Intermolecular forces are the attractive or repulsive forces between molecules. They are separated into two groups; short range and long range forces. Short range forces happen when the centers of the molecules are separated by three angstroms ($10^{-8}$ cm) or less. Short range forces tend to be repulsive, where the long range forces that act outside the three angstroms range are attractive. Long range forces are also known as Van der Waals forces. They are responsible for surface tension, friction, viscosity and differences between actual behavior of gases and that predicted by the ideal gas law. Intermolecular forces are responsible for most properties of all the phases. The viscosity, diffusion, and surface tension are examples of physical properties of liquids that depend on intermolecular forces. Vapor pressure, critical point, and boiling point are examples of properties of gases. Melting and sublimation are examples of properties of solids that depend on intermolecular forces.