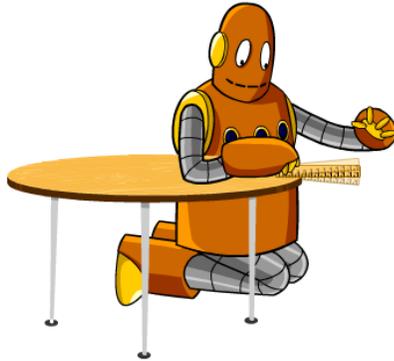




# Use a ruler to learn about sound and pitch!

**You'll need:**  
ruler  
table



**Name:** \_\_\_\_\_

**1. Lay the ruler on the table with 6 inches of the ruler hanging off the edge. Use your hand to hold the ruler against the table.**

**2. Push down on the free end of the ruler with your other hand. Watch and listen to what happens.**

**3. Move the ruler so that 4 inches hang off the edge. Push the end of the ruler.**

**4. Move the ruler again so that 2 inches hang off the edge. Push the end again.**

**1. When did you see the ruler vibrate the fastest? When did it vibrate the slowest?**

\_\_\_\_\_  
\_\_\_\_\_

**2. When did you hear the lowest pitch? When did you hear the highest pitch?**

\_\_\_\_\_  
\_\_\_\_\_

**3. How did the pitch change as the length of the ruler hanging off the edge changed?**

\_\_\_\_\_  
\_\_\_\_\_

**4. Compare the ruler to strings on a guitar or other instrument. How are they alike?**

\_\_\_\_\_  
\_\_\_\_\_