



Title: Bat-O...Mosquit-O

Age: K-adult



Duration: 40 minutes - hours

Outcomes:

- Students will experiment with a 'echolocation' type game
- Students will put themselves in a bat's place or mindset

Materials:



- Blindfolds
- Book on Bats and their use of echolocation such as *'Pippa's First Summer'* by Catherine Badgely
- Stopwatch or a watch that you can time 1 minute on



Preparation:

- Make sure you have a safe place for this game to be played – the gym, or a level field with no rocks or holes
- Understand that some students are not going to be comfortable being blindfolded, allow them to just close their eyes.



Procedures:

- Read the story to the students and then discuss what echo-location is.
- Discuss with the students that echolocation is essential to bats and their survival, and that they are going to get the chance to see how it might feel to be a bat. Ask the students what other things the bat might bounce their eco-location off of. Write this list on the board. Things like trees, houses, leaves, and people are all good answers. Make sure that bugs are up there too.
- Let the students know that a little brown bat can eat up to 10 mosquitoes a minute and between 1200 and 1400 mosquitoes in a night.
- Now tell them that they are going to play 'Marco-Polo' a little differently
- Assign each member of a class a role. Depending on the size of the class you may want to break the class into two teams and do this for each team. You will have 1 bat and 5 or 10 mosquitoes depending on how hard you want to make it. The rest of the students who are not the bats or mosquitoes need to be given roles from the list that they class came up with earlier such as trees, leaves, people etc.
- When the 'bat' is outside and everyone stands around them, the 'bat' is then blindfolded or closes their eyes. **NOTE: This is NOT because bats are blind but rather to help the students focus on the echolocation aspect of the game. Please be sure to point this out to the students.** When the 'bat' calls out "BAT-O" the people in the direction that the 'bat' is facing calls back their role (MOSQUIT-O or HOUSE-O) Now, this is going to be confusing to the 'bat' because that is a lot of information to be taken in. Mobile roles can move around, but students in the roles of tree or house should stay stationary.

- Time the student who is a bat and see how many 'mosquitoes' they can catch in 1 minute. How do they fare against a real bat?
- Allow for the students to each have a turn if they wish being the bat
- Once the game is done come back into the classroom and discuss how it felt to be the bat. Write what the students notice up on the board. What did they notice? Is it easy? Hard? Does it help them see why bats may look like they are flying erratically but are in actuality just following the erratically flying mosquito?
- If you use science journals you can have the students write/draw about their experience in their journal.



Assessment:

- Watch the students as they are participating in the activity
- Check the students comments and reactions



Extensions:

- Have the students do research on echolocation and make a 'Bat-Fact' bulletin board including these facts and others
- Build bat houses to be put up around the school, conservation land, or at student's homes.

