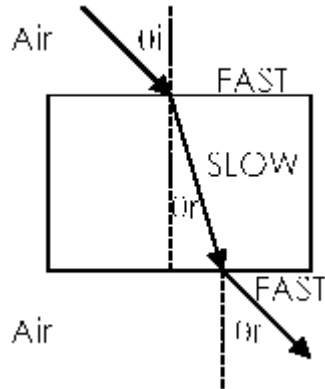


Wave Quiz 2 Tips - [Practice Questions](#) | [Refraction \(FlashQuiz 3.0\)](#) | [Refraction Quiz 2](#)

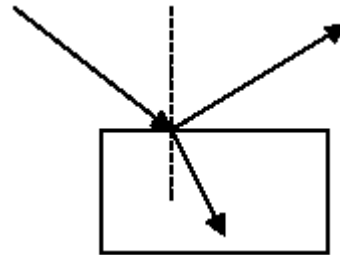
1. Measure the angle of incidence (theta i).
Measure the angle of refraction of light IN the medium (theta r)



2a) Label the reflected ray and the refracted ray

2b) What is wrong with this picture below? (hint: measure angles)

Outside Medium - Air Inside medium - Lucite



3. The tallest person that can see her whole body in a .4 meter mirror is _____ Draw a picture

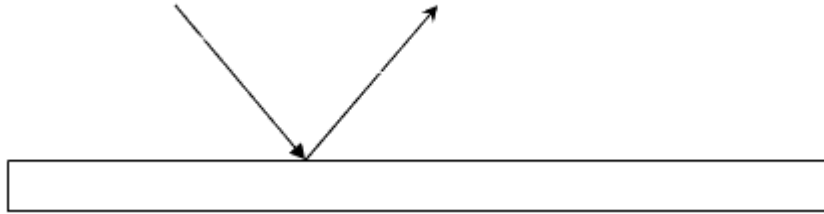
4. Light starts in **medium x** (top) and enters **water (bottom)** at an angle of 20 degrees. The angle of refraction is 40 degrees. What is the index of refraction of medium x. Draw a picture showing how light would bend as goes from medium x to water.



5. What kind of reflection produces an image? _____

6. What kind of reflection doesn't produce an image? _____ Why?

7. Measure the angle of incidence _____ and the angle of reflection. _____ (hint: draw normal first)



8. In refraction, if the **angle of refraction is smaller than the angle of incidence**, what does that tell you about the **speed** and **index of refraction** of the second medium? **faster? slower? same?**

a. if the angle of refraction is greater than angle of incidence? - second medium is **faster? slower? same?**

b. if the angle of refraction = angle of incidence? - second medium is **faster? slower? same?**

9. What is the speed of light in Lucite? (see reference table for equation) _____

10. Which medium on your reference table is the slowest? _____ How do you know?

fastest? _____ How do you know?

11. What if light in a slow medium, bordering on air, comes in at an angle **greater than its critical?** Draw a picture.

Equal to its critical angle? Draw a picture.

12. What angle of incidence between 2 media never produces refraction ? _____ Draw.