic table, the elements go from ( metals / nonmetals ) to ( metal / nonmetals ).
9. Draw in the metalloid line. Mark the six metalloids.
10. Where are the s, p, d and f sublevels?
11. Where are the most active metals?
12. Where are the most active nonmentals.
13. As you go across a period, the atomic size ( decreases / increases ).
14. As you go down a group, the atomic size ( decreases / increases ).
15. A negative ion is called a \_\_\_\_\_\_\_\_\_\_\_ and is ( larger / smaller ) that its atom.
16. A positive ion is called a \_\_\_\_\_\_\_\_\_\_\_ and is ( larger / smaller ) that its atom.
17. As you go down a group, the ionization energy generally (decreases / increases ).
18. Where is the highest electronegativity found? Which element. Why?
19. Where is the lowest electronegativity found?
20. A colored ion generally indicates a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Electron Configuration**



Draw the orbital notation, electron configuration and noble gas configuration for the following. Don’t forget HUND’S RULE, HUND’S RULE, HUND’S RULE!!!

1. Cl
2. O

**Lewis dot diagrams**



1. Calcium 5. Bromine
2. Potassium 6. Carbon
3. Argon 7. oxygen

 Aluminum 8. helium