TITLE The Animal Slam! Amazing Adaptations GRADE(s) K-5

TIME REQUIRED 1-2 class periods

CONCEPT STATEMENT

Students will investigate the concept of animal adaptations and how those adaptations help animals interact within an ecosystem by creating their own hybrid animals and explaining their creative choices.

OBJECTIVES

Students will: understand that animals have characteristics called adaptations that help them survive and that adaptations can be physical or behavioral; use the principles and elements of art to create visual representations of animal adaptations; and use oral language and writing skills to explain their creations and discoveries.

STANDARDS OF LEARNING CORRELATIONS

Science: K.4, K.6, K.7, 1.5, 1.8, 2.5, 2.8, 3.4, 3.5, 3.6, 3.10, 4.5
Visual Arts: K.1, K.3, K.5, K.10, K.12, K.13, K.14, K.15, 1.1, 1.3, 1.4, 1.5, 1.6, 1.8, 1.10, 1.13, 1.16, 1.17, 1.19, 1.20, 2.1, 2.4, 2.5, 2.9, 2.16, 2.21, 2.22, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.4, 4.18, 4.23, 4.25, 5.1, 5.3, 5.5, 5.6, 5.12, 5.28
English: K.2, K.3, K.11, 1.2, 1.3, 1.7, 1.8, 1.11, 1.12, 1.13, 2.1, 2.2, 2.3, 2.7, 2.9, 2.10, 2.11, 2.12, 3.1, 3.2, 3.3, 3.4, 3.6, 3.8, 3.9, 3.11, 4.1, 4.2, 4.4, 4.5, 4.6, 4.7, 4.9, 5.1, 5.2, 5.4, 5.5, 5.6, 5.7, 5.9

MATERIALS

One sheet of 9” x 12” light brown construction paper per student
1-2 sheets of standard drawing paper per student
scratch paper for preliminary sketches
markers, crayons, colored pencils, drawing pencils, erasers
glue sticks
various resource books, field guides, and other materials about plants and animals
scissors

optional: collage materials (animal pictures from magazines or internet, cut-out shapes, tissue paper, stamps and ink pads, etc.)

VOCABULARY

adaptation (physical adaptation and behavioral adaptation)
carnivore, herbivore, omnivore
ecosystem
hybrid
organism

OVERVIEW (List VMFA resources and other resources used)

Set the stage for this activity by showing students images of animals created by a variety of artists, including works by contemporary artist James Prosek, whose work inspired this activity (http://www.troutsite.com/). Concepts and vocabulary should be adapted to the appropriate grade level.

VMFA's free, downloadable Wild@Art app explores over 30 artworks that feature animals, including wild beasts, treasured pets, and imaginary creatures. Organized thematically by animal type and habitat, this app will help your students learn about animals, environments, and their interaction with humans.
https://itunes.apple.com/app/wild-art/id631679551?ls=1&mt=8

These children's picture books will also help with the background information:
Eyewitness Books about plants and animals (DK Publishing)
Beast Feast by Douglas Florian (Harcourt Brace & Company, 1994)
Illustrated Nature Encyclopedia: Animals in the Wild by Michael Chinery (Lorenz Books, 2005)

Lead a class discussion about the animals the artists have chosen for their paintings, drawings, or sculptures. Talk about the environment that surrounds the animal, their adaptations (physical and behavioral), and how they might interact with other animals in their environment. Explain that an adaptation is a change in the physical make-up or the behavior of a living organism that helps it to thrive in its environment.

Introduce the work of James Prosek, an accomplished artist, writer, and naturalist. Prosek is fascinated with the ways that humans have organized the natural world into groups that share certain characteristics. VMFA's collection includes his Flying Fish, a drawing made on tea-stained paper. Prosek used watercolor and gouache to create a hybrid animal. The body is a flying fish, but instead of the usual pectoral fins, he substituted the wings of a South American bird known as a cock-of-the-rock. He then added two drawings of related organisms: a junonia shell and a frond of brown seaweed. He also labeled each drawing to give his work the appearance of a scientific document.

In this activity, students will make their own hybrid creatures that are inspired by Prosek's work. They will add two other plants or animals that share the ecosystem of their hybrids. They will then describe the adaptations of the new creatures and their interactions within the environment. (This can be an oral class discussion for younger students; older students should research their animal choices and write about their observations and conclusions.)

ACTIVITY DIRECTIONS

Teacher instructions: Students may use a variety of materials to create their hybrid animals and/or plants. The complexity of the assignment may also vary according to the age level and ability of the class. Students may choose to draw their creations or to construct them using collage techniques. Once the assignment is explained, distribute the selected materials, including picture books and/or field guides, scissors, and glue sticks. Each student should receive a sheet of light-brown construction paper.

Give the students the following directions:
1. You will each be making a picture of a single animal that is made up of two different animals or plants—and two other related plants or animals that might inhabit the same ecosystem. You may use picture books and/or field guides about animals to help you develop your ideas. Be sure to consider the relationships among the animals and plants in your imaginary ecosystem.

(Depending on the grade level, add that they might think about predator-prey interactions; whether or not the animals are herbivores, carnivores, or omnivores; food chains; etc.)

Example: You could make a hybrid of a cat and an elephant and a second hybrid that combines a rabbit and a peanut. (Elephants are herbivores and cats are carnivores.) The third creation could be a plant, perhaps a carrot that might be enjoyed by both the Peanut Bunny and the Catelephant.

2. Once you have created your three organisms, cut out each creation, arrange them carefully on your brown paper, and paste them down using a glue stick. Then, label each organism with its hybrid name.

3. When everyone is finished, you'll each present your creatures to the group, explaining their place in the ecosystem and their relationships with each other.

Extension activity for older students: In the next class period, divide the class into small groups and have the students imagine an ecosystem that contains all of their creations. Ask them to work cooperativly to create an aerial view of the ecosystem their creatures inhabit, making sure to include everything the creatures will need for survival. Finish by asking each group to explain how their ecosystem works.

Include a writing component to round out the assignment. This could be a research paper about a particular animal—or a short story or poem inspired by the project.