

Activity Number-1

IT REVERBERATES!

<u>SUBJECT</u>	<u>EVS</u>
<u>CLASS</u>	<u>V</u>
<u>CHAPTER</u>	<u>SUPER SENSES</u>
<u>TOPIC</u>	<u>ECHOLOCATION</u>
<u>TIME</u>	<u>30 MINUTES</u>
<u>NATURE OF ACTIVITY</u>	<u>GROUP ACTIVITY</u>

What will I learn ? (Learning Outcome)

To determine the position of an object by using the sound waves that are reflected back to the sender as echoes.

Skills- Comprehending & Applying

What I have to do ? :

- work in group
- exhibit team spirit
- infer information
- recapitulate and associate previous knowledge to new situation
- follow instructions diligently

What do I require ?:

Blindfold, Clipboard or hardcover book, pencils, crayons, observation sheets

What do I need to know ? :

Sound travels in the form of waves through the air to the ears. Depending on the location and intensity of the sound, the ear can usually locate the direction of the sound. Bats are mammals just like dogs, squirrels and humans. They have the ability to echolocate and hence navigate without using sight.

Teacher's Activity -Teacher will:

- 1 Conduct this activity in the school auditorium.
- 2 Break the students into groups of two.
- 3 Spread students out as much as possible so that each team can focus on their own clapping or snapping noises without being distracted by other teams.
- 4 Have one student sit on the chair and the other stand nearby with the Echolocation Worksheet.
- 5 Blindfold student sitting on the chair so that they are unable to see each other.
- 6 Have the non-blindfolded student snap or clap their fingers while the other student guesses the location from where the snap came.
- 7 Have students switch places and repeat the procedures.

How will I proceed ?

Students' activity: Students will:

- 1 Try to determine the location of the sounds made from various locations in front of chair, behind the chair or to the left/ right side of the chair.
- 2 record their partner's response on the Echolocation Worksheet after each snap/clap.
- 3 Put a check mark if their partner guessed correctly and an X if they guessed incorrectly.

What have I observed ? :

Location	Actual Guess	Right / Wrong
In Front of chair		
Behind the chair		
Right side of chair		
Left Side of chair		

What have I learnt ? :

Bats and other animals like whales and dolphins use echolocation to help themselves to see in their environment. They emit a sound that bounces off other objects. By determining the length of the time, it takes for the sound to return to their ears, the animals can figure out the location of the objects.

What am I curious to learn?

Connection between the bats and the Halloween symbols

Let me evaluate myself

Q1. What you understand by the term echolocation?

Q2. Why is echolocation necessary?

Q3. Name any 3 animals which use the technique of echolocation along with the reason.

Q4. What are the conditions necessary for the formation of an echo?

Q5. How does an animal using echolocation know where an object is located?
