

Changing Sounds

Procedure

1. **Record Data** Obtain two rubber bands of different widths. Use the chart below to record your observations.

Rubber Band	Prediction	Observation
Wide		
Narrow		

2. **Predict** Predict how you think each rubber band will sound when it is stretched around an empty coffee can and plucked. Record your predictions in the chart.
3. **Experiment** Place the narrow rubber band around the coffee can. Pluck the rubber band where it stretches across the opening of the can. Observe and record how the rubber band moves and sounds. **Safety:** Wear goggles.
4. **Use Variables** Repeat step 3, but this time use the wide rubber band.
5. **Record Data** In the chart, add your observations about which rubber band produced the higher sound and which rubber band produced the lower sound.

Conclusion

Write the answers to the questions below.

- 1. Hypothesize** Write a hypothesis to explain your observations about the width of a rubber band and how high or low the sound it produces is.

- 2. Predict** Predict how high or low the sound would be if you used a rubber band that is much wider than the ones you used.

Investigate More!

Be an Inventor Construct a musical instrument using containers and rubber bands. Describe how you will control the sounds your instrument makes.

