

Math Activities for:  
Lump Lump and the Blanket of Dreams: Inspired by  
Navajo Culture and Folklore

Black Bears

1. When standing on its hind feet, a black bear can reach seven feet tall. How many inches would a black bear reach?
2. If an average male black bear can weigh up to 600 pounds, how much heavier is the male black bear compared with a female bear that weighs up to 400 pounds?
3. A female black bear can weigh as little as 90 pounds and at most 400 pounds. What is the range in weight for a female black bear?
4. Generally, black bear cubs will hibernate between November and March. Approximately how many days does a cub hibernate?
5. In a family of black bears, the father bear weighs 450 pounds, the mother bear weighs 200 pounds, and the cub weighs 50 pounds. How much do they weigh all together?
6. A large male bear weighs 756 pounds. Write the weight of this bear in base 10 notations, i.e.,  $700 + 50 + 6$
7. A female black bear eats about 617 calories per hour and a female woman eats about 65 calories per hour. How many more calories does a female bear eat per hour than a female woman?
8. A bear can survive up to seven months without food. How many more months would a black bear need to survive an entire year without food?
9. The average black bear can run up to 37 mph (60km/h). If a bear ran for 3 hours straight, how many miles would he have run?

10. The habitat of the black bear ranges in elevation from 4,000 to 10,000 feet. What is the difference in the black bear's elevation?

## Red Fox

1. A red fox can be 36 inches in length. How many feet would this be?
2. There are 4 foxes in my field. They measure respectively 20, 30, 28 and 27 inches. How many inches would they total altogether?
3. If a fox weighs 24 pounds, how many could I carry in a box that holds 120 pounds?
4. If a fox slept for 10 hours during a day, how many hours would it have to hunt for food that same day?
5. A fox can jump as high as 78 inches. How many feet would that jump be?

## Western Bluebirds

1. The western bluebird is usually 15 to 18 cm in length. What is the difference in possible lengths?
2. If 5 bluebirds have 4 eggs each, how many eggs do they have altogether?
3. A Western bluebird egg takes about 22 days to hatch. How many weeks would this take?
4. Western bluebirds live in nesting boxes. To avoid attacks from other birds, they keep their openings  $1\frac{1}{2}$  inches wide. If a western

blackbird makes an opening that is 4 inches wide, how much smaller should it become?

5. A female bluebird must keep her eggs at a temperature of 98 to 100 degrees. If the temperature reached 85 degrees, how much warmer does she need to make the eggs?
6. Bluebirds can raise 3 separate families at one time. If each family had 4 eggs, how many eggs would there be in total?

## Red-Tailed Hawks

1. Red-tailed hawks have a wingspan of 4 feet. What is the total wingspan of 30 Red-tailed hawks?
2. A female hawk lays about 5 eggs each year. How many eggs could she lay in 12 years?

## Robins

1. A robin took 6 days to build his nest. How many nests could he build in 30 days?

These activities were written by Shea Radish

M.Ed. in Education Administration, Wilmington University, Wilmington, Delaware

B.S. in Education K-8, Wesley College, Dover, Delaware

Over seventeen years, Mr. Radish has taught algebra and K-8<sup>th</sup> grade math and worked as a math specialist.