

# **Wave Properties Activity for Kids**



## **Candy Wave DIY**



Duration: 30-60 min



Difficulty: Easy



Cost: \$0 to \$10

Build a model that demonstrates wave properties using candy!

#### **Material List**

- 50 BBQ skewers
- 100 Gummy candies
- Roll of duct tape
- Glass of water
- 1 Ruler
- Structure to anchor the duct tape like a table

### **Instructions**

- Carefully place one gummy candy on each end of each skewer (caution: sharp!).
- 2 Lay down a 5-foot long piece of tape (sticky side up) across a table.
- Find the center of the skewer and tape it down starting at one end.
- 4 Use a ruler to place additional skewers 2 inches apart along the tape.
- When done, carefully put another piece of duct tape on top of the skewers to seal them in.
- 6 Anchor the ends of the model to structures so the wave model is suspended between them.
- Experiment with waves by tapping the skewer on one side.

## **How It Works**

Because all the skewers are linked together, when energy is added to the system by tapping one skewer, it is transferred along the length of the model through a wave. The gummy candies make it easy to see the wave. By watching the gummy candy you can see the amplitude and wavelength. Adding more energy to the system (tapping it harder) will cause the amplitude (height of the wave) to increase. If you move the skewer up and down faster, the wavelength (distance between the wave peaks) gets smaller!