



## What I Have Learned

**To help you fully understand the wave behavior of electrons, you must first understand the dual nature of light. Test your ability and apply the principles you have learned in the previous lesson by completing the sentences below.**

Light has a \_\_\_\_\_ nature. Sometimes, it behaves like a particle called \_\_\_\_\_. Light's particle-like traits are best explained by the \_\_\_\_\_, the theory that \_\_\_\_\_ won his Nobel Prize for.

Light also behaves like a wave, which explains how it \_\_\_\_\_ or how it bounces off in an obstacle. This results in the formation of an \_\_\_\_\_ in a mirrored surface.

Light, like any wave, is known to undergo \_\_\_\_\_ when it passes from one medium to another medium with different optical densities. A light wave will bend \_\_\_\_\_ the normal when it passes from an optically denser to a less dense medium. On the other hand, if it is moving from a less dense to a denser medium, the light wave will bend \_\_\_\_\_ the normal.

\_\_\_\_\_ is the splitting of white light into rainbow colors upon passing through a glass prism.

\_\_\_\_\_ is the deflection of light by the dust particles and gas molecules.

\_\_\_\_\_ is the superposition or the meeting of two waves. It can either be \_\_\_\_\_ (e intensity of the wave increases) or \_\_\_\_\_ (often decreases the resulting displacement of a wave).

\_\_\_\_\_ is the bending of light around an obstacle.