



Herts and Middlesex



Wildlife Watch

Animal Super Sense – Echolocation!

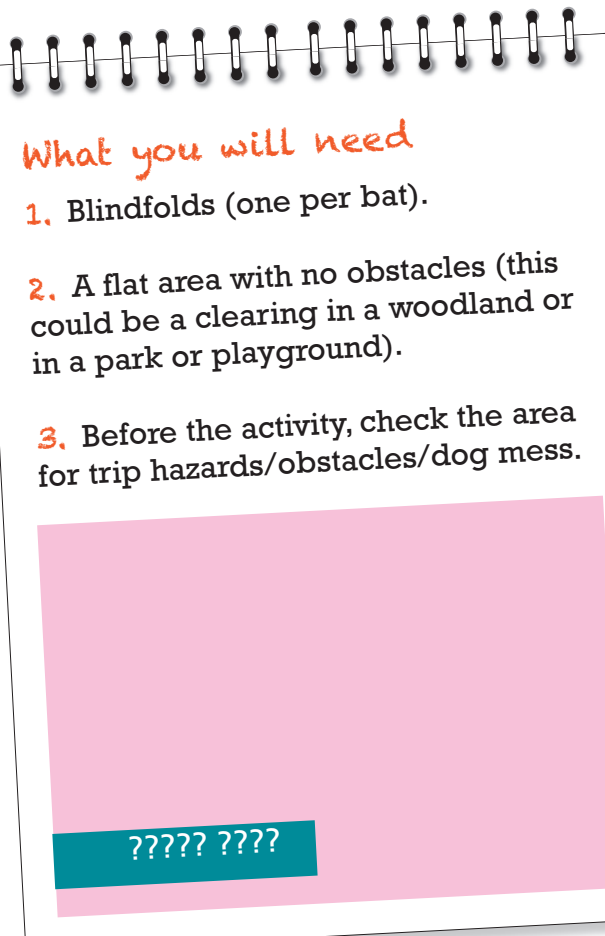
Background information

Bats are nocturnal, coming out after dark to hunt for food. They are not blind as often thought but rely on echolocation rather than sight to navigate and find and capture their prey. This works like sonar, with the bat emitting a high pitched sound as it flies. The sound travels away from the bat and if it meets something (a tree/building/insect) the sound hits it and bounces back. The bat can determine the location, distance and what the object is depending on the echo it receives.

Bats in the UK are insectivores and can eat thousands of insects a night. There are 18 species of bat in the UK of which 10 are regularly recorded in Hertfordshire.

Activity objectives

This game aims to teach children that animals may use different senses to locate their prey and to discover how echolocation in bats works.



What you will need

1. Blindfolds (one per bat).
2. A flat area with no obstacles (this could be a clearing in a woodland or in a park or playground).
3. Before the activity, check the area for trip hazards/obstacles/dog mess.



Now turn over...



and play the game!





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How to play

1. Nominate one child to be a bat and two children to be moths.
2. Ask the rest of the group to be trees and form a large circle (they might need to hold their arms out to ensure the circle is large enough).
3. The bat and moths stand inside the circle and the bat should put on a blindfold.
4. The aim is for the bat to catch the moths. To do this the bat must shout out “bat” and the moths respond immediately by shouting out “moth”. The bat must then work out where they are, follow the sounds and try to catch them. This should show how echolocation works!
5. The moths should move around trying to avoid being captured while continually responding to the bat.
6. If the bat manages to touch a moth, the moth has been caught and should leave the circle and become a tree. The bat carries on until all the moths have been “eaten”.
7. If the bat gets too close to the edge of the circle, the children in the circle should shout out “tree” so the bat can avoid them.
8. You can make the circle smaller to speed up the game or introduce more bats and moths.
9. Play the game several times to allow all children to have a chance at being a bat or a moth.



Information for Teachers

National Curriculum Links

Y4 POS Construct and interpret a variety of food chains, identifying producers, predators and prey.

Y6 POS Identify how animals are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Follow up

1. Discuss what other animals use echolocation to find their way around.
2. Discuss what other animals are nocturnal.
3. Research how other animals find their food. Do they use their hearing or sense of smell? Discuss what senses we use to find our food.

