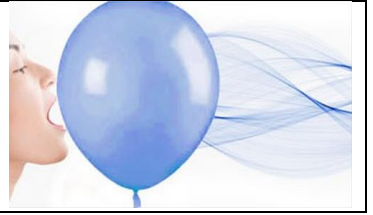


Sound Experiments

Experiment 4: Amplify Sound - Balloon Experiment



Materials:

- A balloon of any size or shape

Experiment:

1. Blow up the balloon but don't tie the end. Simply squeeze the bottom with your fingers to prevent air from escaping. You'll be blowing up the balloon to different sizes during the experiment, so you want to be able to reuse it.
2. Place the balloon next to your left or right ear, and tap on the other side. Note how loud the tapping is.
3. Blow the balloon up even more or let out a little air. Repeat the test by holding the balloon next to your ear and tapping on the other side.

What is happening?

As you try more and more balloon sizes, you'll start to notice that the tapping sound is amplified the most when the balloon is filled with more air. The reason is because the air molecules inside the balloon act as a conductor of sound waves. The more molecules, the better the sound conduction will be.

