Activity: Bat and Moth

Objective:

In a classroom setting, this game provides not only a fun interactive game but a more hands on experience of how animals can use echolocation. Adaptations in the environment are essential to the survival of all animals and echolocation is just one unique and complex example.

Competencies Covered:

- Demonstrate curiosity about the natural world
- Identify questions about familiar topics that can be investigated scientifically
- Demonstrating an understanding of different forms of navigation in the animal world
- Demonstrating an understanding of animal adaptations and how they are specialized for their survival

Materials:

- Blind fold (bandana/tied shirt/fabric)
- Large open space

Set-Up:

1. Begin with the question, “How do bats find their food in the dark (or dolphins find their food beneath the sand or in murky water)?”
2. Have a small discussion/lesson on echolocation.
3. Discuss how finding food using echolocation works, clarifying details and correcting misconceptions.
   a. Echolocation or bio-sonar is the ability of some animals to locate objects using sound waves.
   b. They emit a range of sounds and listen for the echoes.
   c. Many animals, including cetaceans with teeth and some bats, make use of echolocation to orient themselves and detect prey.
   d. Many of the details of echolocation are not completely understood, so research on echolocation continues.
4. Have the participants form a circle where they can join hands.
5. The participants forming the circle are trees that surround an open meadow where the bat hunts insects to eat.
6. Select two volunteers, one to be the bat, the other the moth.

Directions:

Remind everyone that throughout the activity the “trees” are the bats protectors making sure they remain safe within the circle while catching the moth.

- Blind fold the bat
- Direct the bat to the centre of the “Circle of Trees”
- Have the moth enter the circle
- Once both the bat and moth are ready, the bat will clap their hands as they walk carefully around the circle
- The moth will clap back the same patterns as the bat immediately after
- This process continues until the bat is able to tag the moth
- Upon tagging, the moth will become the bat and a new moth is selected
- Continue until everyone who wants to attempt has had a turn


clap!
clap!
CLAP!
CLAP!