

BAT TRUE/FALSE QUIZ

GRADE LEVEL:

Elementary/Intermediate

SUBJECT: Life science

Related Colorado Content

Standards: SC3.1, SC3.3, SC4.1, LA 1,2,4

TIME: 40-Minutes

OBJECTIVE: Students will differentiate between fact and fiction about bats.

MATERIALS: True/False Quiz, pencil

BACKGROUND: Bats are amazing animals! They are the only mammals that truly can fly. They have wings that are specialized and made of a tough skin. In addition, bats have long fingernails that spread and support their wings. The skeleton and soft anatomy of the wings can be compared to the arms and hands of humans. Bats can be found on all continents except Antarctica. There are approximately 1,000 species of bats.

Although there are less than a handful of bats inside Glenwood Caverns at any one time, the cave is home to five different types of bats. Sightings are very rare.

Representatives from the Natural Heritage Program at CSU did a bat study in the cave in October of 2001 and identified the following species: Townsend's Big-eared Bat, Western Small-footed Bat, Western Long-eared Bat, Little Brown Bat, and the Long-legged Bat.

Bats have over-sized ears and nostrils that allow them to use "**echolocation**" to find their food and get around in the dark. Bats emit high pitch sounds through their nose or mouth, and use their keen sense of hearing to hear the resultant echoes. They can judge distance, and can estimate the size of an object with this method.

PROCEDURE:

1. Hand out a copy of the Bat True/False Quiz.
2. Have the students complete the quiz individually. **(All answers are true except the last four).**
3. Discuss the quiz with your students. What misconceptions do they have about bats? Where do these misconceptions come from?

BAT'S TRUE/FALSE QUIZ
Student Worksheet

There are nearly a thousand kinds of bats. True/False

Bats are mammals. True/False

Bat species comprise approximately a fourth of all mammal species. True/False

Records show that pet dogs are far more dangerous than bats. (Less than half of one percent contract rabies.) True/False

Bat guano (droppings) is a major source of fertilizer in developing countries. True/False

Bats may eat over 3,000 insects, including mosquitoes, in a single night. True/False

Bats are extremely valuable in medical and other research. True/False

Bats are the only major predators of night flying insects. True/False

Your grocery stores would not be the same without bats, because they distribute seeds and pollen. True/False

At 40 M.P.H. bats can make a right angle turn in one body length. True/False

There are stiff fines and possible imprisonment for those who kill or disturb bats or harm their habitat. True/False

Bats are the only true flying mammals. True/False

BAT'S TRUE/FALSE QUIZ
Student Worksheet (continued)

The ultrasonic pulses that bats produce return within 6,000th of a second. True/False

The smallest bat is no larger than a bumblebee and weighs no more than a penny. True/False

The largest bat eats fruit, weighs over 2 lbs. And has a wingspan of almost 6 ft. True/False

Bats can crawl and hop. True/False

Only three species of bats feed on blood and they are all found in South America, Central America, and Mexico. (Mainly a nuisance to cattle owners.) True/False

Bats live everywhere on land except extreme deserts and the polar regions. True/False

There are 17 species of bats that live in Colorado. True/False

Bats are blind. True/False

Bats get caught in peoples' hair. True/False

It's OK to touch bats or wake them up. True/False

Bats are rodents. True/False