

Refraction

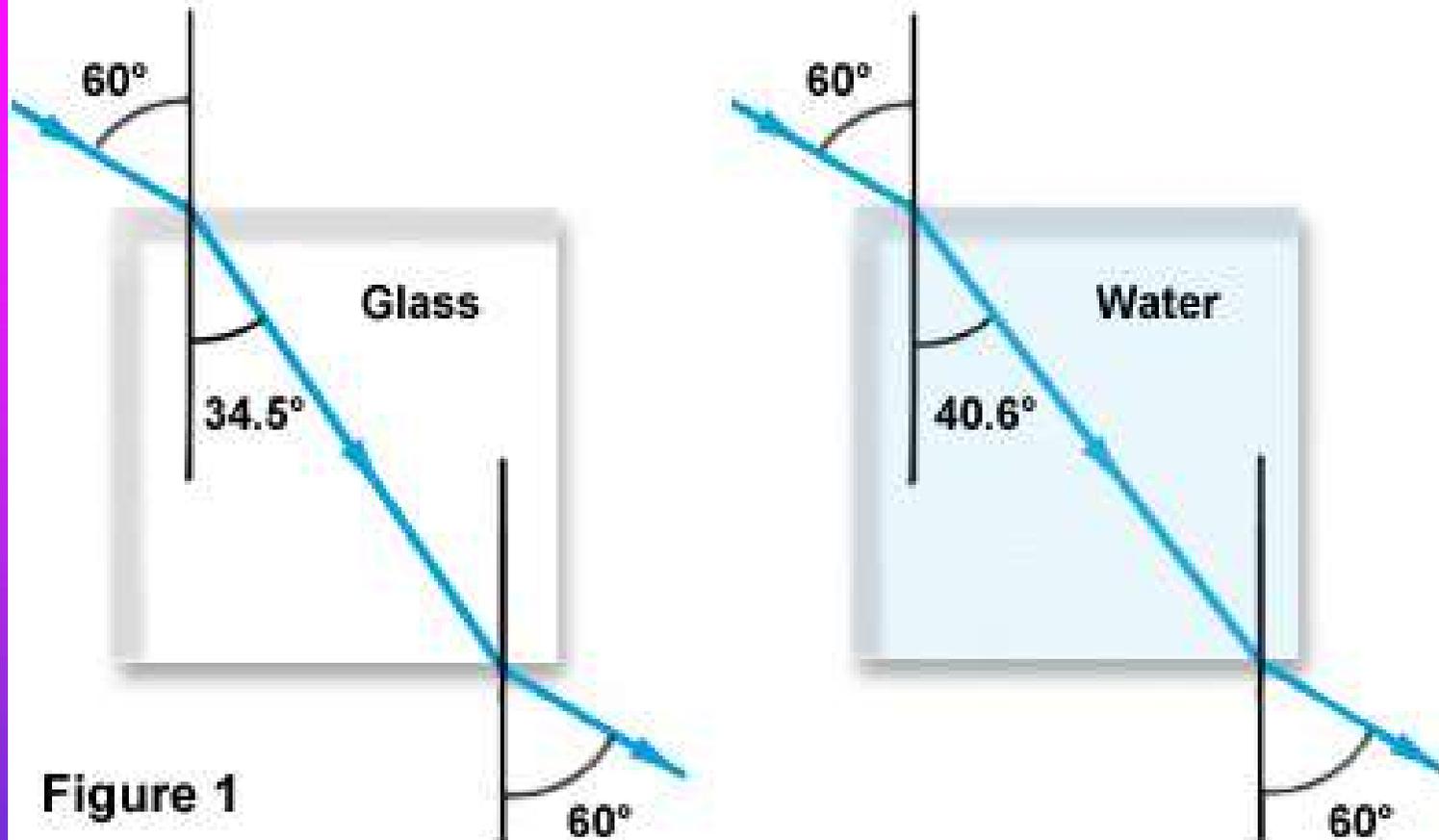
- This is the bending of light rays
- Happens because the rays change speed.
- When they enter a **more dense** medium (glass, water,) they **slow** down.
- When they enter a **less dense** medium – like air, they **speed up**.

Light Refraction by Water



Figure 3

Light Refraction Through Glass and Water



<http://micro.magnet.fsu.edu/primer/java/refraction/index.html>

Image Formation with a Convex Lens

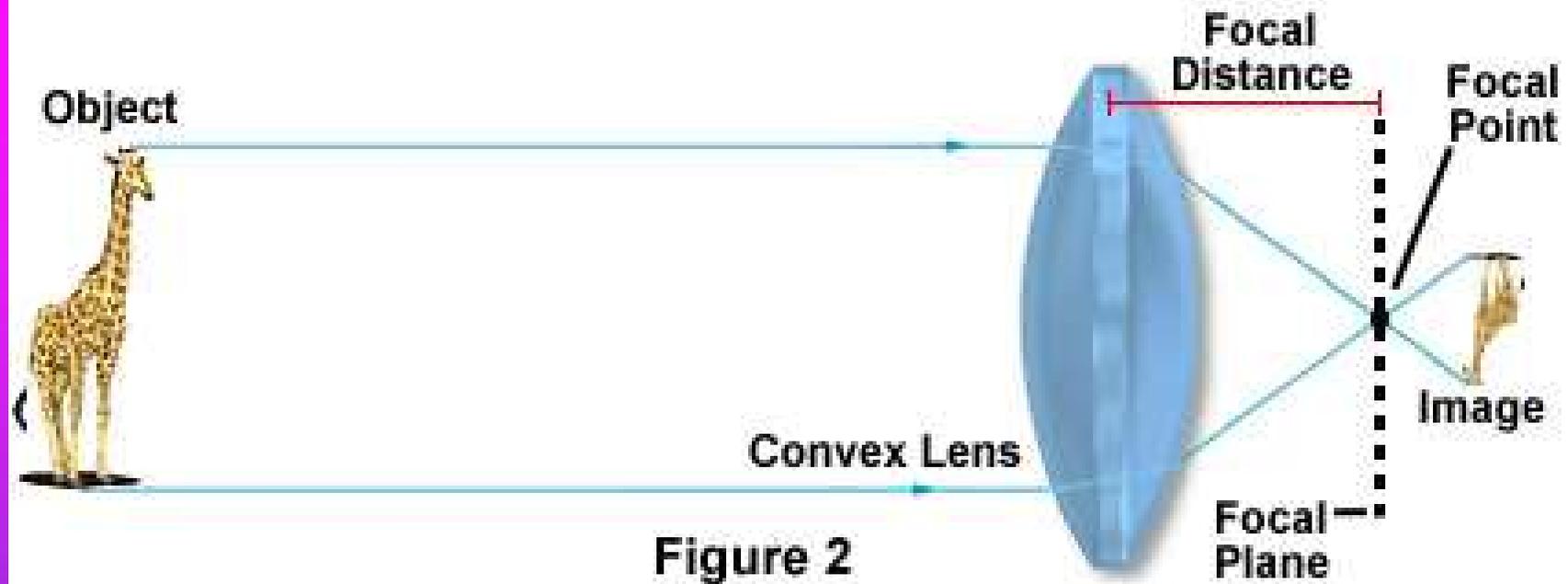
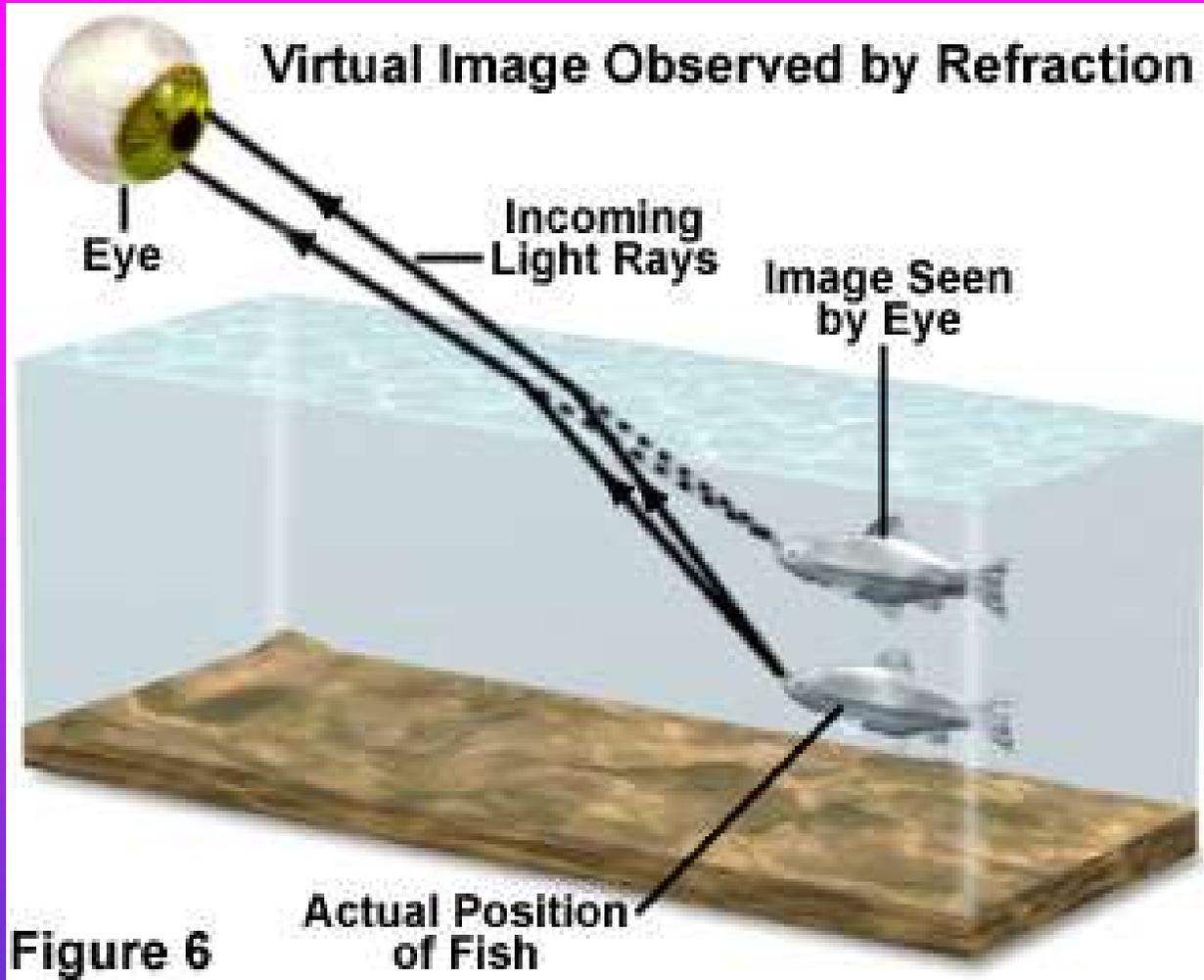


Figure 2

Total internal reflection and refraction

- When an object is viewed through water the image we see is changed because of the way light waves behave as they pass from the water into the air.



CLICK HERE FOR INTERACTIVE SITE

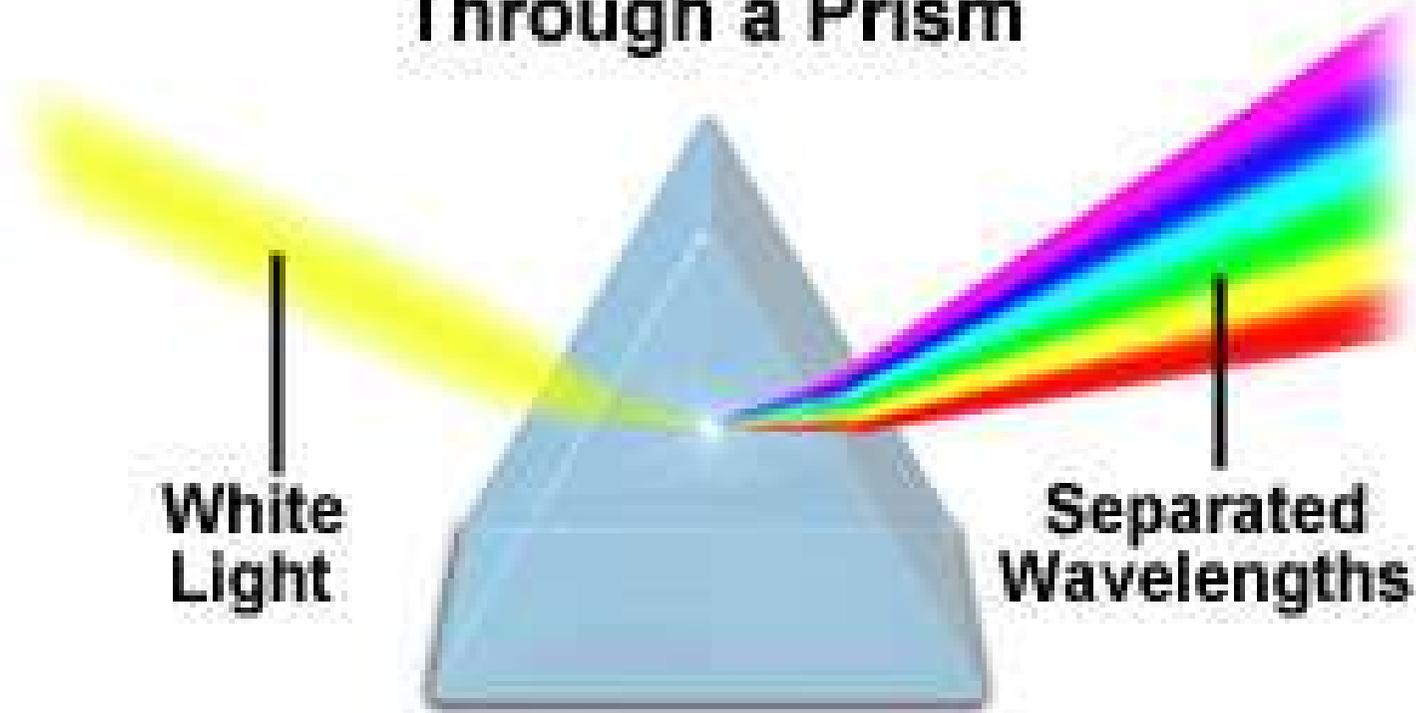
<http://micro.magnet.fsu.edu/primer/java/refraction/fishtank/index.html>

COLOUR

White light is made up of the seven colours of the rainbow.

Red, orange, yellow, green, blue, indigo, and violet.

Refraction of Light Through a Prism



White
Light

Separated
Wavelengths

Figure 5

RAINBOWS

- We see rainbows because the light is first refracted by the raindrop and then reflected off the back of the raindrop.

