Worksheet: Electron Distributions Review **Name**_____*KEY*_____

I. Fill in the blanks:

1. The orbital shaped like a "dumb-bell" is the ___*p*___ orbital, while the orbital shaped spherically is the ___*s*___ orbital.
2. How many sublevels are present in the third main energy level?___*3*___
3. What is the maximum number of orbitals in the "d" sublevel?___*5*___
4. The maximum number of electrons that can occupy an orbital is ___*2*___, provided they have ___*opposite*___ ___*spins*___.
5. The maximum number of electrons that can occupy an energy level is represented by the formula ___$2n^2$___.
6. The highly probable location of an electron within the atom is a(n) ___*orbital*___.

II. Write the electron configuration for the following:

1. Mg:___$1s^2 2s^2 2p^6 3s^2$___

2. As:___$1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^3$___

III. In the space below, show the orbital notation for Mg: