10.1 Bonding
I can:
- ☐ describe a bond as metallic, non-polar covalent, polar covalent, or ionic based on the difference in electronegativity between the two bonded atoms.
  - Metallic Bond: Metal + Metal
  - Ionic Bond: Cation + Anion
  - Covalent Bond:
    - Polar: Nonmetal + Nonmetal
    - Non-Polar: Weak + Weak or Strong + Strong
- ☐ explain the role of electrons in a metallic, non-polar covalent, polar covalent, or ionic bond formation.
- ☐ draw the Lewis structures of neutral atoms and ions.
- ☐ draw the Lewis structure representation of an ionic compound.
- ☐ describe an ionic solid and its properties.
- ☐ describe a metallic solid and its properties.

10.2 Lewis Structures
I can:
- ☐ draw the Lewis dot structure of covalent compounds using the octet rule.
- ☐ draw the Lewis dot structure of covalent compounds containing double and triple bonds.

10.3 Intermolecular Forces
I can:
- ☐ describe a covalent compound as a polar or non-polar molecule.
  - A compound is polar if it has polar covalent bonds that do not cancel out.
- ☐ determine what type of intermolecular forces are involved in a molecular solid and its properties.
  - London Dispersion Forces
  - Dipole Dipole Interactions
  - Hydrogen bonding
- ☐ list examples of network covalent solids and describe their properties.
- ☐ describe a molecular solid and its properties.
- ☐ categorize the type of solid a substance forms.
  - Metallic Solid
  - Ionic Solid
  - Network Covalent Solid
  - Molecular Solid