



Biodiversity around the World

Suggested Curriculum links (Grade 6)

Life Science:

Diversity of Life

- 301-15 compare the adaptations of closely related animals living in different parts of the world and discuss reasons for any differences

Social Studies

- 6.2.1 Compare climate and vegetation in different types of physical regions of the world
- 6.2.2 Assess the relationship between culture and environment in a selected cultural region

Materials

- Pencils
- Craft supplies
- Poster board
- Large envelopes
- Scissors

Overview

Animals may look very different from related species because they are adapted to their specific environment. In this activity, students research pairs of animals, make a poster comparing the two and make a matching game.

Objectives

- To compare similar animals from different environments.

Background

Biodiversity is the diversity of life within a given ecosystem, biome or planet. Biodiversity is generally linked to the health of an area. The more diversity in an area, the more favourable the conditions are for supporting life. In places of great biodiversity, animals are also well adapted to the nuances of each area. For example birds in the same area may have different beak shapes for eating different sizes of seeds.

Across the planet we have many similar animals that are different because they are adapted to their habitat. Dingos and wolves are related animals that have many different characteristics because they live in very different habitats and climates.

Procedure

1. *In groups of two, have students choose two similar animals from separate continents to research.*

Students may choose animals from the list provided. In their research they should find compare the animals'

- Food and eating habits
- Habitat and range
- Adaptations to the local environment
- Reproduction
- Life span
- Threats and conservation status
- Relation to humans
- Behaviour



At the Fluvarium

Join us for *Biodiversity!* Students discover the concept of 'biodiversity' ...the variety of life found in nature. Classifying things as "LIVING", "NON-LIVING", or "DEAD" are key elements investigated. Specific freshwater organisms, i.e. arthropods such as dragonflies, and aquatic creatures such as frogs and Brown trout, are examined closely.

2. *Create a poster/diorama*

Ask the students to use the information they have learned to create a poster or diorama. They should highlight differences and similarities between the animals and their habitats through labels and include a map comparing where the two animals are from.

3. *Present the information to the class*

Have each group present their animals and what they learned to the class.

4. *Make an animal fact sheet cards.*

Ask each student to draw, print or paste a picture of their animal on a sheet of paper. On the opposite side, ask the students to draw a 3 x 3 grid. In each of the nine blocks, ask the students to write down an animal fact based on what they learned. Each pair should write down comparable traits/facts for their pair of animals. For example in the top right side block they may write a fact about diet for each. They should also include facts on special adaptations to their environment.

5. *Make a game with the cards.*

Ask the students to cut up their animal pictures along the grid lines into nine cards. Have the pairs place all 18 cards into an envelope and write the animal names on the front. Ask each pair to trade their envelope with another group to play the game.

To play: Ask the students to draw cards from the envelope and using the facts try to determine which animal it belongs to. After each student has 18 cards they may flip the cards over and place them together to see if they have matched the traits/facts with the animal correctly.

Extensions

- Ask the students to create fact cards for their research animals. Post them on the wall with a map that identifies where each animal is from.

Resources

Websites

ARKive

<http://www.arkive.org/>

Images and information about endangered animals.



Animal Planet: Wild Animals

<http://animal.discovery.com/animals/>
Images and facts about various animals.

Suggested Animal Pairs

Green frog / American tree frog

Polar bear / black bears

Dingo / Grey wolves

Orangutans / Chimpanzees

African Lion / Siberian Tiger

Yangtze River dolphin / Bottlenose dolphin

African elephant / Asian elephant

Saltwater crocodile / American alligator

Corsican deer / White tailed deer

Pine Marten / Black footed ferret

Sea otter / European otter

Giant panda / Brown bear

California condor / Crested caracara

Bald eagle / Harpy eagle

