

Lab: Light Refraction, Part Two

When light moves from one medium into another, it appears to change direction. We call this change of direction “refraction.” We would like to explore the refraction of light through water.



Questions:

What determines how much light refracts when it enters water?
 What is the quantitative relationship between this factor and the refraction?

Pre-lab Discussion	Whole Class	5 minutes
<ul style="list-style-type: none"> Briefly discuss the methods your class has used in the past to identify quantitative relationships. Make it clear that you'd like for them to improve upon what they have done in the past, rather than just repeat it. The usual questions: <i>How are you going to illustrate your data? How are you accounting for uncertainty and variation in the measurements? What seems to be the behavior or features of this relationship? How can you quantify this relationship so that it can be communicated to others?</i> 		
Analysis	Groups of 4	50 minutes
<ul style="list-style-type: none"> Plan how you will respond to students whose technique is to tell Excel to do a functional fit. 		
Group Presentations	Whole Class	30 minutes
Class Discussion	Whole Class	10 minutes
<ul style="list-style-type: none"> Come to a class consensus, if possible. 		
Writing the Report	Groups of 4	15 minutes