



RIDDLES AND RHYMES ABOUT BLACK BEARS

Materials:

- ☆ Paper and pencil.
- ☆ Note cards
- ☆ Black bear questions and answers.
- ☆ *Brown Bear, Brown Bear* by Bill Martin, Jr. (Holt, Rhinehart and Winston, 1983).
- ☆ Chart paper

Rationale

Most students have at least some misconceptions about black bear biology and behavior. These misconceptions may contribute to a fear of black bears. Since these mammals are now common in some parts of Arkansas, it is important that citizens respect and understand black bears so that the bears may continue to thrive and contribute to the rich diversity of animal populations in the state.

Objectives

1. Students will learn important facts about black bear biology and behavior through pictures, questions, and books. Through these exercises, students will gain a broader understanding about the black bear in Arkansas and his environment.

Procedure

Activity One:

NOTE: For younger students, write the questions on chart paper, read them aloud, ask the students to answer, record their answers, then discuss.

1. Write the class refrain on the blackboard:

*Black bear, black bear
How are you today?
Black bear, black bear
What do you say?*

2. Give each pair of students a note card with one numbered black bear question and answer.
3. Instruct each student to write the numbers 1-15 on a piece of notebook paper. Reassure the students that they will NOT be graded on the accuracy of their responses to questions 1-15.
4. Begin the activity by leading the class in the refrain.
5. Instruct the pair of students with note card #1 to read the question.
6. All students write an answer to the question #1 on their notebook paper.
7. Instruct the pair of students with note card #1 to read the answer. Discuss the difference between what the students thought and the correct answer.
8. Lead the class in the refrain.
9. Instruct the students with note card #2 to read question #2.
10. All students should write the answer to question #2 on their notebook paper.



11. Read the answer to question #2. Discuss the answer with the class.
12. Lead the class in the refrain.
13. Repeat this procedure until all of the questions are read and answered.
14. Close the activity by asking the class to list the new facts learned about black bears in this activity. Write these facts on the blackboard.

Activity Two:

1. Read *Brown Bear, Brown Bear* to the students and discuss the pattern the story follows.
2. Have students create their own pattern book about black bears in Arkansas. Include information on the ecosystems of black bears in the state.

Correlation to

National Science Standards

Life Science, Science as Inquiry

Correlation to

Arkansas Frameworks

Science: K-4: LS2.1, LS2.4, LS2.8;
5-8: LS2-9; LS2.11

Social Studies: 5.1.5

Language Arts: W.1.5, W.1.11

Black Bear Questions and Answers

1. Q: Black bear, black bear,
Sleeping in the sun,
Black bear, black bear,
How fast can you run?

A: Black bears have been clocked at 30 miles per hour, which is faster than any human runner and as fast as a horse. Humans cannot outrun black bears.

2. Q: Black bear, black bear,
Sleeping late;
Black bear, black bear,
Do you hibernate?

A: Black bears are not true hibernators. They do go into an extended period of deep sleep. True hibernators have a much-reduced body temperature and cannot be awakened during hibernation.

3. Q: Black bear, black bear,
What do you eat?
Black bear, black bear,
Is it mostly meat?

A: Black bears are classified as carnivores because of their teeth. Carnivores are meat eaters. Arkansas black bears, however, eat much more plant material than the flesh of animals. Black bears are actually classified as omnivores, meaning that they eat both plants and animals. Arkansas black bears eat 85% plants and 15% animals. Many of the animals eaten are insects: ants, ant larvae, and grubs. Black bears also eat carrion, or the remains of dead animals.

4. Q: Black bear, black bear,
Walking near a town;
Black bear, black bear,
Do you like to have people around?

A: Most black bears live in remote, sparsely populated areas. They tend to be shy and avoid people. Black bears that come near humans tend to be young male bears looking for new territory. These bears are called “nuisance bears” because they have learned to depend upon humans for easy food sources. Nuisance bears often raid garbage cans and dog food containers.

5. Q: Black bear, black bear,
When you make your winter bed;
Black bear, black bear
Do you choose the largest cave for a place to rest your head?

A: Black bears may over winter in large caves, but most do not. The preferred winter dens are hollow trees, rocky crevices, or depressions under fallen trees. Snug dens are preferred because they help the bears conserve body heat. In large caves, the bear's heat is lost to the surrounding damp, cool air.

6. Q: Black bear, black bear,
Mother is a sow;
Black bear, black bear,
Are your newborns as big as a cow?

A: Newborn cubs weight from ½ to 1 pound at birth. They nurse their mother's milk and weigh about 8 pounds when they emerge from the winter den.

7. Q: Black bear, black bear,
Male and female came,
Black bear, black bear,
Do you both weigh the same?

A: Most adult male black bears outweigh adult females. Males may weigh from 150 to 300 pounds more than females.

8. Q: Black bear, black bear,
Preparing for a winter nap,
Black bear, black bear,
Do you take your favorite food for a mid-winter snack?

A: Abundant autumn foods such as acorns are eaten in large amounts to prepare for hibernation. Food energy is stored as fat. The bear lives off this stored fat all winter long. Bears don't take extra food into the den and they don't awaken for snacks.

9. Q: Black bear, black bear,
Why do you growl?
Black bear, black bear,
Can't I be your Pal?

A: Black bears are wild animals and may be dangerous. Humans should never corner a black bear, go near bear cubs or close to bear food. There are very few records of black bear attacks on humans, but all wild animals will defend themselves when threatened.

10. Q: Black bear, black bear,
Cubs playing 'neath a tree;
Black bear, black bear,
Are you waiting there for me?

A: Black bear sows often leave cubs at the base of a good climbing tree while the sows look for food. Cubs are good climbers and will climb the tree if frightened or threatened. NEVER pick up bear cubs that seem to be abandoned. Mama bear is most likely nearby and will return to care for the cubs. In fact, NEVER pick up any baby animal (including fawns, baby bunnies, and young birds) that appears to be abandoned by its mother. Watch the animal from a distance and contact your local wildlife officer if the mother does not return.

11. Q: Black bear, black bear,
If you chase me
Black bear, black bear,
I will climb a tree.

A: Black bears are very good climbers. If you surprise a black bear, don't climb a tree. Instead, slowly back away until you are far enough away to walk quickly. Do not run from the bear; that might encourage the bear to chase you to get a better look at what you are. Black bear experts suggest that humans raise their hands above their head to appear larger, and beat on pans or other objects at tent sites to scare the bears away.

12. Q: Black bear, black bear,
Next to my car you stand;
Black bear, black bear,
Shall I feed you from my hand?

A: NEVER feed a wild animal, including black bears. The animals will begin to associate humans with a reliable food source and will come to expect food on a regular basis. In addition, they may expect food from other humans, creating problems with neighbors.

13. Q: Black bear, black bear,
Biggest mammal in the state;
Black bear, black bear,
Let's try to guess your weight.

A: Mature males weigh 350-500 pounds. Mature females weigh about 200 pounds.

14. Q: Black bear, black bear,
Look up high;
Black bear, black bear,
Where are you found in the sky?

A: From ancient Greek to Native American mythology, the bear has played an important role in legends and stories. *Ursa major* (Big Bear) includes the constellation known as the Big Dipper, and *Ursa minor* (Little Bear) includes the constellation known as the Little Dipper.

15. Q: Black bear, black bear,
In forest and hills, prairies and plains,
Black **bear**, black bear,
Do you like them all the same?

A: In Arkansas, black bears are found in remote forested areas that are often rough and hilly.

16. Q: Black bear, black bear,
Baby cub just born;
Black bear, black bear,
Do you eat berries, fruit, and corn?

A: Cubs are born toothless. Their baby or “milk” teeth come in when the cubs are 6-8 weeks of age. Cubs are born in the winter, while the sow is in the winter den. During the denning period and after emerging from the den, cubs are nourished by the mother’s milk. About mid-summer the cubs start sampling foods that they see their mother eat.

17. Q: Black bear, black bear,
You eat plants and cows do too;
Black bear, black bear,
Is grass a favorite plant for you?

A: Black bears do eat some grass when other food is scarce in the spring, but it is not a good food source for bears. Preferred foods in spring are insects and carrion. Favorite summer foods include soft berries including blueberries, black berries, poke berries, and black cherries. In late summer and early fall, bears primarily eat nuts, including acorns and hickory nuts.

18. Q: Black bear, black bear,
Standing tall and neat;
Black bear, black bear,
Do you always walk on your back feet?

A: Black bears walk on all four feet. They may stand on their back feet to get a better look at something, or to extend their reach.

19. Q: Black bear, black bear,
Just like your name;
Black bear, black bear,
Is your color always the same?

A: Black bears may actually be black, brown, or cinnamon. Some black bears are black with a brown face, and many black bears have patches of white fur, especially on the chest.

Black Bear Biology

(Ursus americanus)

Black bears are mammals classified as carnivores because of their teeth (Phylum *Chordata*, Subphylum *Vertebrata*, Class *Mammalia*, Order *Carnivora*, Family *Ursidae*, Genus *Ursus*, Species *americanus*). Their diet, however, is a mixture of plant and animal materials, characteristic of omnivores. The diet of black bears changes with the seasons, as different foods become available. Springtime diet is heavy with berries, fruits, grasses, and roots. Acorns and other nuts make up a large portion of their diet in fall and winter. Insects, small animals, and carrion are eaten when available.

Black bears mate in the summer and cubs are born the following winter. Young female bears may start reproducing at three years of age. Females mate every other year, allowing time to raise cubs. Litter size ranges from one to four, and rarely five, cubs. The cubs are born after a 7-month gestation period and weigh only 7-12 ounces! Cubs remain with the sow until the spring of their second year. These cubs, called yearlings, leave the sow at this point and seek to establish their own territory. Female yearlings are allowed to remain in the territory of the sow. Male yearlings are chased away and are forced to find new territory. Older males are also protective of their territory and will chase away the yearling males. It is not surprising that most nuisance bears are young males that have been forced from the most desirable habitat and into less desirable, fringe areas that are close to humans. These young males often have to be trapped and relocated.

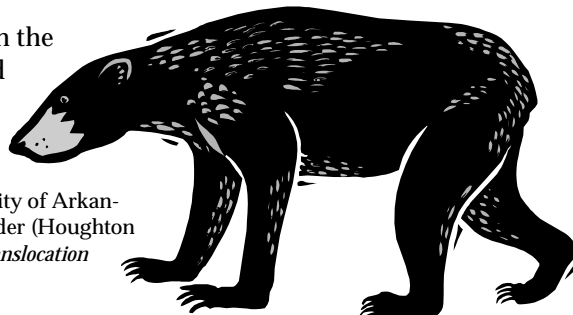
Black bears are not true hibernators. They do sleep for a long period of time in winter dens, however, when their body temperature and heart rate drop. Unlike true hibernators, black bears can easily be aroused during their long sleep periods. True hibernators reduce body functions even more and can be handled without arousal. Black bears prepare for den time by building up fat reserves in the fall. The animals do not eat, drink, urinate, or defecate during denning. Females give birth to young and nurse them during the denning period. Den sites include hollow trees or logs, areas beneath the roots of fallen trees, rocky crevices, and caves.

When black bears leave the den in late winter or early spring, food is still scarce and the bears continue to use fat reserves to survive. Mature males are first to leave their dens, followed by young adults, and finally by sows with newborn or yearling cubs. The colors of black bears range from near black to brown and a reddish-brown color referred to as cinnamon. Mature male bears range in weight from 350 to 500 pounds. Mature females weigh about 200 pounds.

Black bears are considered to be nocturnal and often are seen at dawn and dusk, although hungry bears may feed during the day. Nuisance bears often are daytime feeders. Black bears have poor eyesight and generally move slowly, although they may run up to 30 mph for short distances. Their hearing is moderate, but their sense of smell is very good. These animals are not aggressive, although they are wild and should not be approached by humans. Humans should never feed black bears or any other wild animal since feeding encourages the animals to approach humans and human dwellings with the expectation of finding food.

Black bears may live twenty to twenty-five years in the wild. Habitat loss, food availability, hunting pressure, and human contact may limit the black bear life span to about six to ten years.

Sources: *Arkansas Mammals* by John Sealander and Gary Heidt (University of Arkansas Press, 1998); *Mammals* by William H. Burt and Richard P. Grossenheider (Houghton Mifflin Co., 1976); *Black Bears in Arkansas: Characteristics of a Successful Translocation* by Kimberly Smith and Joseph D. Clark (*Journal of Mammalogy*, 1994).



Black Bears in Arkansas



The black bear (*Ursus americanus*) has long lived in the area that we now know as Arkansas. Native Americans used black bear meat for food, the skins for robes, and teeth and claws for adornment. Because of the importance of the black bear as a source of food and clothing, it became an important image in Native American legends and ceremonies. Early European explorers such as De Soto in 1542 noted the presence of black bears and used them as a food resource. Thousands of bears were used for food by the French and Spanish explorers that followed De Soto.

The black bear also became an important commodity to early settlers in Arkansas. Bearskins brought \$1 to \$2 each at Arkansas Post in 1806. Bear oil sold for \$1 a gallon. Bear lard was preferred for cooking because it didn't turn rancid in storage. An Arkansas community, Oil Trough, was named for the wooden troughs used to render bear lard.

The black bear was so common and important in the early days of statehood that Arkansas was unofficially called the "Bear State." That name was used until the 1923 Arkansas General Assembly passed a resolution declaring the "Wonder State" to be Arkansas's official nickname.

Many years of over hunting and habitat alteration brought a drastic decrease in the size of the black bear population. The logging boom of the late 1800s in both the Ozark Plateau and the Ouachita Mountains resulted not only in the loss of valuable black bear habitat, but also in great demand on bear and other wildlife populations for meat (with burgeoning human populations). By 1927 as few as twenty-five bears remained in Arkansas, prompting the state to close the bear hunting season. All of the remaining bears were located near what is now the White River National Wildlife Refuge in eastern Arkansas. The descendants of these Arkansas bears live in the wildlife refuge today, with a population at around 175 (and increasing).

In 1958 the Arkansas Game and Fish Commission began a program to return black bears to Arkansas. About 250 bears from Minnesota and Manitoba, Canada, were relocated (biologists use the term "translocate") into the Ozark and Ouachita National Forests of western Arkansas. This project was so successful that today over 3,000 bears live in Arkansas. Black bears have moved from Arkansas into neighboring Oklahoma and Missouri, establishing new populations in those states as well. The animals are now so plentiful in Arkansas that a bear hunting season was reopened in 1980.

Biologists describe the translocation of black bears in Arkansas as the most successful translocation of a large mammal in the Order *Carnivora*. The final success of this effort, however, depends upon human understanding of, and tolerance for, the large mammals.

Sources: *Black Bears in Arkansas: Characteristics of a Successful Translocation* by Kimberly Smith and Joseph D. Clark (*Journal of Mammalogy*, 75, no. 2, 1994, pp. 309-320); *Arkansas Black Bear: A Teacher's Guide for K-6 Grades* by David Goad, Pat Knighten, and Heather McClure (Arkansas Game and Fish Commission).