**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:

