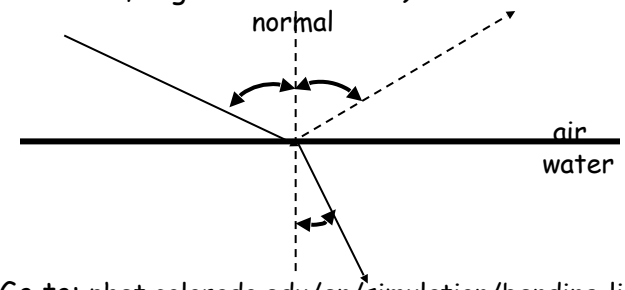
8th grade Science EAMS	Bending Light - PhET	Date Name	Period

Label the drawing below. (refracted beam, reflected beam, incident beam, angle of reflection, angle of incidence, angle of refraction)



Go to: phet.colorado.edu/en/simulation/bending-light

Tap the **"play"** button, Tap **"Intro"**

1. **Push the red button** on the laser pointer to get a beam of light.
2. **Use the protractor** on the bottom left to measure the angle.

The top part of the screen and the bottom are each a different **medium** (material)

3. **Draw** what happens to the light ray when it travels through AIR then into WATER. **Write the angle of reflection in your drawing and the angle of refraction and angle of incidence.** Use a RULER.

Air
Water

4. **Draw** what happens to the light ray when above and below the line are both WATER. **Write the angles.**

Water
Water

5. **Draw** what happens to the light ray when above and below the line are both AIR. **Write the angles.**

Air
Air

6. Change the top material to Glass and the bottom material to Water. **Draw** what happens to the light ray. **Write in the angles.**

Glass
Water

7. **Draw** what happens when the light travels from Mystery A into Mystery B. **Write in the angles**

Mystery A
Mystery B

What is Mystery A_____
What is Mystery B_____

8.When light travels through the same medium, it is NOT _____.

On the bottom tap the "Prisms"
Explore the different aspects of this simulation.

9.Draw what happens with a triangle prism.

10.Draw what happens when you use two prisms.

11.Change the environment (top right): _____
Change the prism. Draw a picture:

12.On the back of this paper draw the most complicated picture you can make with the prisms.