



Lesson Plan

Theme: Animals go through different stages during their life cycle and we can learn to recognize what these stages look like. At each stage, an animal may have different needs.

Length of Lesson: 90 mins

Introduction: 15 minutes

Field and Interpretive Center (IC) Activities: 60 minutes

Conclusion: 10 minutes

Transitions between stations: 5 minutes

Minnesota Academic Science Standards/Benchmarks:

- 1.4.3.1.1: Demonstrate an understanding that animals pass through life cycles that include a beginning, development into adults, reproduction and eventually death.
- 1.4.3.1.2: Recognize that animals pass through the same life cycle as their parents.

Excellence in EE: Guidelines for Learning Standards:

- Grades (K-4) - Strand 1 Questioning, Analysis and Interpretation Skills, A) Questioning, C) Collecting Information
- Grades (K-4) - Strand 2 Knowledge of Environmental Processes and Systems, 2.2) The Living Environment, A) Organisms, populations and Communities C) Systems and Connections

Objectives (Students will be able to...):

- use deductive reasoning to successfully decide which part of the life cycle an animal is in
- learn that the success of the life cycle relates to plants and animals having the proper things they need in their home/habitat (food, water, shelter, space)
- understand that not all life cycles are completed (and that's ok), deduce reasons why a life cycle may go uncompleted
- recognize that plant and animals life cycle will be the same as their parents.

Background Information :

Many animals undergo physical changes as they grow, with several predictable stages that occur sequentially. Complete metamorphosis involves four distinct life stages: egg, larva, pupa and adult. Incomplete metamorphosis is similar but without the pupa stage, and may instead have more, less distinct, changes.

*Helping people discover, enjoy,
understand, and preserve the incredible
natural world that surrounds us.*

Introduction:

Goals: Welcome students to River Bend, introduce the River Bend leaders, and introduce the program content.

Key points:

- Welcome
- Review student knowledge on habitats
- Explain a life cycles
- Set expectations for the day

Activities:

1. Oh Deer! (interactive game)

Goal: To reaffirm the concept that life cycle completion is dependent on basic needs (food, water, shelter, space) being met.

Key points:

- One groups of students will represent the habitat needs (food, water, shelter, space) the other group of students will be deer.
- Each deer needs to choose one habitat need and tag a student representing that habitat needs.

Assessment: Discuss with students what was challenging about completing their life cycles. Emphasize what happens if one of the habitat needs cannot be met.

2. The Great Life Cycle Relay Race (active game)

Goal: To advance the point that animals go through the same life cycle as their parents.

Key points:

- Students will be assigned to teams that portray a specific animal.
- Each student will go through that animal life cycle then tag the next person to continue the cycle.

Assessment: Hold a group discussion at the end of the game relating the differences within each life cycle that animals can have and the various changes they go through. Work to conclude how it's beneficial for animals go through life cycles.

3. Dip Netting: (active learning)

Goal: To catch and identify the life stage of the animals they've caught in the pond.

Key Points:

- Students use dip nets to collect pond critters.
- Participants will identify the life stage the animals they've caught are going through with guidance from their leaders.

Assessment: Listen to student ideas regarding why it's beneficial to have life cycles. Focus on unique life cycles such as frogs and dragonflies.