

## Sound Bite

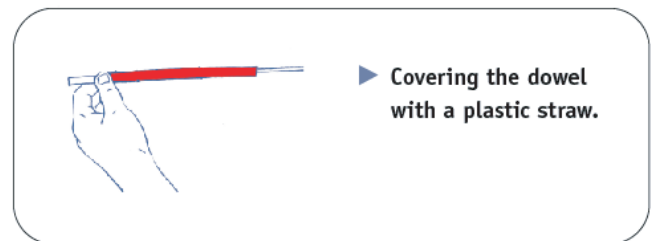
### Listen with your teeth and bones, not your ears.

We typically use our ear canals to listen: sound waves are captured by the outer ear, or pinna, and travel to the middle and inner ear, where they are transformed into nerve impulses and sent on to the brain.

But bone conduction is another pathway to listening. In bone conduction, vibrations from sound waves pass through the bones in your head rather than through the channel of your outer ear. Have you ever placed a radio or stereo speaker next to your head behind your ear? Some of the sounds you hear are being transmitted to your inner ear through the bones of your skull.

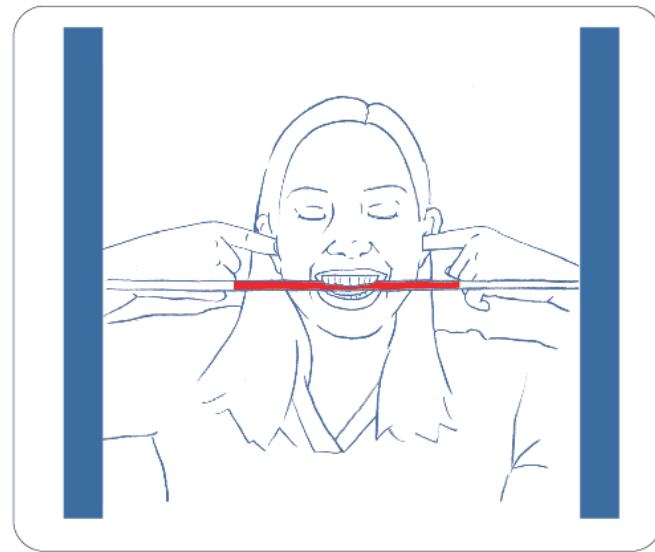
#### What you need:

- A 1/4" dowel, 2-3 feet long
- Plastic straws (if sharing this activity with others)



#### What to do:

- Cover the dowel with a plastic straw
- Touch the end of the dowel to a wall, table, or other surface
- Plug both of your ears
- Bite down on the dowel.
- What do you hear?



Making Sense of Sound

[www.exploratorium.edu/listen](http://www.exploratorium.edu/listen)

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