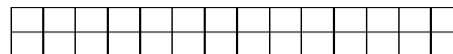
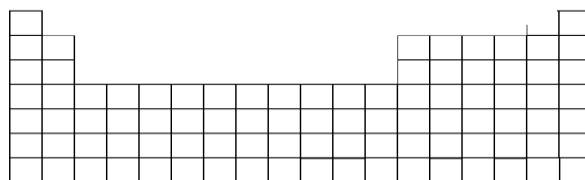


THE PERIODIC TABLE

Metal, Nonmetal, Metalloid

1. Label groups 1-18 & periods 1-7
2. Color Code & Label the metals, nonmetal, & 7 metalloids (semi-metals)
3. Characteristics of metals: (pg 18)
4. Characteristics of nonmetals: (pg19)

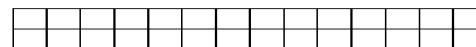
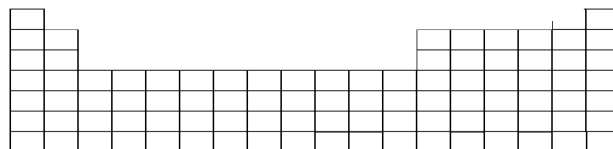


5. Characteristics of metalloids:(pg 19)

History of the Periodic Table:

6. Why are the following scientists important and how did each organize the periodic table(pg 133-135)
 - a. Mendeleev:
 - b. Mosley:

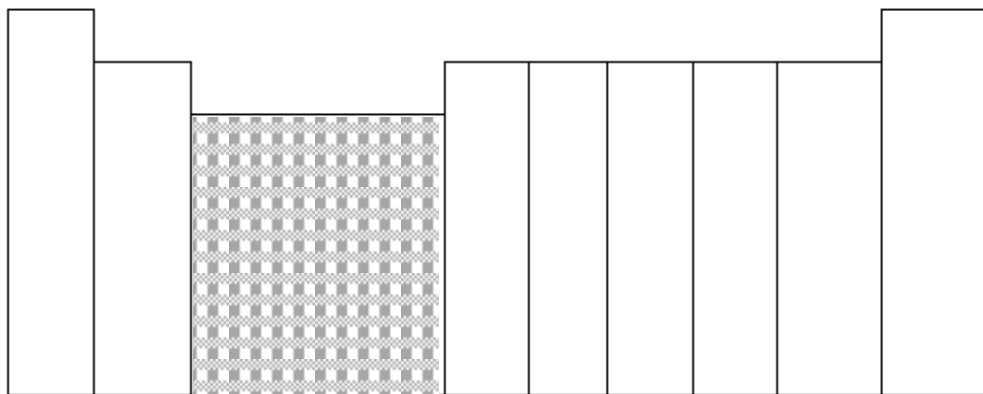
7. (pg 135-136)Periodic Law: When elements are arranged in order of increasing _____, elements with _____ properties end up near each other.
8. (pg 135) Elements in the same group on the periodic table have _____ properties. (pg 136) The patterns observed, the periodicity, can be explained by the arrangement of the _____.
9. Label groups 1-18 & Label periods 1-7 (pg 17)
10. Color Code& Label the following sublevels: s, p, d & f



The Electron:

11. Label groups 1-18
12. (pg 142, 146-147) Write the group electron configuration for each group in the s & p sublevels. (hint: use quantum letter n)
13. (pg 142, 146-147) Determine the number of valence electrons for each group in the s & p sublevels.

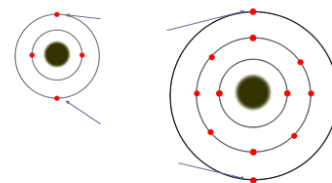
Every atom in a **period** has the same: _____



Every atom in a **group** has the same: _____

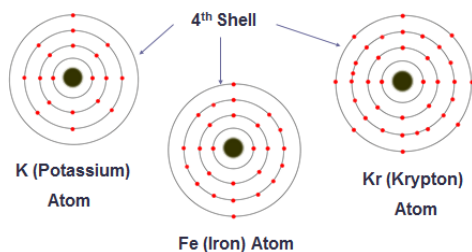
All atoms in group 2 have ____ electrons in their outer energy levels

| | |
|----|----|
| 4 | Be |
| 12 | Mg |
| 20 | Ca |
| 38 | Sr |
| 56 | Ba |
| 88 | Ra |



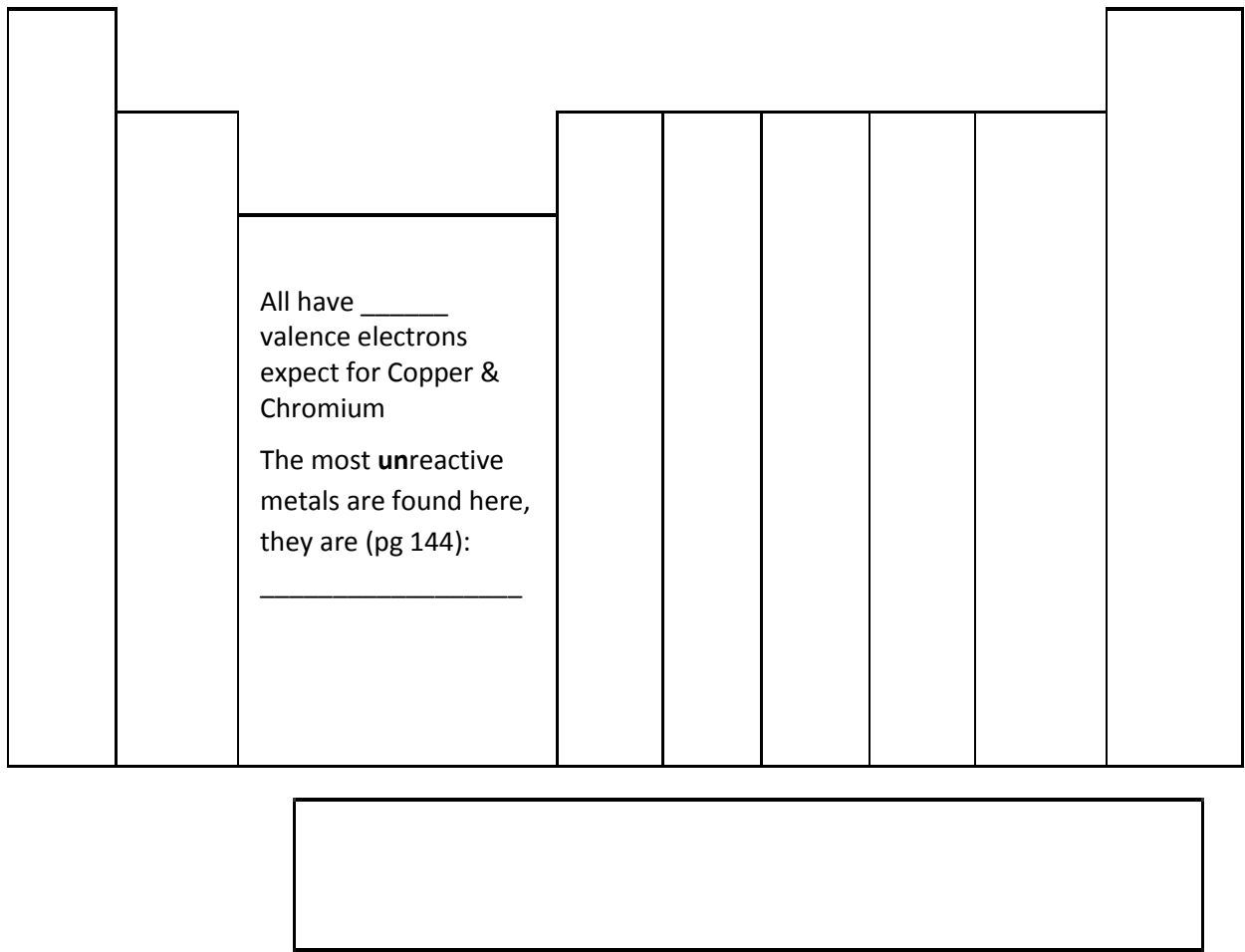
All atoms in Period 4 have _____ Energy Levels

| | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
| K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Kr |



The Breakdown of the Periodic Table:

- 14. Label groups 1-18
- 15. (pg 140-141) Color Code each section of the periodic table: hydrogen, alkali metals, alkaline earth metals, transition metals, halogens, Nobel gasses,& inner transition metal (the f-block)
- 16. Identify, on periodic table below, (pg 142) the most reactive metal group and (pg 147)the most reactive nonmetal group
- 17. Identify, on periodic table below, the group that all the elements are unreactive



Fun Facts

- 18. **The most abundant element in the earth's crust: oxygen
- 19. (pg 808) The most abundant metal is : _____
- 20. (pg 806) The element of life: _____
- 21. (pg 803) The most abundant element in air: _____