Rainbows

Snell's Law:

Fig. 4.10: Two solar rays (or rainbow rays as they are called) are refracted and internally reflected by two raindrops. The rainbow ray is the brightest and has the smallest angle of deviation of all the rays incident on the rainbow. The different colors of the primary rainbow are produced by light refracted and reflected with minimum deviations in many raindrops. An observer sees the colors of the rainbow due to the refraction and reflection of sunlight from these droplets that happen to be in suitable locations. The primary rainbow is a mezmerizing produce by passage of light through the circular cross sections of nearly raindrops.