by Guy Belleranti

Animals that sleep during the day and come out at night are called nocturnal.

For desert-dwelling animals, being active at night allows them to escape the heat of day and to conserve water. Many snakes and rodents are examples of desert animals that prefer the night.

The darkness of night makes it easier for some animals to escape predators, especially if the animal is dark enough to blend into its surroundings. Some animals are always listening with their extra good hearing while others keep close watch with great night vision.



Then there's the hedgehog, a small nocturnal mammal that rolls up into a ball of spiny hairs when danger comes near. Because it is active only at night, it can usually wander around unseen. The skunk, another nocturnal animal, has a most smelly way to defend itself. Its fur is mostly black, which blends in with the darkness.



Of course, there are predators that are especially adapted for night hunting, so no prey animal is safe simply because it's nocturnal. Owls and certain species of cats are very effective nocturnal hunters because they have great night vision and excellent hearing. In addition to this, owls have softer feathers than most other birds so they can swoop silently down upon prey. Of course cats don't have feathers, but the soft pads on their feet allow them to quietly sneak up on small animals. Cats also use their whiskers to help feel their way in the dark.

Another predator that's well-known for its nocturnal behavior

is the insect-eating bat. You've probably heard the expression "blind as a bat." Many people are surprised to learn that most bats aren't really blind- they're just color blind. Instead of using their eyes to hunt for an insect dinner they use echolocation. What is echolocation? It works like this: The bat emits a very high-pitched sound. The sound is so high

that people can't even hear it. However, the bat has specially adapted ears so it can hear these sounds just fine. When the sound hits an object it bounces, or echoes, back. From the sound of the echo the bat immediately knows the object's size and location. Its echolocation can also determine if an object is a yummy insect or something that can't be eaten like a plant or a tree.



About the Author

Guy Belleranti works as a docent at Reid Park Zoo in Tucson, Arizona. The information in this article comes from his experiences working with animals and teaching others.

k 1		
Name:		
Name.		

by Guy Belleranti

According to the information in the article, why are many desert snakes and rodents nocturnal?



2. Fill in table below to show ways animals have adapted to survive at night. Use only information from the article. Some boxes have already been filled in.

	adaptation 1	adaptation 2	adaptation 3	adaptation 4
bat				
skunk		sprays a smelly chemical		
owl	excellent night vision			
cat				excellent hearing

- **3.** What is echolocation?
 - **a.** A way of making high-pitched sounds that bats use to communicate.
 - **b.** A method of making high-pitched sounds that bats use to avoid being eaten.
 - **c.** A high-pitched sound that helps bats fly after dark.
 - d. The ability to make a high-pitched sound that bats use to locate things in the dark.
- **4.** Reread the following sentence from the article.

For desert <u>dwelling</u> animals, being active at night allows them to escape the heat of day and to conserve water.

Which is the best definition for the underlined word?

- **a.** living or residing
- **b.** nighttime hunter
- **c.** heat-loving
- **d.** healthy

by Guy Belleranti

Match each vocabulary word from the article with the correct definition.



1. conserve	a. move downward from the air
2. wander	b. saying; commonly used phrase
3. emits	c. protect
4. swoop	d. ability to see
5. expression	e. move around aimlessly
/ image a dicately	
6. immediately	f. sound waves bouncing off a hard surface
7. vision	

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by Guy Belleranti

In the article, "Rise and Shine! It's Nighttime!", you learned about several different nocturnal animals.

Choose one animal mentioned in the article. Research the animal using books, the encyclopedia, or the Internet. Write a paragraph with interesting facts about the animal you chose.



with interesting facts about the animal you chose.	

ANSWER KEY

Rise and Shine! It's Nighttime!

by Guy Belleranti

1. According to the information in the article, why are many desert snakes and rodents nocturnal?

adaptation 1

Being active at night allows them to escape the heat and conserve water



adaptation 4

2. Fill in table below to show ways animals have adapted to survive at night. Use only information from the article. Some boxes have already been filled in.

		adapianon 2	adapianon o	
bat	echolocation			
skunk	black fur	sprays a smelly chemical		
owl	excellent night vision	excellent hearing	soft feathers for quiet flights	
cat	whiskers for feeling	soft pads on feet	excellent night vision	excellent hearing

adaptation 2

adaptation 3

- 3. What is echolocation? d
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c 1. conserve

a. move downward from the air

e 2. wander

b. saying; commonly used phrase

g 3. emits

c. protect

4. swoop

d. ability to see

b 5. expression

e. move around aimlessly

h 6. immediately

f. sound waves bouncing off a hard surface

d 7. vision

g. gives off

f 8. echos

h. right away