

Atom Worksheet

Notes

The Atom - Building Block of all matter.

- 1) Structure
 - a) Nucleus (Core) particles
 - i) Neutrons
 - (1) No Charge
 - (2) Strongly Bound to Protons
 - ii) Protons
 - (1) Positively Charged
 - (2) Number Identifies the element
 - (3) Strongly bound to Neutrons
 - b) Orbiting particles
 - i) Electrons
 - (1) Negatively Charged
 - (2) Farther out from nucleus, weaker the bond
 - ii) Multiple orbits dependent on number of electrons
 - (1) Outside orbit – valence shell
 - (2) Fewer than 4 electrons in valence shell = conductor
- 2) Types
 - a) Balanced
 - i) Equal number of Protons and Electrons
 - ii) Zero Charge
 - b) Unbalanced
 - i) Negatively Charged Ion - More Electrons than Protons
 - ii) Positively Charged Ion - More Protons than Electrons