

Try it at Home

Good Vibrations

What you will need?

- A ruler

Instructions:

1. Place a ruler on the table so that 10 cm is extended over the floor.
2. Pluck the ruler and listen to the sound it creates.
3. Move the extend 15 cm of the ruler over the floor.
4. Pluck the ruler.
5. Repeat the above steps at 20 cm and 25 cm.

Questions to consider?

1. Did the sound change as more of the ruler was extended off the table?
2. Describe the change in sound?
3. What do you think caused the change in the sound of the ruler?

What is happening?

When the ruler is plucked the molecules in the ruler vibrate making sound. When molecules vibrate faster, higher pitched sounds are made. When the molecules vibrate slower, lower pitched sounds are made.