Make a membranophone

A **membranophone** is an instrument that produces sound with a resonating membrane. Kazoos and drums are both membranophones. This membranophone can be made at home. It can sound a little bit like a clarinet.

Try making several membranophones with holes in different places, tighter or looser balloon membranes, and water bottles of different sizes. What kinds of sounds can you make?

### Materials
- small plastic water bottle (empty)
- scissors
- drinking straw
- tape
- paper
- rubber band
- balloon

### Step 1
CAREFULLY poke a straw-sized hole near the top of the label of the water bottle.
Cut water bottle in half.

### Step 2
Make and tape a tube from the piece of paper.
Cut some holes in the tube.

### Step 3
Cut the end off the balloon to make a sheet of rubber.

### Step 4: Assembly
- Insert the straw into the little hole.
- Place the paper tube in the opening of the water bottle. Seal the connection with tape.
- Secure the balloon to the cut end of the water bottle with the rubber band.

To play your new membranophone, blow into the straw. If you don’t hear anything, try adjusting the tension of the balloon membrane, and make sure the chamber inside the water bottle is sealed.