

Name _____ Date _____
Teacher _____ Period _____

Physics - Refraction Worksheet

1. Using Table 17-1 in your book, determine the speed of light in the following substances:
 - a. Crown Glass

 - b. Water

 - c. Diamond

2. The speed of light in one type of plastic is 2.50×10^8 m/s. What is the index of refraction of the plastic?

3. Light in air is incident upon a piece of flint glass at an angle of 35° . What is the angle of refraction?

4. A ray of light passes from air to water at an angle of 50.0° . Find the angle of refraction.

5. A ray of light is incident on a piece of quartz at 40.0° .
- What is the angle of refraction?

 - Compare your answer for 5a to your answer for your problem 3. Does flint glass or quartz bend light more?
6. A block of unknown material is submerged in water. Light in the water is incident on the block at an angle of 35° . The angle of refraction is 23° .
- What is the index of refraction of the unknown material?

 - What is the speed of light in the unknown material?