



Kit Fox Lesson Plan One

LEVELS:

Grades 3 to 6

SUBJECTS:

Science, language arts

STATE STANDARDS: (New Mexico)

1) Science: Science 6.29.10.9 C. Strand 2: Content of Science

2) Language Arts: English Language Arts 6.29.4.9 A. Strand 1: Reading/listening comprehension

CONCEPTS:

The unique components of air, water, climate, and geological conditions at White Sands National Monument provide a harsh environment for plants and animals. Because of this, animals have adapted to this different environment. The kit fox is an example of an animal adapted to this desert environment.

SKILLS:

Comparing and contrasting

OBJECTIVES:

Students will study the characteristics of the kit fox and describe how they have adapted to the desert conditions.

VOCABULARY:

Adaptation – change in an animal’s body or lifestyle that improves its chances of survival in its environment.

MATERIALS:

- Large picture of fox
- Scotch tape
- Paper and pencils

TIME CONSIDERATIONS:

30 to 45 minutes

BACKGROUND:

The kit fox is the smallest of the canine family, which includes wolves, coyotes, red foxes, and grey foxes. It is very well adapted to desert and semi-arid areas of western North America. The kit fox has sensitive eyes, which allow it to hunt in the cool of the evening. It has a keen sense of hearing that allows it to locate prey in the dark. It also has the largest ears of all the foxes, and the ears help get rid of body heat. The ears have a lot of hair to keep sand out while digging a burrow. The fox also has a good sense of smell.

The kit fox lives in dens in the soil. A den may have as many as 8 entrances. They stay in their dens during the hot days and come out to hunt at night. They are called nocturnal animals. Their paws are thickly furred to help them run over the sand, and they are very fast runners.

The color of its coat helps it to blend in with the surroundings. Our kit fox is pale buff and yellow, with a cream colored throat, belly, and inner ears.

Adult foxes are 15 to 20 inches in length and have a 9 to 12 inch long tail. They weigh 4 to 6 pounds on average. They are small, so they need less water. They eat mice, kangaroo rats, rabbits, lizards, ground birds, and large insects.

The following is a list of the adaptations for the teacher:

1. Sensitive eyes
2. Good hearing
3. Large ears to help stay cool
4. Hair in ears for protection
5. Good sense of smell
6. Hunt at night
7. Paws are furry

8. Very fast runner
9. Color blends with environment
10. Small size

GETTING READY:

- Picture of kit fox for the blackboard
- Make a copy of the background information for each student.
- Write each adaptation separately on small pieces of paper.

DOING THE ACTIVITY:

- Have students read the background information about the kit fox.
- Discuss size, characteristics, home, and food.
- Discuss what an adaptation is.
- Have students write down as many adaptations as they can find.
- Put the picture of the fox on the board.
- Put the adaptation pieces of paper on the chalk tray.
- Take volunteers to choose an adaptation and tape it by the part of the fox it describes.

REINFORCEMENT:

- Have all the students stand.
- Have a volunteer name an adaptation, he/she can sit down.
- Continue with another volunteer, etc.
- If the group is larger than 10, adaptations can be repeated.
- Continue until all are seated.

EVALUATION:

Use the reinforcement exercise as form of evaluation.

Reference Material for Kit Fox Lesson Plan:

- *National Audubon Society Field Guide to the Southwestern States: Arizona, Nevada, New Mexico, Utah* by Peter Alden and Peter Friederici
- *50 Common Mammals of the Southwest* by George Olin
- *Kaufman Field Guide to Mammals of North America* by Nora Bowers, Rick Bowers, and Kenn Kaufman
- *Fox* by Caroline Arnold
- *Crafty Canines: Coyotes, Foxes, and Wolves* (Watts Library: Animals) by Phyllis Jean Perry
- www.wildlifer.com/foxrefs.html
Extensive bibliography for kit fox (*Vulpes macrotis*) and swift fox (*Vulpes velox*)
- <http://www.arkive.org/kit-fox/vulpes-macrotis/> Web page with images/videos of kit fox
- <http://digital-desert.com/wildlife> Fact sheets on extensive list of animals

