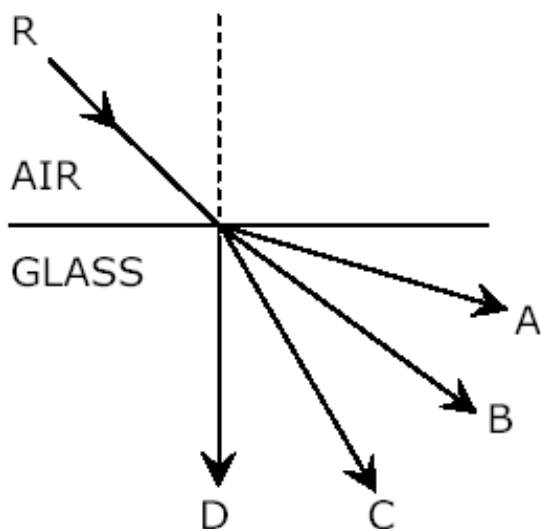


Wave Test 2 Tips [[Wave Quiz Tips](#)] [[Wave test 2 Review Questions](#)]

1. List 4 reasons why we believe light has a wave behavior (DDIP)
2. How far can light travel in a vacuum for 20 seconds?
3. Name the 6 colors of the spectrum in order.
4. Which color has the largest frequency _____, smallest frequency _____, (see reference)
largest wavelength _____, and smallest wavelength _____?
5. a) Which color is the fastest in glass? _____ b) Slowest? _____
6. a) If light comes from air and enters glass, which color is bent the most? _____
b) The least? _____
7. What kind of reflection produces an image? _____
8. What color of light has a frequency of 6×10^{14} Hz? _____
9. What kind of light did Thomas Young use in his famous double slit experiment? _____
10. Because light can be polarized it proves that light is a _____ wave.
11. How does the color of a fast moving star change when it turns and comes toward the earth?
_____ Away from the earth? _____
12. **a)** Do the dangerous electromagnetic waves tend to have a high or low frequency? **b)** Name two dangerous electromagnetic radiations. _____
- 12 **c)** All electromagnetic radiations have the same _____ in a vacuum.
- 12 **d)** Electromagnetic radiation is created by accelerating _____.



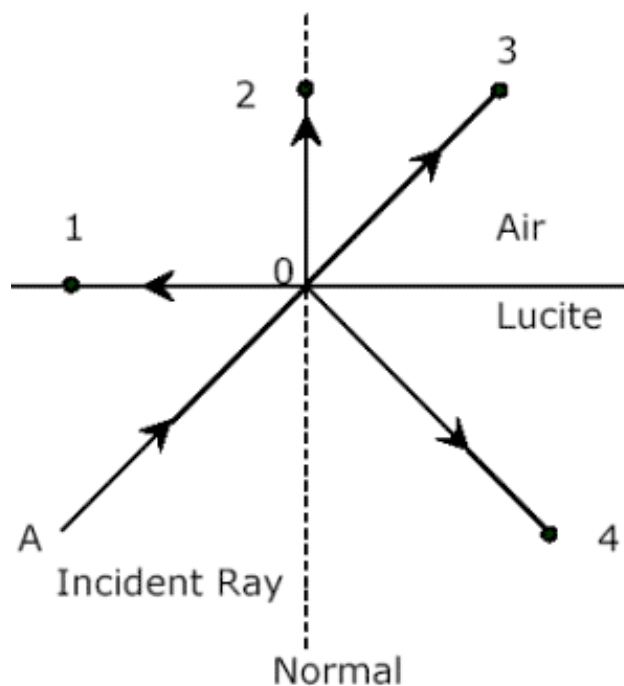
13. Where will a ray of light go when it passes from air to glass? (see picture below) A B C D

13 **a)** Which wave characteristics change when light is refracted? direction? ___ wavelength? ___ frequency? ___ period? ___ speed? ___

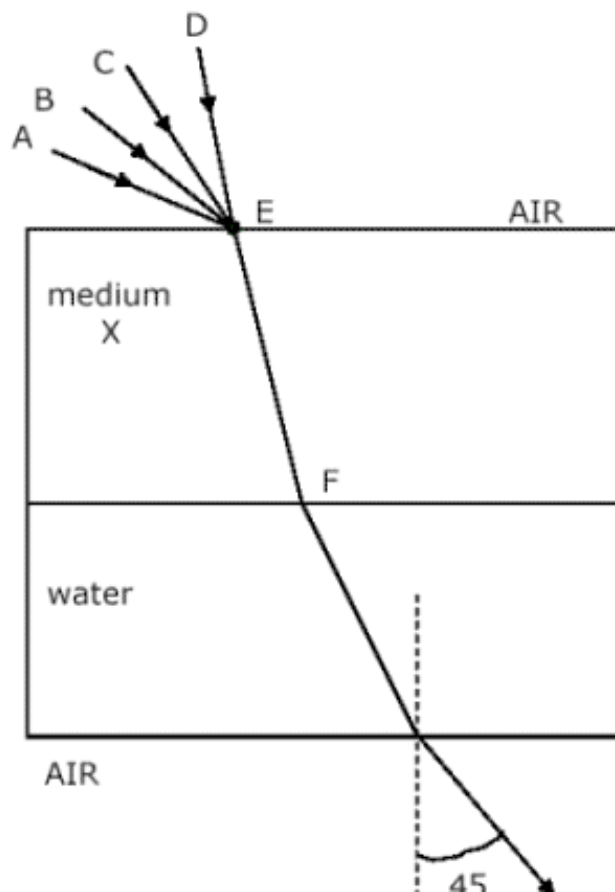
14. A ray of light (A) in Lucite intersects a boundary with air.

a) Which ray shows the path of reflection? _____

b) Which ray(s) are not possible? _____

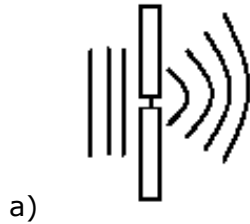


15. Which incident ray, if any, is correct? A B C D



16. Name the wave behavior.

Wave Behavior

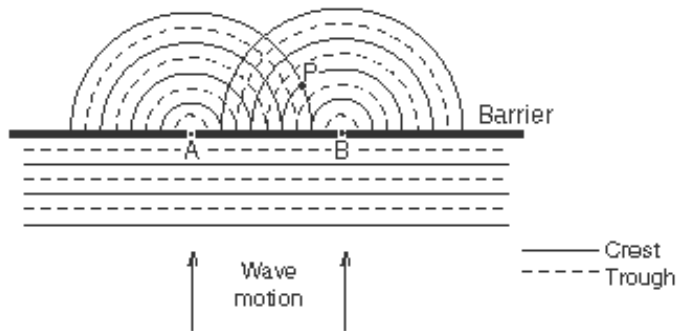


b)



X

c)



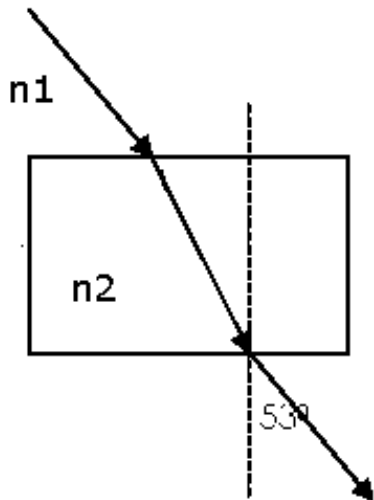
17. What do each of the following pictures show?

a)

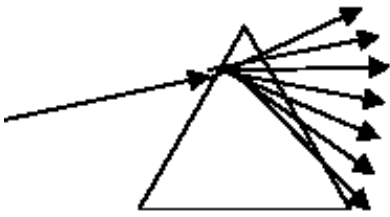


_____ reflection

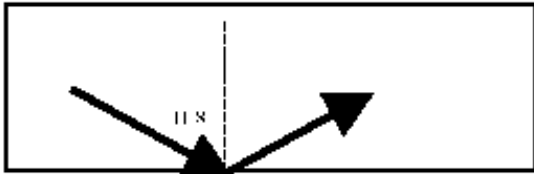
b)



c)



d)



e)