

Candy Wave Model Instructions

Activity:

Make a candy wave model and move it to see how energy is transferred along the length of the model through a wave.

<https://www.generationgenius.com/activities/wave-properties-activity-for-kids/>

Materials:

- 12-ounces of gumdrop-like candy
- 16 feet of duct tape
- 50+ 12-inch skewer sticks
- Two 1 x 12-inch wood dowels
- Ruler
- Pencil (optional)

1

Push one candy onto each end of every skewer.

2

Measure and cut one 8-foot strip of duct tape and place it sticky side up on a flat, long surface.

3

Center and place the candy skewers 2 inches apart on the duct tape strip, leaving at least 6 inches of tape at each end for anchoring handles.

- Find the center of each skewer by balancing it on one finger.
- To get the best wave, measure from the bottom of each candy to the edge of the duct tape. The distance should be the same on both sides.

4

Measure and cut a 7-foot strip of duct tape and secure the skewers by laying the strip sticky side down over the skewers and bottom tape strip.

5

Roll a dowel (handle) onto each sticky end of the bottom tape strip.

6

Hold (or secure) both ends of the model so it is taut. Make a wave by tapping one skewer. Energy is transferred along the length of the model through a wave. By watching the candy, you can see the amplitude (height of the wave) and wavelength. Tapping it harder will cause the amplitude to increase. If you move the skewer up and down faster, the wavelength (distance between the wave peaks) gets smaller!