SAFETY WITH ANIMALS

**Lesson 3: Grades 4-6**

**Bone-up on Rabies Prevention and Wildlife!**

**Curriculum Connections, Standards addressed:**

**Academic Goals:** 1.4, 1.8, 1.10, 2.3, 3.1, 3.2, 3.7, 4.3, 4.6 & 4.7

**Knowledge Goals:** Communication Arts: 3 & 6; Mathematics: 3 and possibly 6; Science: 3 & 8; Social Studies: 7; Health & Phys Ed: 1, 3, 5 & 7

**Objectives:** Students will be able to identify both wild and domestic animals. They will be able to explain how rabies is spread and prevented and will be able to distinguish animals that can carry rabies from those that cannot.

**Common Core-Aligned Activities:**

**W.5.7—Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.**

Encourage students to research what species of animals are carriers of the rabies virus. Are these species common to your community? How is the virus transmitted? What fears does the word ‘rabies’ conjure? Can it be prevented? How?

**Character Concepts:**  Responsibility

What types of responsible behavior do people need to take to keep their community free of the rabies virus?

**STEM initiatives: Think critically in the connections to Science, Technology, Engineering and Math**

**5-ESS3-1:** Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment. What types of vaccinations have been created to protect people and animals from the rabies virus? What is the most effective type of vaccine used? What species of animals can be vaccinated? What is the medical treatment used if someone is affected? How has science been effective in controlling this virus?

**Materials Needed:**

* Markers and colored pencils
* 11 x 17 paper, card stock or construction paper
* Glue
* Big bag full of stuffed animals (both wild and domestic, try to include mostly native wild animals)
* Find your state’s rabies statistics on the CDC.gov website
* DOWNLOAD Handout: “Rabies Q’s & A’s Uncovered”
* Magazines with animal pictures (National Geographic, Pet Life, Missouri Conservationist, Cat Fancy, etc.) (optional)

**Method:** Once again play our detective theme music, Mission Impossible, to get the class excited about the day’s activities. Write the following on the chalkboard prior to the start of class: “ \_\_\_\_ is a disease that is caused by a virus that attacks the brain and spinal cord and can kill the victim if not prevented.” Tell your detectives this is a definition and while the theme music is playing, ask them to take a minute to think about what the missing word is. Once someone identifies it correctly as rabies, write it in the blank and explain to the students that they will be surprised about the amount of misguided information concerning the rabies virus. Ask your students to guess who can get rabies and how many of these victims were found infected with rabies in your state in the most recent year reported on the CDC website. You will probably get some exaggerated answers.

Explain they will discover important information about the rabies virus but first must uncover some background information. Write the words WILD and DOMESTIC on the chalkboard and ask the students to tell you what they mean. Write their correct definitions beneath the corresponding words and give them one example of each type of animal and write it on the board under the correct title. Ask for volunteers to draw a stuffed animal out of the bag and have the class decide if it is wild or domestic and keep them in two separate piles. Add these animals to the lists you just started until all of the animals have been pulled from the bag.

Then write the headings MAMMALS and NON-MAMMALS on the chalkboard and ask the students to tell you what characteristics distinguish a mammal from a non-mammal and write the correct responses on the board. Then ask students to look at the stuffed animals that have been pulled from the bag and distinguish or separate the mammals from the non-mammals and write their names on the board under their perspective headings.

Now explain to students that only mammals can become infected with rabies and that almost all animals infected with rabies are wild. Circle the headings MAMMALS and WILD and ask the students to put on their spyglasses and find the animals that are listed under **both** of these columns and circle them. Now they have a list of animals that are most susceptible to rabies.

Distribute the “Rabies Q’s & A’s Uncovered” handout to each student and read it aloud together. Encourage questions and discussion.

**Call to Action:** Have the students fold both the right and left hand sides of the 11x17 paper inward like a brochure so that when it opens you have three equally sized columns separated by the folds in the paper. Have them write the following headings across the paper at the top of each column in this order:

Animals most often infected with rabies /Animals rarely infected with rabies /Animals Never Infected with Rabies

All three headings will then have the following categories listed under them:

 (Wild mammals) (Domestic mammals) (Non-Mammals)

Your students will create collages of animals. Have the students either cut pictures of animals out of magazines and glue them beneath each column creating a collage or simply have them draw various animals under their corresponding columns and label them with the animals’ names. Although each student is to create their own collage, they can be allowed to work together in their detective groups to help each other. Hang the collages in a high-traffic area for others to learn about rabies. Look at the “Rabies Q’s & A’s Uncovered” handout again - see Question 4 “Can the rabies virus be prevented?” Enlarge this and hang it in the middle of the display, surrounding it with the detectives’ collages. You can title the display: Look what our Detective Work Uncovered about the Rabies Virus!

**Extensions:** Use the rabies statistics from Illinois and Missouri (or states of your choice) to create line or bar graphs. Compare the results and ask questions such as:

1. Did Illinois or Missouri have more cases of rabies reported in the past year?
2. Which state had the most domestic animal cases reported in the past year?
3. Rabies was found most frequently in which animal in Missouri?
4. Rabies was found most frequently in which animal in Illinois?

**HEY TEACHERS! If your students want more fun, here are some additional hand-outs to download:**

“No MAYBEs with Rabies”

**Reading:**  Visit our section entitled ***Recommended Children’s Literature*** for a comprehensive listing of animal-related books.

**Web sites:**

[www.cdc.gov](http://www.cdc.gov) (kid’s section)

[www.avama.org](http://www.avama.org)