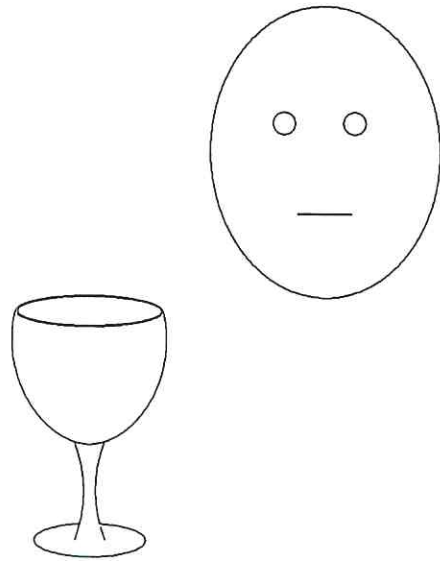
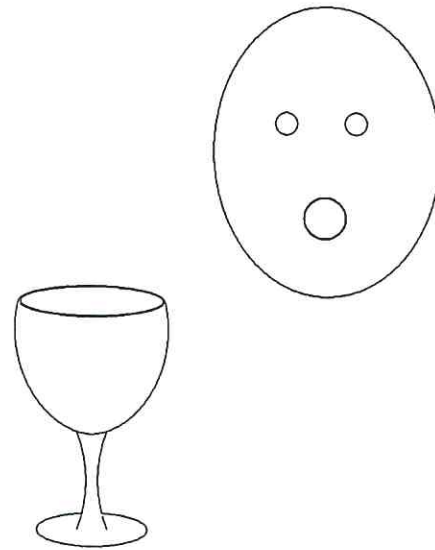


Before singing



First, I observed that

During singing

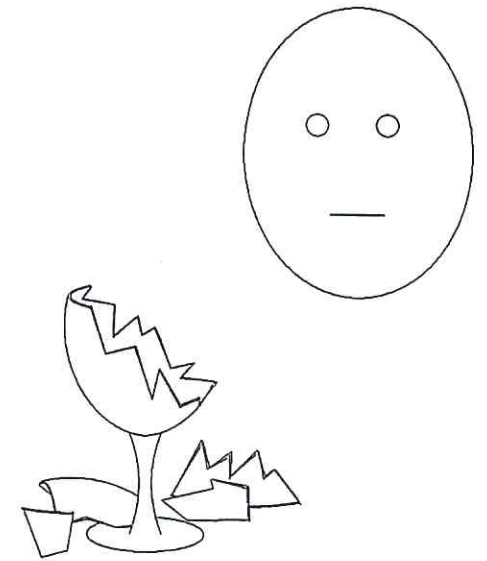


Next, when the singer was singing I

observed that

I think this happened because

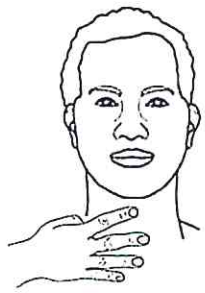
After singing



Finally, when the singer stopped

singing I observed that

I think this happened because



Humans Voices Data Sheet

*Observing vibrations when
whispering, humming, talking, and yelling*

NAME: _____

Directions: Make observations about sounds using your sense of touch by placing your fingers on your throat.

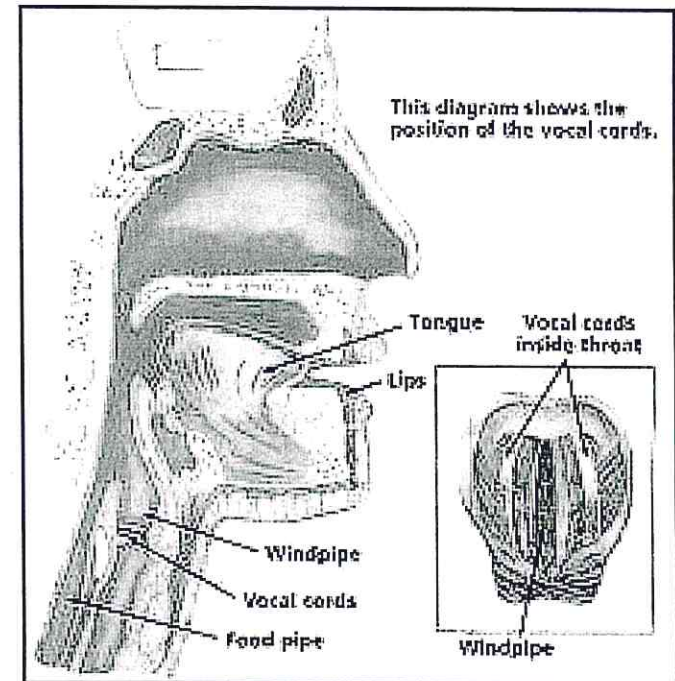
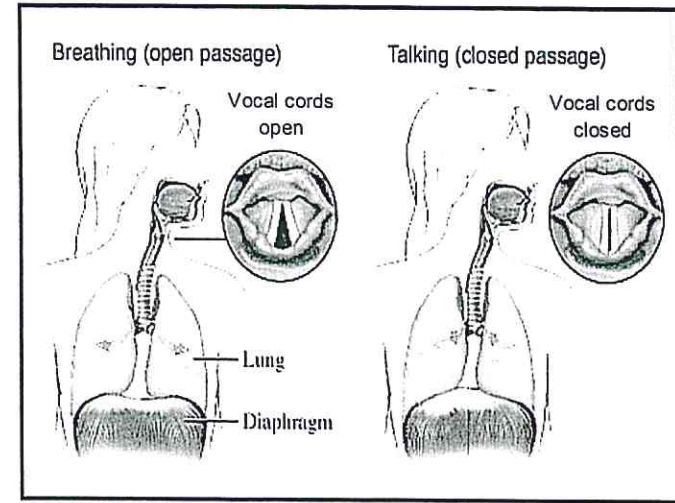
	Whisper	Hum	Talk	Yell
Circle the word that best describes the strength of the vibrations you feel. <i>(Add additional description on the lines.)</i>	None Weak Medium Strong _____ _____	None Weak Medium Strong _____ _____	None Weak Medium Strong _____ _____	None Weak Medium Strong _____ _____
How does the vibration change if you change your volume?	With loud whispers, the vibrations feel _____ _____ With quiet whispers, the vibrations feel _____ _____	With loud humming, the vibrations feel _____ _____ With quiet humming, the vibrations feel _____ _____	With loud talking, the vibrations feel _____ _____ With quiet talking, the vibrations feel _____ _____	With loud yelling, the vibrations feel _____ _____ With quiet yelling, the vibrations feel _____ _____

What is the relationship between the **kind of sound** we make and the **strength of the vibration**?

What is the relationship between the **volume** of the sound we make and how the **vibrations feel**?

Human Voices: A Reading

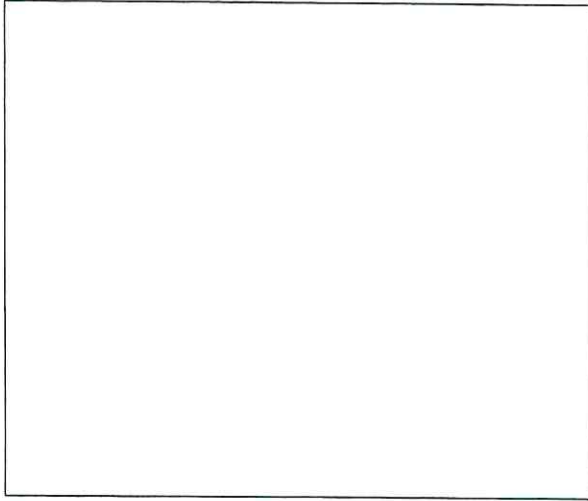
There are parts inside your body which are responsible for helping you make sounds like talking, yelling, and singing. The **diaphragm** is a muscle below your lungs. You can control your diaphragm muscle. To make loud sounds, you can feel your diaphragm pushing hard. The diaphragm muscle pushes on your **lungs**. Your lungs are kind of like balloons. Your diaphragm muscle moves air in and out of your lungs. The **windpipe** connects to your mouth and nose to your lungs. When you breathe, air goes through the windpipe and fills up your lungs. Your **vocal cords** are inside your windpipe. When you talk, muscles in your neck control your vocal chords. When you talk, your vocal cords close narrower than when you are breathing. You breathe in just before you talk or sing. While you are talking or singing, you are slowly breathing out. As air leaves your lungs, it moves up. The air passes through the vocal cords. As the moving air passes over your vocal cords and gets vibrated. The sound travels in the air from your vocal cords and out of your mouth through the air making different kinds of sounds that we can hear.



Directions:

- Read "Human Voices: A Reading."
- Use information from the reading and your own observations to answer the following questions.

1.) What's happening inside our bodies that we can't see (but we can feel) that makes us able to talk?



2.) How does today's lesson help us explain our big question: Why can the singer shatter a glass with his voice?

