Give the full name and atomic number for each elemental symbol given then identify the following element as a metal, non-metal or metalloid and what family the element is in.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Symbol | Element | Atomic # | Metal, Non-metal, Metalloid | Family Name |
| Ar |  |  |  |  |
| Cl |  |  |  |  |
| Ba |  |  |  |  |
| Cs |  |  |  |  |
| At |  |  |  |  |
| Nd |  |  |  |  |
| Fm |  |  |  |  |
| Fe |  |  |  |  |
| Au |  |  |  |  |
| H |  |  |  |  |

Write the charges on the following Elements after they become cations or anions:

F Li N Mg

Be Br Al Mn

Sn Ba H OH

Zn PO4 NH4 Ne

How many valence electrons do the following elements have:

Ba O Al S K P

Ra I Mg N Na Se