

WAVE PROPERTIES

Activity 1: Waves on a rope

1. Tie one end of a 3 to 5 meter rope or coiled telephone cord to a stationary object such as a door knob.
2. Quickly move the other end of the rope up and down. Observe the resulting wave. What kind of wave did you produce? _____
3. Increase the speed of the up-and-down movement. What happens to the frequency? To the wavelength?

4. Increase the height to which you move your arm. What happens to the wave's amplitude?

5. In the space below, draw diagrams of your observations in steps 2, 3, and 4.

