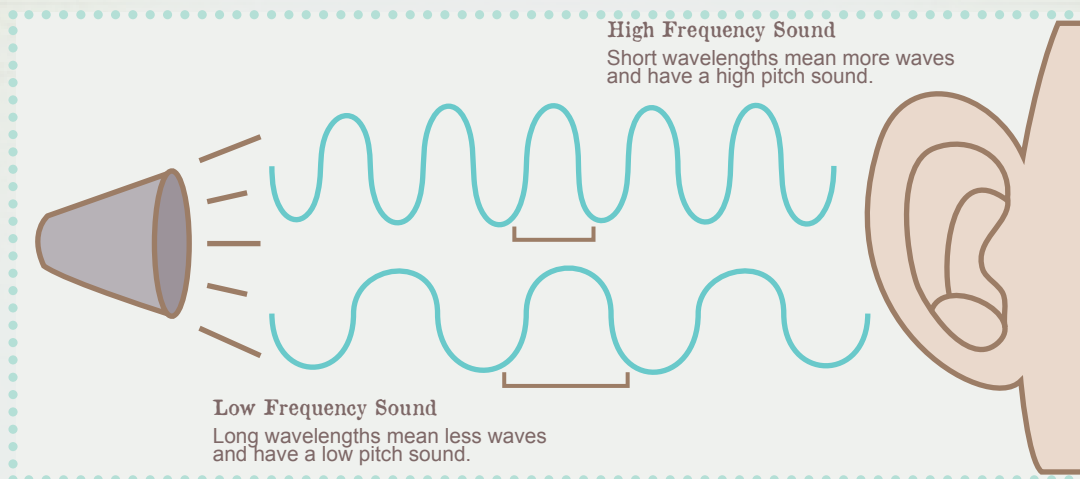


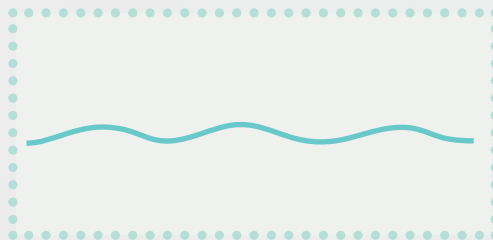
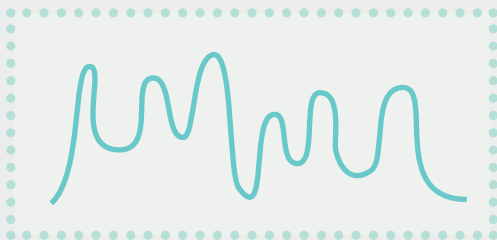
What is Sound?

Sound is made with vibrations. Whenever an object vibrates it causes air particles to move and bump into each other in wave-like motions. We call these vibrations *sound waves*. Just like water ripples when you throw a stone into it, sound waves ripple and keep going until they run out of energy. Our ears vibrate in a similar way to the original source of the sound. This is how we hear many different sounds.



Describe the frequencies you see below. What kind of sound do you think they are making?

NOW YOU TRY:





TRY THIS!

Have you ever tried to make a pretty tone by rubbing the rim of a wine glass? When you wet your finger and drag it around the rim, it slips and sticks to the glass—similar to the way a violin bow slips and sticks to the strings that it plays. This “slip-stick” motion causes the glass to start vibrating. Try adding more water to the glass. What happens to the tone?

THINK ABOUT IT

Do you think there is sound in space? Why or why not?
Hint: Space is a vacuum, which means that there are no air particles.