



SCIENCE CAREER
ADVENTURES

Charlie the Sound Engineer: Understanding Sound

Meet Charlie!



Hi everyone! My name is Charlie, and I am a sound engineer. A sound engineer creates new sounds. A sound could be music that you listen to on an iPad or voices that you hear when someone sings.

Why I Became a Sound Engineer

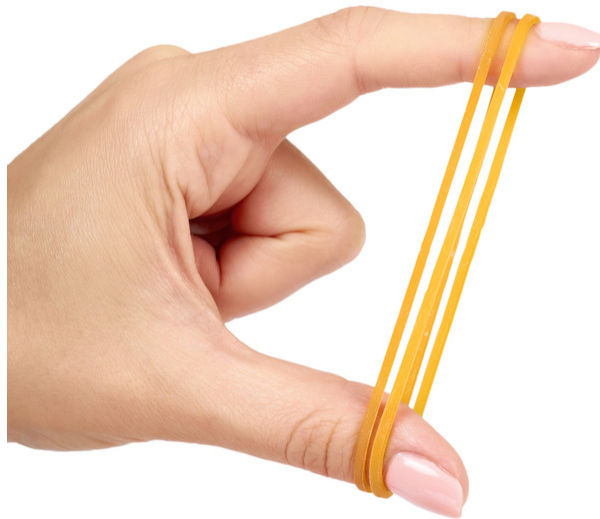
When I was a kid, I loved making music. One time, I started a band with my friends! We would play instruments at my house after school. One time, my older sisters played with us!



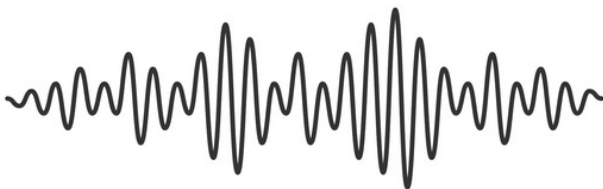
I also liked to read stories on my iPad about how music is made. Music is made of sounds. For example, a sound could be a musical note played on a clarinet or the booming sound of a drum beat.

Understanding Vibrations

As a sound engineer, I have to know about vibrations. Vibrations are quick movements that go back and forth. Try plucking a string on a rubber band. Can you see and feel the vibrations?



It can be hard to see vibrations. We can create pictures to show what different vibrations look like. Can you see the difference between these two vibrations?



Understanding Sound

I also have to know about sound waves. Vibrations make sound waves. These sound waves are what we can hear. Different instruments make different sound waves. That's why a trumpet and a violin don't sound the same at all!



Making Sounds for T.V. Shows

I make sounds for T.V. shows. During a show, there is sometimes sounds that people will hear. Here are some sounds that you might hear during a T.V. show!

Whistling Trains



Galloping Horse



Bubble Gum Popping



Making Sounds for T.V. Shows

Right now, I am making sounds for a cartoon that kids can watch on T.V. In the cartoon, two kids will play instruments.

It is my job to make the sounds for the instruments. That way, you can hear the sounds when you watch the cartoon.



A guitar and a drum have different sounds. This is because they have different vibrations. The different vibrations make different sounds!



Apps for Music



Have you ever used an app to make your own music? You can use apps on a tablet to make music. One time, I used an app to make a song. I made a drum beat both fast and slow. I then added other sounds, like a sound from a guitar. Apps help me mix all of the different sounds together to make them into a new song.