

Mathematical relationship between  $n$  &  $v$  is \_\_\_\_\_

$$n = \frac{c}{v}$$

Which substance on the Absolute Indices of Refraction slows down light the most? \_\_\_\_\_ the least? \_\_\_\_\_

The more light is \_\_\_\_\_, the more it \_\_\_\_\_

1. Prediction  $\theta$  ref from  $\theta$  in

a. Snell's Law \_\_\_\_\_ On Reference Table

1 – incident medium      2 – refractive medium

$$n_1 \sin \theta_1 = n_2 \sin \theta_2$$

**Air**                      **Lucite**

b. \_\_\_\_\_

1 – incident medium  
2 – refractive medium

When a light changes media, its \_\_\_\_\_

NOT its \_\_\_\_\_

c. \_\_\_\_\_

2. Critical Angle - **angle of** \_\_\_\_\_ for which the

\_\_\_\_\_ **equals** \_\_\_\_\_ when

light travels inside one medium that \_\_\_\_\_

\_\_\_\_\_

$\theta_c$  for Lucite

$\sin \theta_c =$  \_

3. Total Internal Reflection - (High n to Low n)

When  $\theta_1 =$

When  $\theta >$

When  $\theta <$

Lucite  $\theta_c = 41.8$

$\theta_1 > 41.8$  \_\_\_\_\_

$\theta_1 < 41.8$  \_\_\_\_\_

1. Dispersion - \_\_\_\_\_ into it's  
component wavelengths (colors)

Each color has a different \_\_\_\_\_ (different speeds)

Dispersive Medium - a medium in which the velocity of a wave  
depends on its frequency

ex) \_\_\_\_\_

Nondispersive → \_\_\_\_\_