**Light Refraction and Snell’s Law notes**

Draw the picture:

Where would you throw the spear to catch the fish??

 We will find out ☺

Now draw another picture:

ni = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

nr = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Өi = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Өr = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* If you are going from a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ medium to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ medium, the object will bend \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the normal.
* If you are going from a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ medium to a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_medium, the object will bend \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_from the normal.

SNELL’S LAW

Example: Find the angle of refraction for a ray of light that enters a bucket of water from air at an angle of 25o to the normal.

Index of refraction of air = 1

Index of refraction of water = 1.333

Drawing:

Formula:

Plug in numbers:

Answer:

Example 2: A light ray is going through the air and strikes olive oil (n = 1.37) at a 47ᵒ angle. What is the angle of refraction?

Drawing:

Formula:

Plug in numbers:

Answer: