



LAWS OF REFLECTION AND REFRACTION

Guide Questions

40% of the Written Report (Group Report) grade

1. Based on your experiment results, what is the relationship between the angle of incidence and the angle of reflection? State the two parts of the Law of Reflection.
2. In the second part of the experiment (Law of Refraction), as light travels from air to lens, does the light ray bend towards or away from the normal? If light travels from lens to air, instead, does the refracted ray bend toward or away from the normal?
3. Which medium has the higher index of refraction (air or lens)? In which medium does light travel faster?
4. All electromagnetic waves travel at the same speed in vacuum. However, it is observed that in glass, red light travels faster than violet light. If white light travels from vacuum to glass, which light component (red or violet) has the smaller angle of refraction?
5. What does the slope of the graph of $\sin(\text{angle of incidence})$ vs. $\sin(\text{angle of refraction})$ represent?