

Be the Vibration!

Name: _____

1

Step 1 Make sure you have all your supplies. Your experiment set-up should look like this:

Tie the rope at one end, or have someone hold it still.

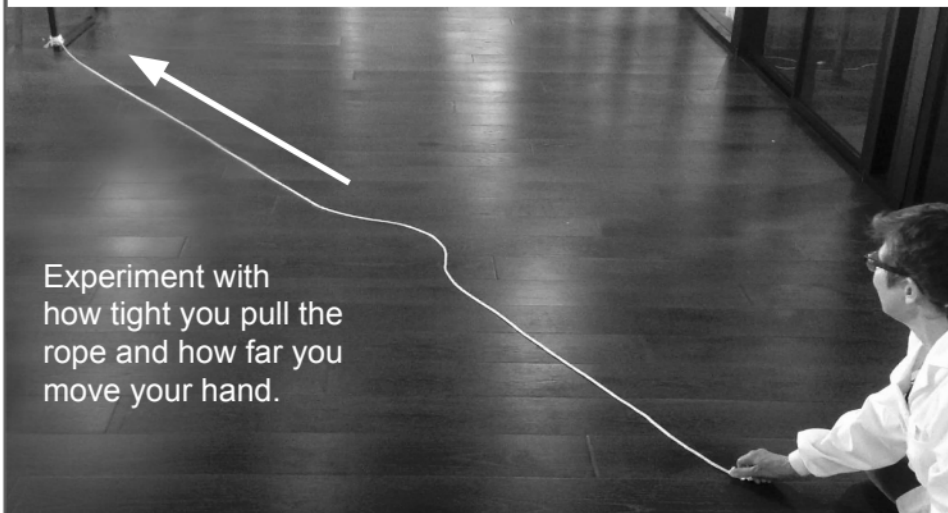
Be sure you're on a smooth, hard floor.



2

Step 2 Make a vibration by jerking your hand to the side and back. Try to make a wave that travels to the end of the rope.

Experiment with how tight you pull the rope and how far you move your hand.



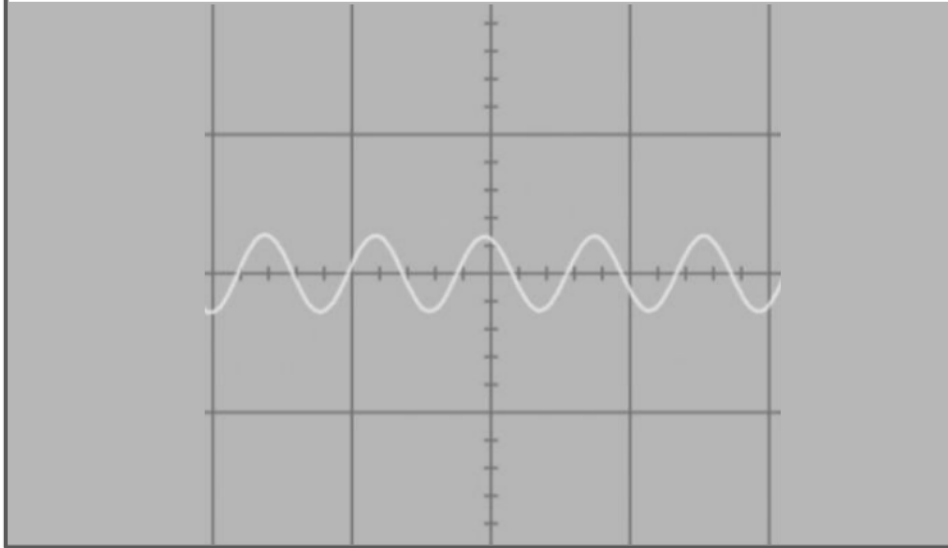
mystery science

Why are some sounds high and some sounds low?

3

Step 3

Challenge! Make waves that look like this oscilloscope picture of a **high**-pitched sound:

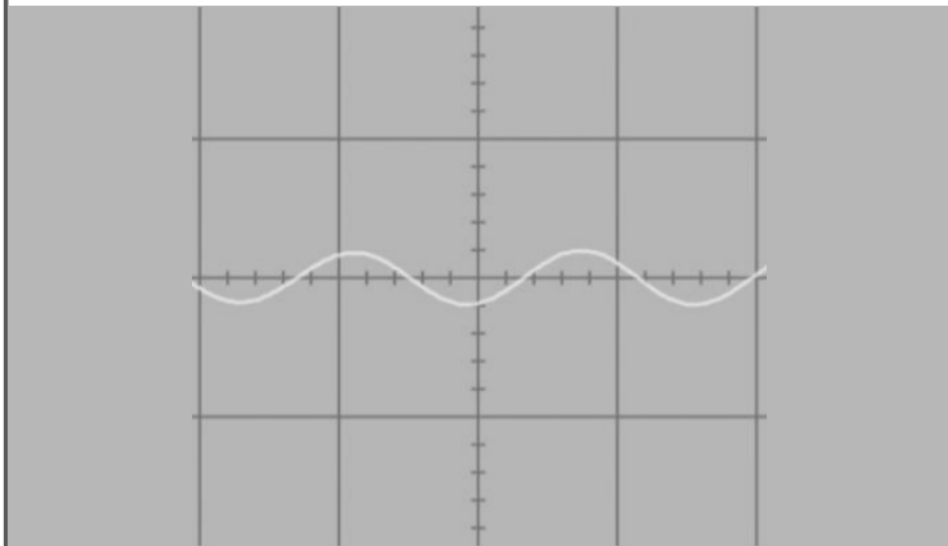


How do you have to vibrate your hand to make waves that are squished together like this?

4

Step 4

Challenge! Make waves that look like this oscilloscope picture of a **low**-pitched sound:



How do you have to vibrate your hand to make waves that are spread out like this?

mystery science

Why are some sounds high and some sounds low?