

## Adaptations Classroom Lesson Plan Overview- 3rd - 5th grade

**Grade level:** 3<sup>rd</sup> – 5<sup>th</sup> grade

Program Length: 1 hour total (Divided into 3-20-minute lessons)

Part 1: Adaptations for Beginners (20 mins.)
Part 2: Adaptations in Action (20 mins.)

Part 3: Exploring Physical Adaptations (20 mins.)

## **Related NE State Science Standards:**

- SC.3.9.3.C Use evidence to support the explanation that traits can be influenced by the environment.
- SC.3.9.3.D Use evidence to construct an explanation for how the variation in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.

**Outcomes:** After completing Adaptations lesson from Fontenelle Forest, students will be able to:

Understand what behavioral and physical/structural adaptations are and some reasons why living things adapt.

- 1. Develop an understanding that organisms have different inherited traits and that the environment can also affect the traits that an organism develops.
- 2. Give examples of plants and animals behavioral and physical(structural) adaptations and how those help them to survive.

## **Materials:**

- Computer/AV equipment to show video clips (4 in this lesson)
- Chart paper or blank document for teacher to make T-chart and record answers
- Paper for individual KWL charts
- Masking tape for shoe tying contest
- Design your own species activity: "Animal Discovery News" paper copy of activity page for each student with pencils, crayon/markers OR make it a digital version for designing on tablets/iPads

## **Adaptations Lesson and Activity Resources Guide**

- 1. Adaptations classroom lesson overview and plans created by Fontenelle Forest Education Department Staff.
- 2. YouTube video by <u>Highschool Science 101 "Types of Adaptations"</u> briefly describing differences between physical and behavioral adaptations.
- 3. Video about plant adaptations at Fontenelle Forest. Created by Fontenelle Forest: Save the Oaks - Episode 1 - Saving the Oaks at Fontenelle Forest - YouTube
- 4. Animal Discovery News-Adaptations activity sheet created by Fontenelle Forest Education Department staff.
- 5. <u>Project Wild K-12 Curriculum Activity Guide, Revised edition (2002):</u> Activity: Thicket Game, pp.114-115.
- 6. Sit Spot activity. Lesson written by Fontenelle Forest Education Department staff. Demonstration video about nature sit spots by Royal Botanical Gardens: <a href="Connect with Nature: Sit Spots">Connect with Nature: Sit Spots</a> YouTube

Website directions by Sensory Trust.org: Sit spot (sensorytrust.org.uk)

- 7. Shoe Tying Race with Taped Thumbs activity. Lesson written by Fontenelle Forest Education Department staff. Inspired by Minnesota Science Teachers Education Project: The Opposable Thumb as a Human Adaptation: Thumb-taping Lab
- Website resource for the Great Migration Challenge game from the Alaska Department of Fish and Game.gov <u>The Great Migration Challenge (alaska.gov)</u>
- 9. YouTube video from Quizes "How Fast Can You Spot These Camouflaged Animals?" for Part 3 lesson on exploring physical adaptations.
- 10. Bird Wing paper airplane instructions created by Fontenelle Forest Education Department staff, including information from these two sources:
- Book: <u>Raptor! A Kid's Guide to Birds of Prey</u> by Christyna M Laubach, Rene Laubach, and Charles W. G Smith. Storey Kids (2002).

Online article: Audubon Society, Audubon for Kids, "These Paper Airplanes Fly Like Birds" by For The Birds!, April 29, 2020. These Paper Airplanes Fly Like Birds | Audubon