



Wild Kids

Bats Eat Bugs...and Other Things

STUDENT GUIDE

There are more than 1,000 different kinds of bats in the world! Most bats eat insects. Some eat fruit and nectar, the sweet liquid of flowers. A few bats are carnivores. They eat meat such as small mammals, frogs, fish and even other bats. Less than 1% of bats feed on blood.



Big-eared bat

INSECTIVORES

Most of the bats that live in Arizona are insectivores - they feed on insects. These bats usually have small eyes and large ears. They use echolocation to find their way in the dark and to find food. Echolocation is a special hearing system. Bats make high-pitched sounds, then listen for the returning echoes to figure out the location. Insect-eating bats use one or more of these hunting styles:

- **Fast food on the run** - the Mexican free-tailed bat flies high at 65 miles per hour, catching its favorite food, moths, in the air.
- **Swoop and snack** - the long-eared myotis bat (myotis means "mouse-eared") flies low, then swoops down to snatch insects off plants.
- **Stalk and munch** - the pallid bat lands on the ground and stalks its prey, such as beetles, scorpions and centipedes.

NECTARIVORES

A few bats in Arizona are nectarivores. They use their keen senses of smell and sight to find nectar and pollen. They usually have a long nose and a long, thin tongue.



Lesser long-nosed bat

Nectar-feeders flower hop. As they fly from flower to flower drinking nectar, pollen grains stick to the fur on their head and shoulders. The pollen grains drop off onto other flowers, pollinating them. Some plants (like saguaros) have special flowers that attract bats. These flowers open at night, are white in color, have a strong musky scent and often grow on the end of long branches, where bats can reach them easily. The lesser long-nosed bat is an important pollinator of the saguaro cactus.

FRUGIVORES

The large fruit-eating bats are called "flying foxes." They live in tropical areas of Africa, Asia and Australia. They find food using their senses of sight and smell. Flying foxes have large eyes and a long nose.



Flying fox

SANGUIVORES

Vampire bats live in Mexico, Central America and South America. They use echolocation to find their way in the dark, and use their senses of sight, smell and hearing to find food. They even listen for the breathing sounds an animal makes. Once they have found prey, scientists believe the bats use heat-sensing pits on their nose to find blood vessels that are close to the skin's surface. Vampire bats do not "suck" blood. Instead they lap it up.

BAT MATCHING

Match the picture of the cartoon bat on the left to its "real" name on the right.



Lesser long-nosed bat



Mexican long-tongued bat



Spotted bat



Townsend's big-eared bat

BAT WORD SCRAMBLE

Unscramble the letters to find the word defined in each sentence. Hint: words can be found in the reading passage on the first page.

_____ revmpari - a bat that laps up blood

_____ tarnec - the sweet liquid from flowers that some bats eat

_____ lonpleita - some bats do this to help plants

_____ tacheoeloc - some bats do this when they send out a sound to find food

_____ dillap tab - a bat that stalks its prey

_____ tinsces - what most bats eat

_____ nyfgli ofx - a large fruit-eating bat

_____ vacorine - an animal that eats meat

_____ gusoraa - the lesser lon-nosed bat is important to this plant

BAT POEM

Write a poem about bats using some of the words you unscrambled above.



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TEACHING GUIDE

Overview

In this activity, students will read an article the feeding habits about different bats. Then, they have the opportunity to do three different activities to test their comprehension.

Suggested Procedures

1. Print the worksheet above. If possible, print it double sided.
2. Ask students to read the article and complete the first two activities on the second page.
3. As a class, discuss the answers to these activities.
4. Instruct the students to do the third and final activity. For this one, they are asked to make a poem about bats. The style of the poem is up to you, or you can let the students use their own creativity. We have included an example of a poem below. They should use one or more of the words from the second activity.
5. Have students share their poems.
6. To recap, have the students answer the following questions:
 - What are some traits that insect eating bats have? Why are these important?
 - What are some traits that nectar feeding bats have? Why are these important?
 - What traits do plants that are pollinated by bats have? How do these help attract bats?

Grade

3rd

AZ Science Standards

- 3.L1U1.5

Science and Engineering Practices

- Obtain, evaluate and communicate information

Crosscutting Concepts

- Structure and Function