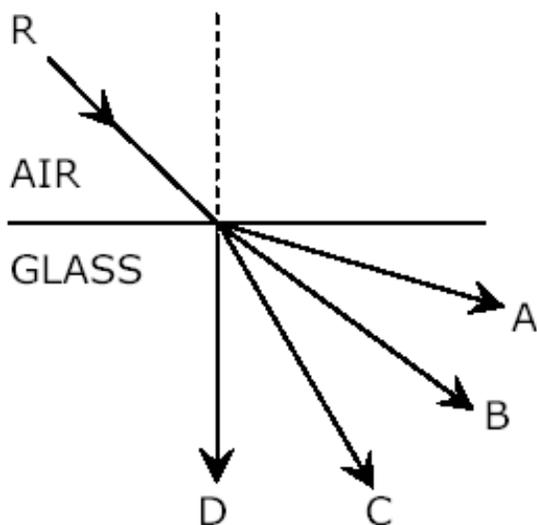


## Wave Test 2 Tips [ [Wave Quiz Tips](#) ] [ [Wave test 2 Review Questions](#) ]

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  $6 \times 10^{14}$  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 \_\_\_\_\_.



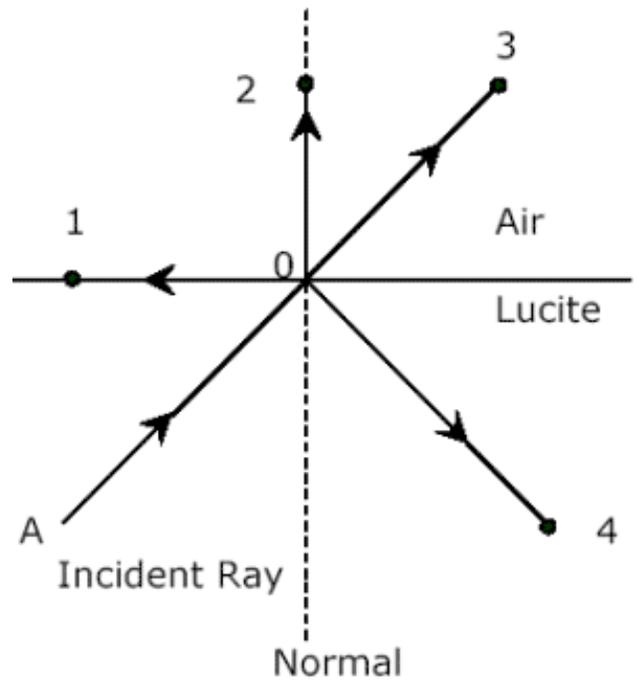
13. Where will a ray of light go when it passes from air to glass? ( see picture below) A B C D

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

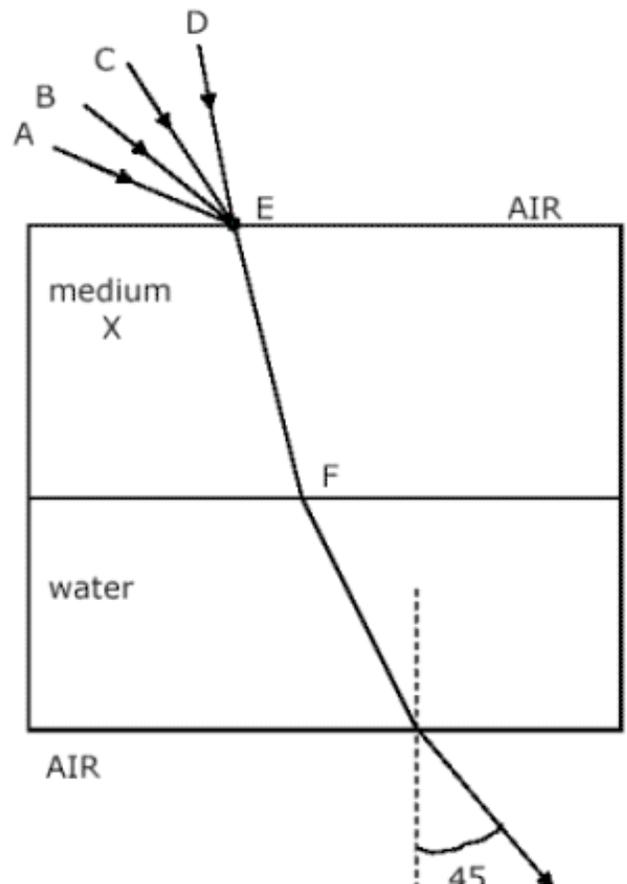
14. A ray of light (A) in Lucite intersects a boundary with air.

**a)** Which ray shows the path of reflection? \_\_\_\_\_

**b)** Which ray(s) are not possible? \_\_\_\_\_

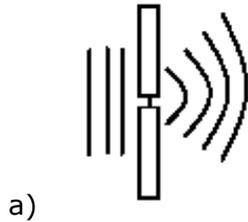


15. Which incident ray, if any, is correct? A B C D



16. Name the wave behavior.

Wave Behavior



\_\_\_\_\_

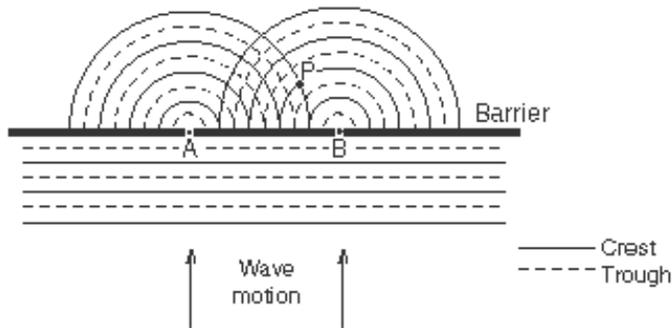
b)



X

\_\_\_\_\_

c)



\_\_\_\_\_

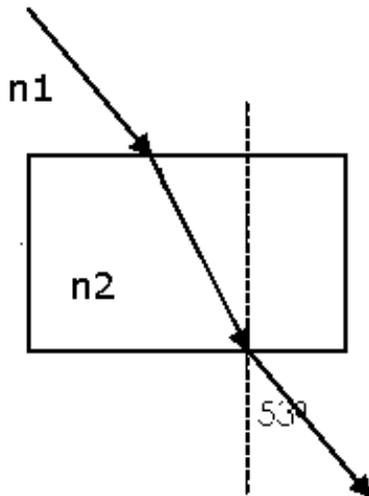
17. What do each of the following pictures show?

a)



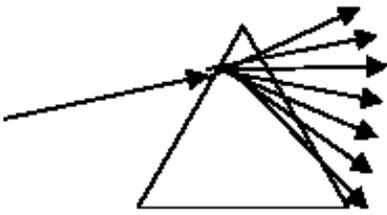
\_\_\_\_\_ reflection

b)



\_\_\_\_\_

c)



\_\_\_\_\_

d)



\_\_\_\_\_

e)



\_\_\_\_\_