



Curiosity Guide #407

Sense of Hearing

Accompanies Curious Crew, Season 4, Episode 7 (#407)

Echolocation

Investigation #4

Description

Can your friend locate a sound without sight?

Materials

- Tape
- Meter stick
- Blindfold
- A friend

Procedure

1. Place a tape X on the floor.
2. In front of the X, measure and mark off three square meter boxes. The first should be directly in front of the X, the second a meter away and the final box two meters away.
3. Have your friend stand on the tape X, put on the blindfold, and cover one ear.
4. Now you move from one box to the next, saying your friend's name. Allow him or her to guess which box you are standing in each time.
5. Try the investigation for several rounds, and then repeat, having your friend use both ears.
6. Was using one ear or both ears easier? Why?

My Results

Explanation

Most people are more accurate when using both ears to locate where a sound is coming from. Our ears are meant to work together as they take in sounds. Generally, those sounds bounce around objects within the space, which gives us information about the surroundings. In this case, the blindfolded person depends on his or her ears to determine the distance from the source of the sound. Blind individuals have a more acute sound-placement ability, as well as an improved sense of touch. Even someone who becomes temporarily blinded experiences a boost in auditory discrimination. Vision is tied to what we hear, and that is why an audio track out of sync with a video is so distracting. Sight also works with hearing to identify softer sounds, particularly when we focus on someone's lips when they speak.

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