Optics- day 10

Refraction

refraction- the bending of light when it travels from one medium to another

The Speed of Light:

vacuum/air- 3.00 X 108 m/s

water- 2.26 X 108 m/s

acrylic- 1.76 X 108 m/s

angle of refraction- the angle between the refracted ray and the normal

Rules for Refraction:

1. The incident ray, the refracted ray and the normal all lie in the same plane.

The incident ray and the refracted ray are on opposite sides of the line that separates the 2 media.

2. Light bends *toward* the normal when the speed of light in the second medium is less than the first.

Light bends *away* from the normal when the speed of light in the second medium is greater than the first.

Partial reflection and refraction- when light is both reflected and refracted

Read pages 515-519, answer questions #1-7 on p. 519