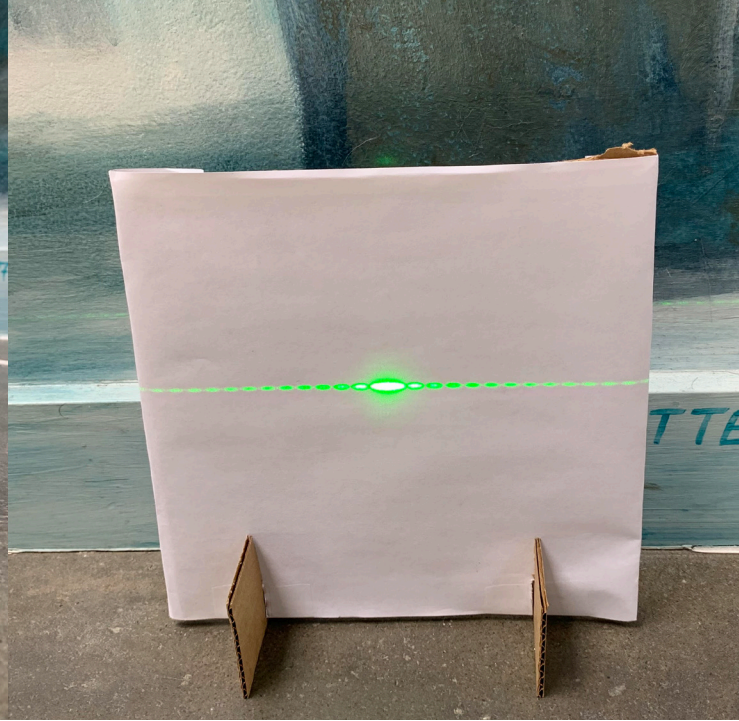
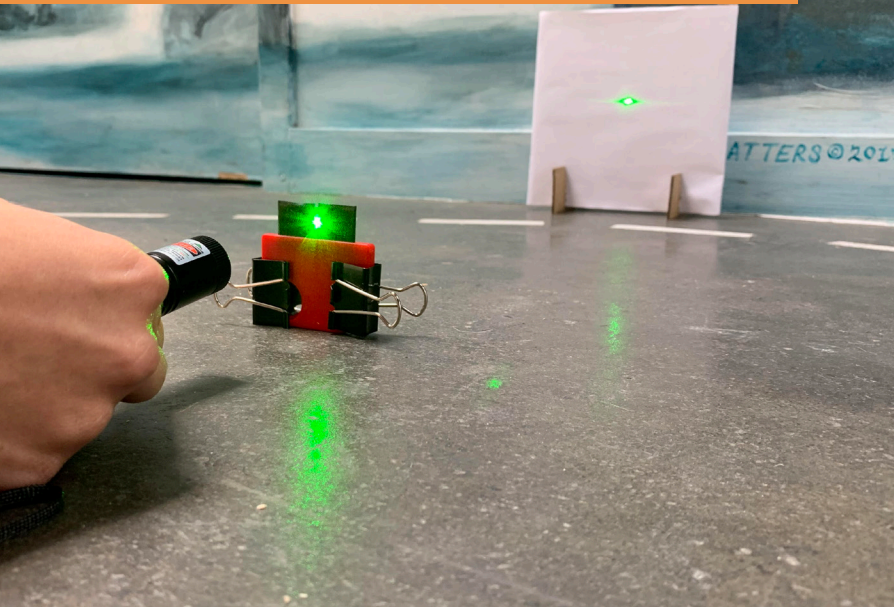


Double Slit Experiment



Description:

This experiment demonstrates some of the properties of light: diffraction and interference. When the light passes through the two slits, it will react with itself and create the pattern on the right, with alternating light and dark. It is quick and easy to make at home with a pet toy laser, black tape and a lice comb, or you can buy a specific diaphragm with more precise slits. Assembly takes around 10 minutes.

Budget:

Materials:

Labor

Total:

Eco-Luxe

\$50

20 minutes

\$50 + 20 minutes

DIY

\$15

10 minutes

\$15 + 10 minutes

Why This Matters

This experiment gives us a better insight into how light behaves. Modern technology uses this property in a variety of ways. Reading a CD requires constructive and destructive interferences to code information, and sunglasses use a coating which will "destroy" certain unwanted frequencies, such as UV rays.

What Can I Do?

Get excited about energy!

Visit matteroftrust.org and its Eco-Hub for more information.

Make one of your own, and play with different distances, number and sizes of slits to see how the diffraction pattern changes!