The Light Guide consists of a piece of clear plastic wound spirally. Turn on the light. Notice that the light travels through the plastic and not out the sides. This is because of Total Internal Reflection. Hold your hand at the end of the tube to see that the light has traveled all the way through.

Total Internal Reflection results from the geometry and composition of the plastic. Light rays will only be transmitted if they strike the material at an angle which is less than what is called the critical angle. In this case, the angle of incidence (angle at which the light rays hit the plastic or any material) is always greater than the critical angle.