**Images and Ray**

**Diagrams.**

**Light can form two kinds of images: Real and virtual.**

**Real images: are images formed from light that has meets at a specific point (focal point).**

**Real images go in and out of focus. Example: image seen looking through a microscope or telescope.**

**Virtual images: are images formed from light that has not meet at a specific point. Example: image seen when you look in the bathroom mirror.**

**Ray diagrams: are pictures that illustrate where an image can be found.**

**Ray diagrams are made of a picture of a lens, light that travels parallel to the focal point of a lens and light that travels through the middle of a lens.**

**Light that travels through the middle of a lens has no “net” change in direction and therefore goes straight through the middle.**

**Light that travels parallel to the focal point of a lens meets at the focal point on the other side of the lens.**

 **F.P.**

**The point where these two different kinds of light meet is where the image is located.**

**Object Image**

**An inverted, Real image is created because the light from the top of the object meets towards the bottom on the opposite side of the lens.**