



Sound Waves

(Remember always ask permission and clean up after you are done)

Materials Needed:

- 2 large craft sticks
- 2 pieces of straw
- 1 wide rubber band
- 2 thin rubber bands

Directions:



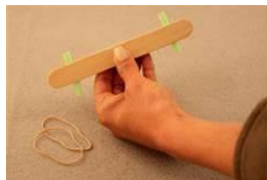
Stretch the wide rubber band lengthwise down one of the craft sticks.



Cut two pieces of straw, each 1-1 ½ inches in length. Put 1 piece of straw under the rubber band at the left end of the stick about 1/3 from the end. Put 1 piece of straw on top of the rubber band at the right end of the stick about 1/3 from this end.



Place the other craft stick on top of the straw pieces and stick. The straw pieces are sandwiched into between the two sticks.





With a thinner rubber band bind the right ends of the two sticks together about $\frac{1}{2}$ inch from the end. You may need to wrap the rubber band several times to make it tight.



With another thinner rubber band bind the left end of the two sticks together about $\frac{1}{2}$ inch from the end.. You may need to wrap the rubber band several times to make it tight.



You are ready to play your harmonica. Put it up to your mouth with the wide band up. Hum into your craft sticks. Remember blow into the sticks not the straws.



What happens when you slide the straws closer or further from the center?

When you hum into your harmonica the air causes the rubber band to vibrate. Vibration is what causes sound. The sound waves travel through the air to our ear.