**Notes on Chapter 3**

Formulas:

1. Hooke’s Law—F=kx
2. Pressure=force/area (P=F/A)
3. Hydraulics—F of input/A of input=F of output/A of output
4. Boyle’s law
5. Charles’ law
6. Amonton’s law
7. 3.1
   1. Atoms—
   2. Molecules—
   3. Kinetic theory of matter
   4. Cohesion—
   5. Brownian motion—
   6. Diffusion--
   7. Osmosis—
8. 3.2
   1. Crystalline solids
   2. Amorphous solids
   3. Properties of solids
      1. Elasticity
      2. Plasticity
      3. Hardness
   4. Hooke’s law—F=kx (force=constant x amount of deformation) (in newtons and meters)
9. 3.3
   1. Adhesion
   2. Cohesion
   3. Capillarity
   4. Pressure (pascal the SI unit)
      1. Gravitational pressure
      2. Compression
   5. Pascal’s Principle
10. 3.4--Gases
    1. Compressibility—ability to be squeezed
    2. Boyle’s law—P1V1=P 2 V2
    3. Charles’ law—V1/T1=V2/T2
    4. Amonton’s law—P1/T1=P2/T2