Why Do You Classify This?

Summary

In this lesson plan students will get to group pictures of animals into similar groups and defend their reasons. The process should mirror how they have been classifying objects previously.

Group Size

Small Groups

Materials

- Animal cards

Animal pictures

What Can You Do With a Tail Like This?
Student journals

Additional Resources

Books

What Do You Do With a Tail Like This?, by Steve Jenkins and Robin Page; ISBN-10: 0-618- 25628-8

Background for Teachers

Classification is a way to organize information in a hierarchal order. It helps students to see that animals and plants have similarities and differences, for example a bear is an animal and a mammal, but a frog is an animal and a amphibian. Students need to see that animals can be grouped by characteristics that are seen and are not seen; e.g. cold- blooded can't really be seen, but fur can be. This lesson is to be used after the students have been exposed to many classifying activities. They should be familiar with grouping and simple classification keys.

Intended Learning Outcomes

- 1. Use science process and thinking skills
- 3. Understand science concepts and principles

Instructional Procedures

Invitation to Learn

Have students rip and fold a piece of paper in their journal to create a flip chart. Ask students to think of an animal they know well, one that they can picture in their mind and describe. Explain that students are going to create a character sketch of the animal. They will describe what the animal looks like, acts like, and places where it would live. This sketch should give information about the animal without ever saying the name of the animal. Give students time to complete their animal sketch. Encourage them to include LOTS of detail and write in complete sentences. After completing the animal sketch, have students write the name of the animal on the inside of the flip chart. If they finish early they can draw a picture as well. *If you want to carry this into more writing practice students can revise and edit as partners and then present to a group.*

When all students are done, have them share their animal sketches. Students stand up and walk around until the teacher says stop. They turn to the person closest to them and take turns reading their sketch and having the other student guessing the animal.

Instructional Procedures

Show the students the book *What Do You Do With A Tail Like This?* Explain that this book talks about similarities in animals like tails, eyes, hands, etc (show pictures/example from the book). Then it talks about how these parts can be different and how they are used.

Explain that before you read the story you want to see how much the students know about animals. Pass out the Animal Cards. Assign partners or 3 students to work together. Give the students a few minutes to walk around looking for their matching cards. When they are done talk about what matches they found. Post the matches on a poster for reference.

Read the book to the students. Stop and observe matches when they apply to the story. Have students correct themselves when necessary.

Explain to students that scientists look at what is similar and different in animals to classify, just like with the grouping activities done before. Explain that today students will get to group pictures of animals into similar groups and defend their reasons. The process should mirror how they have been classifying objects previously.

Pass out animal picture cards. Pictures can be grouped in various ways depending on how much your students have already learned about animals. If they know what the differences between reptiles and mammals are, you can have some of both in a group. But a little more challenging is to have a group of spiders, birds, etc. That way, students can focus on characteristics that make the animal unique from other animals similar to it. Students work in groups to classify them. Encourage students to look at all characteristics.

When the students have created groups, help them to make a classification key to show the animals.

Assess students as you move through the groups. If students need more practice have them switch cards and repeat the activity with different animals.

Extensions

Curriculum Extensions/Adaptations/ Integration

Have students gather and group leaves. Include leaves that are native to Utah.

If your students need more hands-on or kinesthetic activity, have them group stuffed animals instead of pictures.

Use the Internet to have students research about animals. They can write a report or give an oral presentation.

Use the jigsaw activity to learn about animals. Have groups of students learn about an animal (or group) through the Internet, books, etc. Then regroup students so that each animal is represented in the group. Have them give an oral presentation.

Focus classifying animals or plants from specific habitats. Students group the animals from wetlands, deserts, and forests. Then discuss differences in the adaptations that the animals have to survive.

Students can write as if they are the animal and explain what life is like.

Students can create a daily diary as if they were an animal living in the forest, wetland, or desert. (Use *Diary of a Worm* to encourage ideas.)

Family Connections

Teach a family member how to use a classification key.

Use a simple plant classification key to identify trees around their homes.

Give students a classification key and animal pictures; they must identify the animals.

Assessment Plan

The *Animal Cards* provide a pre-assessment of students' knowledge of animals and their adaptations.

Give students a classification key and an animal/plant to identify.

Students explain how to use a classification key and why they are important.

Bibliography

Research Basis

Wolfe, P. (2001). *Brain matters: translating research into classroom practice*. Association for Supervision and Curriculum Development, Alexandria, VA.

The brain processes abstract information best after experiencing real things first and then symbolic representations. To analyze and compare information, the brain needs to be able to base it on an experience. When learning science, students need to be presented with real-life experiences and meaningful context that build a base for the abstract written problems we usually pose on tests.

Authors

Utah LessonPlans