

Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas and big questions.

Objective(s):

- *To understand why light refracts as it moves from one medium to another.*
- *To apply the Law of Refraction, called Snell's Law, as light moves from one medium to another with differing optical density.*
- *To use Snell's Law to calculate the critical angle of light between two different media.*

Notes:

During the video segment, use words, phrases or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You can ask yourself: "If I was going to explain this to someone else, what would I say?"

Answer the following.

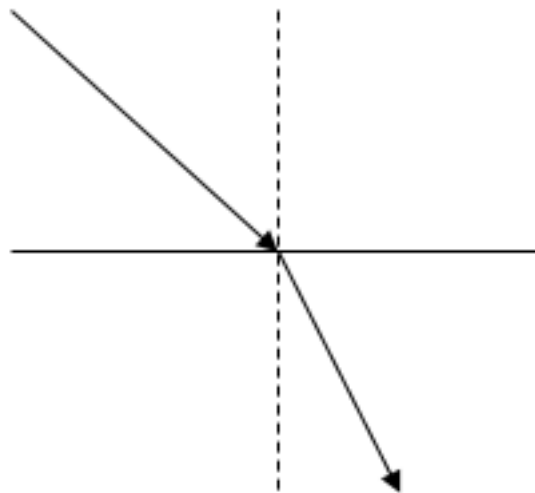
1. Define refraction in your own words.

2. Why does light bend as it moves between two different transparent media?

3. The greater the index of refraction of a material, the _____ the material bends the light.

4. The greater the index of refraction of a material, the _____ the speed of light in that medium.

5. On the diagram below, label the incident light ray, the angle of incidence, the refracted light ray, and the angle of refraction.



6. If light travels into a slower medium from a faster medium, the light bends _____ the normal line.

7. If light travels into a faster medium from a slower medium, the light bends _____ the normal line.

Answer the following.

8. Write Snell's Law in the space below:

9. Define critical angle in your own words.

10. If light traveling into a faster medium has an angle of incidence greater than the critical angle, the light _____ back into the original medium.

11. What wavelength of visible light bends the most?

12. Name two applications of refraction that are mentioned in the segment.
