



Math Mission

Summary:

Students will act out math story problems about endangered Puerto Rican animals.

Background Information:

This lesson should be used after “Extinction Extravagance” and/or “Acrostic Animal” so that students already have an idea about what reasons lead to animals being endangered. Use information from “Acrostic Animal” and the US Fish and Wildlife Service <http://endangered.fws.gov/>.

Students must create realistic stories to match their math problems. For example, if it is subtraction, the reasons for the animal number declining must be due to loss of habitat, predation, loss of food, natural disaster. If it is addition, the reasons for the animal number increasing must be due to law enforcement protection, abundance of food, predator numbers declining, and protection of current and potential habitats.

Materials:

- Paper
- Pencils
- Chalkboard or sidewalk chalk

Procedure:

Introduction.

We have been talking about many endangered Puerto Rican animals. Today we are going to act out some math story problems using these animals as our topic.

Activity 1.

Instruct each student to think about the endangered animals we have been researching and discussing. Have each student write down one story problem that has to do with an endangered Puerto Rican animal. The problem has to use numbers that allow the class to act it out. It can be subtraction or addition – depending on the wording students choose that is true to the animals’ situation. For example: One day there were 14 Puerto

Grade Level: 2nd

Goal: Students will become familiar with endangered Puerto Rican animals through math story problems.

Key Concepts: the checks and balances of nature

Objectives: Upon completion of this lesson, students will:

- 1) be able to write a math story problem.
- 2) be able to work cooperatively to act out a math story problem.
- 3) be able to give reasons for the declining or increasing numbers of various Puerto Rican animals

Teaching Location: In the classroom or outside

Lesson Time:

Overall: 80 minutes
Activity 1: 15 minutes
Activity 2: 60 minutes –
(depends on number of students)
Conclusion: 5 minutes

Subject Areas for Infusion:
Environmental Education, Math

Standards:

Wisconsin State Standards:
Environmental Education:
A.4.4

Math: A.4.3, A.4.4, B.4.1,
B.4.5, F.4.2, F.4.5

Rican Parrots flying through the Caribbean National Forest looking for some delicious fruit to eat. Out from the shadows flew 3 Red-tailed hawks, each killing a Puerto Rican Parrot for lunch. How many Puerto Rican Parrots are left? They must also write out the number sentence and answer to the problem.

Activity 2.

After all students have a story problem written out, they will take turns reading the story as the rest of the class acts it out. The teacher can help guide students when they are having trouble to make sure the outcome is correct. The student telling the story can check to see that their answer is right by observing the end product of the students acting out the story. The number sentence can then be written on the board (if inside) or with sidewalk chalk (if outside). Continue until all students have read their story problems.

Conclusion.

Ask if students have any questions about the math story problems. Compliment them on their creativity.

Assessment.

Each story problem will be handed in and assessed individually to see that it was written correctly and that the number sentence matches the story. The reasons for it being addition or subtraction will be looked at to see that they make sense and tie in with what we have discussed in previous lessons.

Adaptations: A student with special needs can be part of the group that acts out the story problems. They can also draw a picture that tells their story problem instead of writing it out.

References:

Lessons “Extinction Extravagance” and “Acrostic Animal”
US Fish and Wildlife Service <http://endangered.fws.gov/>