

Echolocation Game



Background:

Echolocation is the ability to locate objects by bouncing sound waves off of them, and then measuring the time taken for an echo to return, and calculating the direction the echo came from. Bats use echolocation to find their way around in the dark, and to locate their food. They send out sound waves which they create by using their mouth or nose. When the sound goes out it hits an object and an echo bounces back to the bat. From this echo, the bat can identify the location, the size, the shape and even the texture of the object.

These sound waves are very high-pitched, and most humans are unable to hear them. A device called a 'bat detector' is able to pick up these sounds and convert them into sounds which we can hear as a series of clicks, pops and whistles.

What is needed: space to play, blindfold

How to play:

1. Have children form a circle.
2. Explain echolocation.
3. Have someone volunteer to be the bat. The bat is blindfolded and placed in the center of the circle.
4. Have someone volunteer to be the moth.
5. The bat says "bat" and the moth must answer immediately with "moth."
6. They move around the circle until the bat catches the moth. (You may wish to use a film canister filled with gravel as a bat communication device).