## Atomic Structure

Name - $\qquad$
1.) When dealing with a full atomic symbol as in the example below, what do we call the three letters $-a$,
$b, c$ ?
${ }_{b}^{a} X^{c}$
2.) Using the periodic table for help, fill in the following chart for the sub-parts of the following atoms.

| Symbol | Atomic <br> Mass | Atomic <br> Number | Number of <br> Protons | Number of <br> Neutrons | Number of <br> Electrons | Full <br> Atomic <br> Symbol |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ag | 36 | 18 |  |  | 18 |  |
| Al | 27 |  |  | 61 |  |  |
|  |  |  |  |  |  |  |
|  | 210 | 85 |  | 42 | 33 |  |
|  |  | 79 |  |  | 85 |  |
| $\mathrm{X}^{2+}=$ | 227 |  |  | 118 | 79 |  |
| $\mathrm{X}^{3+}=$ |  | 95 |  | 148 |  |  |

3.) Using the periodic table for help, fill in the following chart for the sub-parts of the following isotopes.

| Symbol | Number of <br> Protons | Number of <br> Neutrons | Number of <br> Electrons | Full <br> Atomic <br> Symbol |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Cl}-36$ |  | 19 |  |  |
|  | 29 | 33 |  |  |
|  |  | 34 | 27 |  |
| $\mathrm{Ca}-42$ |  |  |  | ${ }_{24}^{49} \mathrm{Cr}$ |
|  | 48 | 22 |  |  |
| $\mathrm{X}^{2+} \mathrm{Cs}$ |  | 60 |  |  |

