

## How CREATURES HEAR

Christ's kindness

Jesus gave the snake no visible ears, but it is not deaf. It senses vibrations with its body!

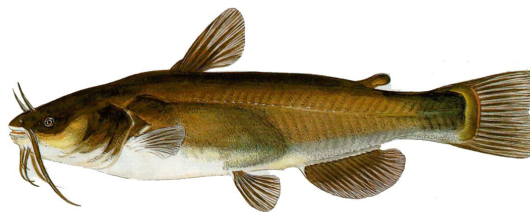


Where did God put a bird's ears? This osprey has ears on the sides of its head but they're hidden behind feathers. Birds hear about as well as people.



Western Osprey—CC BY 2.0 by Simon Carrasco  
Donkey—CC BY 2.0 by Håkan Dahlström  
Mosquito—© 2017 Nikon Instruments Inc  
Bat—© Eric Isselee / Shutterstock.com  
Spider—CC BY 2.0 by James Niland  
Locust—© EcoPrint / Shutterstock.com

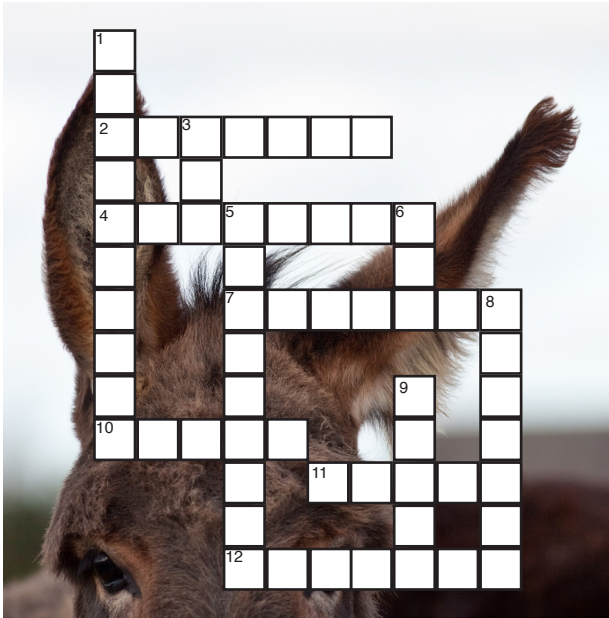
Bats use sonar to talk with each other, fly at night, and find insects to eat.



Fish have a very good way of sensing the presence of other fish—it's called the lateral line. The lateral line is the thin stripe on the side of a fish's body, running from its tail to its head.



You can easily identify the ear of a frog—it's the round disc (eardrum) just behind its eye.



## CROSSWORD

The words used in the CROSSWORD are taken from the articles found in **CREATOR** Volume 22 Number 4.

Answers to CROSSWORD found in **kids' kreation** #91

**Across:** 1. SCALE 3. PLATES  
4. MERCY 6. SEISMOLOGY 8. FIRE  
9. FOCUS 10. CORE  
**Down:** 2. LITHOSPHERE  
4. MAGNITUDE 5. CANADA  
6. SURFACE 7. LISBON

### Across

2. A fish can hear using its swim \_\_\_\_\_, and the lateral lines on the sides of its body.
4. The mosquito hears using his \_\_\_\_\_.
7. The tympanic membrane is another name for your \_\_\_\_\_.
10. Both dolphins and bats use \_\_\_\_\_ to detect prey.
11. Doctors have divided the ear into \_\_\_\_\_ parts: the outer ear, the middle ear, and the inner ear.
12. Jesus provided \_\_\_\_\_ with organs in their legs that act like seismographs, and gave them sensitive hairs called trichobothria.

### Down

1. Sounds are \_\_\_\_\_ that can travel through air, water, and solid rock.
3. Aside from touch and smell, the \_\_\_\_\_ communicates by tapping.
5. \_\_\_\_\_, whales, hippos and rhinos can communicate using low-frequency sounds known as infrasounds.
6. Hearing involves not only your \_\_\_\_\_, but also your brain.
8. Jesus placed 3 tiny bones in your middle ear- the hammer (\_\_\_\_\_), anvil (incus), and stirrup (stapes).
9. The cochlea turns sound waves into \_\_\_\_\_ signals, which are then sent to the brain.

## Animal Ear Identification

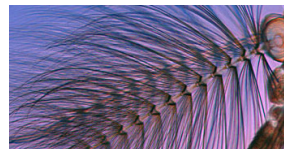
Match the ear(s) with the name of the animal below.

bat  
cat

frog  
locust

mosquito  
spider

1. \_\_\_\_\_



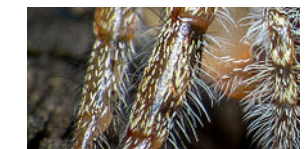
2. \_\_\_\_\_



3. \_\_\_\_\_



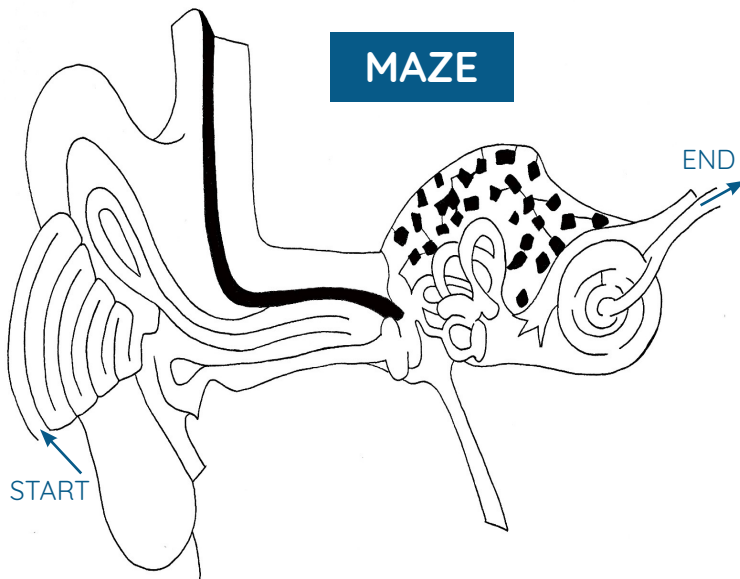
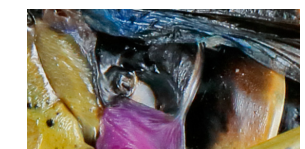
4. \_\_\_\_\_



5. \_\_\_\_\_



6. \_\_\_\_\_



1. mosquito 2. bat 3. cat 4. spider 5. frog 6. locust