It's A Jungle Out There

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Teacher's Guide

Grade Level: PS-3
Subject Areas: Science

Objectives and Goals

- Science objectives
    - Students will learn about biomes
        - Oceans
        - Tropical Seasonal Forest/Savanna
        - Tropical Rainforest
        - Temperate Deciduous Forest
        - Taiga (Boreal Forest)
        - Temperate Grassland/Desert
        - Subtropical Desert
        - Woodland/Shrubland
        - Alpine
        - Tundra
        - Polar Ice Cap
    - Students will discuss some of the reasons why animals are endangered
    - Students will learn about one species, the Bald Eagle, that has been helped and is no longer on the endangered list
    - Students will learn about one species, the Black Sun Bear, that is so rare that scientists don't really know how many there are in the wild
- Life Skill objectives
    - Students will learn to analyze problems and apply solutions
    - Students will learn that working together will often help to solve problems.

Required Materials and Equipment

- Teacher reference sheets
    - World biomes map

    - Chart of rainfall vs temperature for the world's biomes
    - Description of specific biomes
    - Information about the animals in the show (the Cast of Characters)
    - Bald Eagle Natural History from Lakeside Nature Center
    - Sun Bear Natural History from Animal Diversity Web, (http://animaldiversity.ummz.umich.edu/) sponsored by the University of Michigan
- Student Sheets
    - Sun Bear coloring sheets from StoneLion Puppet Theatre
    - Rain Forest coloring sheets from Enchanted Learning

Anticipatory Set

- Discuss reasons animals may become endangered
    - Habitat loss
    - Hunting
    - Disease
    - Excessive predation
- Ask students what could be done to help. Possibilities include
    - Smaller, more concentrated development
    - Changes in farming styles (less slash and burn)
    - Change in fishing methods
    - Cleaner, less polluting fuels
    - Others?????
- Ask students what they can do. Even little things help! Possibilities include
    - Recycling
    - Making sure that nothing 'nasty' goes down storm drains to lessen pollution
    - Using less water
        - Showers vs baths
        - Turning the faucet off while brushing teeth
    - Others?????
- Explore how to work in a group to achieve a goal

Direct Instruction

- Definition of Biome: A distinct group of life forms (plants and animals) and the environment in which they are found.
- Using the descriptions of the biomes, the map of biomes and the temperature vs. rainfall chart, discuss the characteristics of each biome.
    - Temperature
    - Rainfall

    - Location on the earth
    - Animals found in each biome
    - Plants found in each biome
- Using the 'Cast of Characters', discuss the specific animals the students will encounter in the performance.

Guided Practice

- Sun Bear Coloring Sheet provided by StoneLion Puppets
- Rain Forest Animals Coloring Book provided by Enchanted Learning.

Watch performance of ***It's A Jungle Out There***

Closure

Standards Fulfilled

Missouri Science Standards

Kindergarten – Grade - Grade Level Expectations

LO: 1-D-K-a: Observe and compare the structures and behaviors of different kinds of plants and animals

Grade 1 – Grade Level Expectations

LO: 1-A-1-a: Identify the basic needs of most animals

LO: 1-A-1-b: Identify the basic needs of most plants

Grade 2 – Grade Level Expectations

IN: 1-A-2-a: Pose questions about objects, materials, organisms and events in the environment

St: 3-A-2-b: Work with a group to solve a problem, giving due credit to the ideas and contributions of each group member

- Discussion of the various reasons that an animal or plant may become endangered

Grade 3 – Grade Level Expectations

EC: 2-A-e-b: Classify populations of organisms as producers or consumers by the role they serve in the ecosystem

- Discuss the role of the various animals in the biomes

EC: 2-A-3-d: Predict the possible effects of removing an organism from a food chain

LO: 1-A-3-a: Describe the basic needs of most plants (i.e., air water, light, nutrients, temperature)

St: 3-A-2-b: Work with a group to solve a problem, giving due credit to the ideas and contributions of each group member

- Discussion of the various reasons that an animal or plant may become endangered

Grade 4 – Grade Level Expectations

EC: 1-A-4-a: Identify the ways a specific organism may interact with other organisms or with the environment (e.g., pollination, shelter, seed dispersal, camouflage, migration, hibernation, defensive mechanism)

EC: 1-A-4-b: Identify and describe different environments (i.e. pond, forest, prairie) and how they support the life of different types of plants and animals

EC:1-D-4-a: Identify examples in Missouri where human activity has had a beneficial or harmful effect on other organisms (e.g. feeding birds, littering vs. picking up trash, hunting/conservation of species, paving/restoring green spaces)

Kansas Science Standards

Kindergarten Standards – Life Science

3.0 The student will begin to develop an understanding of biological concepts.

3.1.1: The student discusses that organisms live only in environments in which their needs can be met

3.1.3: The student observes living things in various environments.

Grade 1 Standards – Life Science

3.1.1: The student discusses that organisms live only in environments in which their needs can be met

3.1.3: The student observes living things in various environments.

Grade 2 Standards – Life Science

3.1: The student will develop an understanding of the characteristics of living things

3.1.1: The student discusses that organisms live only in environments in which their needs can be met

Grade 3 Standards – Life Science

1.1.1: The student asks questions that he/she can answer by investigating

1.1.4: Begins developing the abilities to communicate, critique, analyze his/her own investigations, and interprets the work of other students.

3.1.2: Compares basic needs of different organisms in their environment.

Grade 4 Standards – Life Science

1.1.1: The student asks questions that he/she can answer by investigating

1.1.4: Begins developing the abilities to communicate, critique, analyze his/her own investigations, and interprets the work of other students.

3.1.2: Compares, contrasts and asks questions about life cycles of various organisms