

## **Unit #1: Matter and Bonding**

### **The Learning Goals For This Unit**

#### **1. The Atom**

- models (Dalton, Thomson, Rutherford, Bohr)
- #p,n,e
- isotopes, ions
- average atomic mass

#### **2. Periodic Trends**

- AR, IE, EA, EN, metal/nonmetal reactivity
- ionic radius

#### **3. Bonding**

- ionic bonding (Lewis structures)
- covalent bonding (Lewis structures) – pure, polar, coordinate, metallic
- properties (see lab)
- inter/intramolecular forces – predict mp/bp