



How Does the Beat Get There?

Vern, DJ Unicorn, and a sound surprise

A SprigKids science story





Where did the beat go?

DJ Unicorn tapped play. The beat was ready in the music player—but the speaker stayed quiet. "Where did it go?" Vern wondered.



Vern's prediction.

"Maybe the sound is hiding inside the cable like tiny beat bubbles!" Vern said.



Let's test it.

DJ Unicorn connected the cable. Then she played the beat again. The speaker woke up.



The cone moves.

Vern watched the speaker's cone. It trembled to the pattern—back and forth, back and forth. A little paper strip fluttered in front of it.



A surprise!

"Wait," said Vern. "The cable never made a sound. The cone moved—and then the air moved!"



Vern revises his idea.

"The cable carries a changing electrical signal—not sound. The speaker turns that pattern into moving air. Moving air is sound!"



DJ Unicorn's beat map.

"Let's trace the whole trip!" she said. A beat starts in the player, travels as an electrical signal, moves the speaker cone, and becomes a pressure wave in the air.



Try it safely.

With a grown-up, use a battery-powered speaker at low volume. Hold a tiny strip of tissue a little in front. Play a beat and watch for a flutter.

Grown-up note: Keep fingers out of the speaker and never use a wall outlet for this activity.



Remember the beat's journey.

A music player starts the beat.

The cable carries a changing electrical signal.

A speaker's cone moves to that pattern.

The cone makes a sound wave in the air.

The air-pressure wave reaches our ears.