

Make a Simple Duck Call

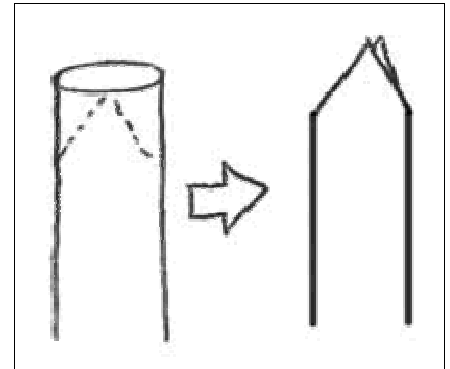


YOU WILL NEED:

- One plastic straw from your kitchen or a fast food restaurant
- Scissors
- Lungs (you all have these already!)

WHAT TO DO:

1. Use your fingers to press on one end of the straw to flatten it - the flatter the better.
2. Cut the flattened end of the straw into a point (see diagram).
3. Flatten it out again - really well.
4. Now take a deep breath, put the pointed end of the straw in your mouth and blow hard into the straw. If all goes well you should hear a somewhat silly sound coming from the straw. The smaller you are, the harder it may be to get a good sound - sometimes adults can get more of a sound thanks to their bigger lungs. If you still have trouble, try flattening it out some more or cutting the straw in half.
5. Don't stop there - try cutting the straw different sizes to see how the sound changes, or make another identical straw and add the pointed end of the new straw to the uncut end of the first straw (to make the first straw longer) The sound will be very different, (more like a moose call!) and you will have to blow even harder, but give it a try.



HOW DOES IT WORK?

Is this science? It sure is. You see all sounds come from vibrations. That little triangle that you cut in the straw forced the two pieces of the point to **VIBRATE** very fast against each other when you blew through the straw. Those vibrations from your breath going through the straw created that strange duck-like sound that you heard. Now you will never be bored again when you go to a fast food restaurant

MAKE IT AN EXPERIMENT

The project above is a **DEMONSTRATION**. To make it a true experiment, you can try to answer this question:

1. Which size straw call sound the most like a duck?
2. Which length of straw is the easiest to get a sound? Which is the hardest?
3. Does the diameter (thickness) of the straw affect the sound it produces?