A Year in the Life of a Grizzly Bear

Summary
Students learn about seasonal variations in the life of a grizzly bear.

Procedure

Reading and Reporting
Begin by dividing students into small groups. Distribute copies of the A Year in the Life of a Grizzly Bear narrative to each group to read. This narrative provides all the basic information needed to complete the activity; however, you may choose to have the children supplement information presented in the narrative with reference material from your school library or the internet. See Resources below. Using information provided in the narrative, have each group report to the class on one of the following topics concerning grizzly bears:

- seasonal habitat requirements
- seasonal food preferences
- behavior
- cub rearing
- denning

Groups can design a poster or seasonal diorama to use while presenting their report. The poster or murals can depict what the grizzly bear does and where it lives during each season, including what the grizzly eats, how it gets its food, what the grizzly mother teaches her cubs, and what a grizzly den might look like. An alternative to doing a report would be to write and present a skit which conveys their topic to the class. Examples include a skit depicting a reporter interviewing a grizzly, a play featuring a mother bear teaching her cubs, etc.

Comparing Characteristics
This activity can be done as homework. It allows students to compare food habits, behavior, family life and other characteristics of bears and humans. Pass out copies of the You and a Grizzly comparison page. Have the students find a human fact that corresponds with each bear fact. Point out that the “reciprocal” part(s) of each bear fact is underlined. Students will write a corresponding human fact for each by filling in the correct number, word, or phrase in the human fact labeled with the same number. For example, Bear Fact Number 1 says, “At birth I weighed 15 oz. and was 10 inches long. My eyes were closed.” Students will need to find out their approximate birth weight, their approximate length at birth and whether human babies are born with their eyes open or closed, and write this information in Human Fact Number 1. (See Human Facts Example for some possible responses.)

Objectives
Students will be able to:
- Identify differences in grizzly bear lifestyle from season to season
- Describe how grizzly bears use their habitat
- Describe the diet of grizzly bears
- Identify some similarities and differences between grizzly bears and themselves

Grade Level
3-5

Time to Complete
One class session

Subjects
Art, language arts, science

Materials
- Copies of A Year in the Life of a Grizzly Bear narrative
- Copies of You and a Grizzly comparison page
- Markers, crayons, colored pencils or paint
- Poster board or large sheets of paper for a mural or diorama
Resources


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Winter

On a slope high in the Mission Mountains (in Montana), a snow drift, formed by the steady winter wind, accumulates over the entrance to a grizzly bear den. Inside the snug den, a female grizzly hibernates. Her heart rate has slowed to half the normal rate and her body temperature is 9 degrees lower than when she entered the den in late November. She does not eat, drink, urinate or defecate for the five to six months spent asleep inside the den. Her body is nourished exclusively by fat reserves. However, she is sensitive to noises and changes in her environment and can be aroused.

In late January, the sow (female grizzly) gives birth to one or two young in her den. The cubs are born with their eyes closed and are covered by very short, fine hair. They weigh about a pound and are about 10 inches long. They sleep most of the winter, nursing from their mother.

Spring/Summer

In April, as winter snows melt and new vegetation emerges, the mother grizzly leads her cubs from the den. Each cub weighs between 5 and 10 pounds and spends the first week close to the den. During this time, the female may take short trips from the den in search of tender new vegetation, winter-killed animals or perhaps elk weakened during the harsh winter.

As the weather warms, the mother leads the cubs out of the high country to the warmer streamside below and teaches them to forage and hunt for food. The cubs learn to dig up roots and catch and eat ground-dwelling rodents, both in the daytime and at night. As spring progresses into summer, the sow teaches her cubs to hunt, fish and swim.

The cubs remain with their mother for two years learning how to survive and fend for themselves. During this time, the cubs play and wrestle with each other. Grizzly sows seem to “tolerate” these playful episodes as long as the area is safe and the cubs are well fed.

Grizzly bears mate in June or July; this is the only time of year adult grizzlies socialize with other adult grizzlies. Males and females go their separate ways after mating. Sows generally breed every three years. The sow which you have been reading about will not mate this year, or the next, because she will be busy raising her two cubs through the following year.

In July and early August, the female and her cubs move back toward the high country to forage on fresh vegetation in avalanche chutes and alpine zones. If they encounter people during their travels, they may leave the area.

Fall

In September, the sow and cubs move down to lower elevations of the Northern Continental Divide Ecosystem to feed again. They eat foods high in protein and calories, such as berries and nuts, to build fat reserves for the coming months of denning. As the weather gets colder, the mother grizzly leads her cubs back up to the high country. The nine-
month-old cubs are larger now, weighing 45-90 pounds, so the sow must build a larger den.

The grizzly bear does not use the same den she built last year but chooses a site nearby. Her denning site is located on a north-facing slope above 6,500 feet elevation, where there is sufficient snow to cover the den entrance throughout the winter. For the den entrance, she looks for the base of a tree or a stump with roots which will reinforce the entrance. She digs the den into a slope to create a thick roof over the place where her head will lie. The sleeping chamber is elevated above the den entrance for warmth.

Once she has dug the den, the grizzly gathers bedding materials of evergreen boughs, mosses and grasses to line the den floor for added insulation. The sow and the cubs enter the den in mid-November during the first blizzard of the season. When the grizzlies emerge from the den next spring, the cubs will be more independent, although they will still rely on their mother for guidance.
# You and a Grizzly

## Bear Facts
1. At birth I weighed **15 oz.** and was **10 inches long**. My eyes were **closed** at birth.

2. I was born in late January in a **den**, which my mother had dug on a north-facing slope high in the **mountains**.

3. During the first several months of life, I slept almost continuously, occasionally nursing from my **mother**.

4. At three months, when I emerged from the **winter den** with my mother and brother, I weighed **7 lbs**.

5. During my first two years, I stayed close by my **mother**. She taught me how to **dig for roots, catch rodents, and avoid dangerous situations**. I **liked to wrestle with my brother, swim and eat fish**.

6. I mostly eat **roots, berries, nuts, rodents and fish**.

7. At nine months, I weighed **73 lbs**.

8. During the winter, I stay warm **by sleeping in a warm, snug den**, lined with evergreen boughs, mosses, and grasses and insulated by deep **snow cover**.

## Human Facts
1. At birth I weighed _________________ and was _________________ inches long. My eyes were _________________ at birth.

2. I was born on _________________ in a _________________ in _________________.

3. During the first several months of life, I _________________.

4. At three months I weighed ____________.

5. During my first two years, I stayed close by my ________________ who taught me how to _________________.

6. I mostly eat _________________.

7. At nine months I weighed _________________.

8. During the winter, I stay warm by ___________.
You and a Grizzly Example

Bear Facts

1. At birth I weighed 15 oz. and was 10 inches long. My eyes were closed at birth.

2. I was born in late January in a den, which my mother had dug on a north-facing slope high in the mountains.

3. During the first several months of life, I slept almost continuously, occasionally nursing from my mother.

4. At three months, when I emerged from the winter den with my mother and brother, I weighed 7 lbs.

5. During my first two years, I stayed close by my mother. She taught me how to dig for roots, catch rodents, and avoid dangerous situations. I liked to wrestle with my brother, swim and eat fish.

6. I mostly eat roots, berries, nuts, rodents and fish.

7. At nine months, I weighed 73 lbs.

8. During the winter, I stay warm by sleeping in a warm, snug den, lined with evergreen boughs, mosses, and grasses and insulated by deep snow cover.

Human Facts

1. At birth I weighed 7 lbs., 5 oz. and was 21 inches long. My eyes were open at birth.

2. I was born on March 25, 2004 in a hospital in Cody, Wyoming.

3. During the first several months of life, I slept, drank milk from a bottle, cried, liked to stare at bright objects, and was totally dependent on my parents for my basic care and well-being.

4. At three months I weighed 12 lbs.

5. During my first two years, I stayed close by my parents who taught me how to walk, say my first words and feed myself. I liked to swing, play with toys and ride in my car seat.

6. I mostly eat peanut butter and jelly sandwiches, fruit, and macaroni and cheese.

7. At nine months I weighed 20 lbs.

8. During the winter, I stay warm by wearing several layers of clothing, including a warm coat or jacket, a scarf, hat, mittens and boots. I stay inside near a warm fire during snowy, cold weather.