

Mammals

Bat Echolocation

In Alberta, we have 9 species of bat. Bats are nocturnal, meaning they are active at night. They can see with their eyes but not very well in the dark. Bats have a special adaptation called echolocation to help them navigate at night. Bats emit sound waves that bounce (or echo) back when the sound wave hits an object. This helps the bat make a sound map to find bugs to eat and a safe path to fly. For this activity, partner up with a friend, sibling, or adult to understand how a bat's echolocation works.

YOU WILL NEED:

- Foil pie plate
- Tape
- Two cardboard paper towel rolls

INSTRUCTIONS:

1. Find a flat surface in the room such as a table that is close to the wall.
2. Tape the pie plate to the wall, low enough to catch sound waves at the table's surface.
3. Tape the two cardboard paper towel rolls to the flat surface (table) so that they are facing the pie plate but are pointing as far away from each other as possible. The paper towel rolls should be taped at the edge of the table so you and your partner can put either your mouth or ear directly against the roll.
4. Decide who will listen (put your ear up to your roll) and who will whisper (put your mouth up to your roll) to start.
5. Have the whisperer quietly whisper three words that rhyme with "bat" into their roll while the listener tries to hear what their partner is saying. The listener should be able to hear what the whisperer is saying because the sound will bounce off the pie plate and enter the other paper towel roll. This is a good demonstration of echolocation.
6. Switch! Now the whisperer can take a turn listening and the listener can come up with a special batty message to bounce off the pie plate.



Did you know that a little brown bat can consume 600 mosquitoes, or mosquito-sized bugs, per hour?