Let's Investigate! HANDS-ON SCIENCE



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A Musical Can

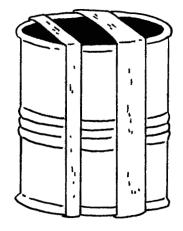
Let's Find Out

What happens when you pluck rubber bands stretched across a can?

What You'll Need

- 1 thin rubber band
- 1 thick rubber band
- a metal can

What to Do



- 1. Stretch the rubber bands across the top of the can. Leave a bit of space between them.
- 2. Pluck the rubber bands one at a time. Listen to the sounds.
- 3. Pull the thin rubber band to make it tighter. Pluck it and listen.
- 4. Pull the thick rubber band to make it tighter. Pluck it and listen.

What You Saw

Did the thin rubber band make a different sound than the thick rubber band? How did the sounds change when you pulled the rubber bands tighter? Write your answers on your record sheet.

Think About It

When you plucked the rubber bands, they moved back and forth quickly. What happened to the air around them?

Why do you think the sounds changed when you pulled the rubber bands tighter? Write your answers on your record sheet.



Name _

Sound

A Musical Can

Let's Find Out

What happens when you pluck rubber bands that are stretched across a can?

What You Saw

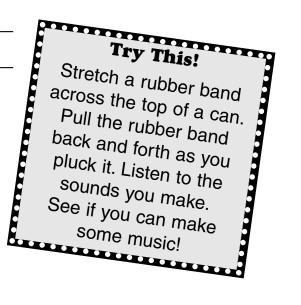
Did the thin rubber band make a different sound than the thick rubber band?

How did the sounds change when you pulled the rubber bands tighter?_____

Think About It

When you plucked the rubber bands, they moved back and forth quickly. What happened to the air around them?

Why do you think the sounds changed when you pulled the rubber bands tighter?



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A Straw Flute

Let's Find Out

How does the amount of vibrating air affect sound?

What You'll Need

- a straw
- scissors

What to Do



- 1. Blow through the straw. (Don't touch the straw with your lips.) Listen to the sound you make.
- 2. Cut off one-half inch of the straw. Blow again and listen.
- 3. Repeat step 2 until you have about two inches of straw left. Blow again and listen.

What You Saw

What happened to the sound each time you cut the straw? Write your answer on your record sheet.

Think About It

What happened to the amount of air in the straw as the straw got shorter?

Why do you think the sound changed each time you cut the straw? Write your answers on your record sheet.