Next:
Materials and Explanations

Then:
Step-by-Step Photo Sequence
MUSICAL STRAW

Hmmm? There's a straw... and straws are interesting. Is there anything you can do with a straw to be amazing?

Materials
• A straw, unwrapped
• Scissors

EXPERIMENT
1. Flatten the last inch of the straw with your teeth, making sure that you don't curl the end. Flatter is better, so really press down hard.
2. Cut the corners off the straight, flattened end of the straw.
3. Now you're ready to make music (and annoy everyone)! Place the cut end of the straw into your mouth, seal your lips around it, and blow until a "sound" is produced. You'll feel the entire straw vibrate as the sound is made. Don't give up if you don't make music right away; you may need to re-position the straw and try it again. You've just made a "double reed" mouthpiece, similar to an oboe.
4. Cut small sections off the bottom of the straw while you're making the sound. Listen for changes in the pitch as you cut the straw shorter and shorter. Watch out for your lips!
HOW DOES IT WORK?
When adjusted properly, the flattened ends of the straw will vibrate as air flows over them. The vibration is passed on to the column of air inside the straw. This is just like the double reed on some woodwind instruments. The vibrating reed produces the oboe-like sound in the straw based on the length of the straw. By cutting off pieces of the straw, you alter the length of the air column and thus change the pitch. The English horn, oboe, and bassoon all use this same principle of vibration to make sound. These instruments, however, change the length of the column of air with holes, stops, and pads.

Here's a variation: Find two straws, one smaller than the other (the smaller should fit snugly inside the larger straw). Using the smaller straw, repeat Step 1 above. Slide the bigger straw up over the smaller straw and start blowing. Move the larger straw back and forth to change the pitch of the sound. It's a straw trombone, sort of.

Comments
This is a great simple science experiment to get kids excited. I would recommend larger straws. (Not for length, but the size of the hole.)
HERE IS WHAT YOU NEED

SCISSORS
DRINKING STRAW
1. Take the straw out of its wrapper

2. Flatten one end of the straw
3

CAREFULLY CUT ALONG THE EDGE OF THE FLAT END AT AN ANGLE

REPEAT ON THE OPPOSITE EDGE
THIS IS WHAT IT SHOULD LOOK LIKE
4. Blow air through the straw while cutting the bottom with scissors.