

## Adding Electrons

- An atom is **neutral** if there is no charge written behind the atomic symbol
  - This means that the # of Protons is **EQUAL** to the # of Electrons
- Electrons fit into **orbitals**
  - The s orbital always fills up first
    - s orbitals hold 2 electrons
  - The p orbital fills up second
    - p orbitals hold 6 electrons
- As atoms get bigger, they need more orbitals to hold their electrons
  - This atom has a total of 3 orbitals
    - 1-s fills up first (2 electrons)
    - 2-s fills up next (2 electrons)
    - 2-p fills up next (6 electrons)
- Lets use Ne as an example
  - Ne has an atomic number of 10, so it has 10 protons
  - It is neutral, so it also has to have 10 electrons
  - We would add the electrons in this order:

