

Modern Atomic Theory

Atomic Properties and the Periodic Table



Atomic Size

- The sizes of atoms vary.
- Atoms get larger as we go down a group and get smaller as we go from left to right.

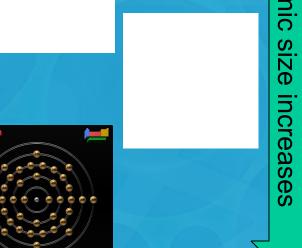
atomic size decreases

atomic size increases

Atomic Properties and the Periodic Table

 As you go down a group, the average distance of the electrons from the nucleus increases.

 Atoms get bigger as electrons, and thus energy levels, are added.



Atomic Properties and the Periodic Table

- As you go across a row (period) of the periodic table, the atoms are gaining electrons.
 - Since the number of protons also increases, the increase in positive charge pulls the electrons closer to the nucleus.
 - The electron "cloud" is drawn in.

atomic size decreases

