

## **Title:** Adaptation Upgrade

**Objective:** Write an argument for the importance of specific animal adaptations

**Time:** 15 minutes

**Materials Needed:** Journal; Pencil; Color pencils (optional); Pictures of different animals - try to have examples of mammals, fish, birds, reptiles and amphibians (Species native to MN, North America, found in specific biomes.) *Minnesota Weatherguide Environment™ Calendar*, a good source for pictures.

<p><b>Interdisciplinary Lesson</b> <b>Theme: Animal Adaptations</b> Topic: Physical Adaptations Suggested Grade Level: 3-5 Indoors or Outdoors: Either</p>
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## **Directions:**

1. Each student will choose one of the pictures or is assigned one.
2. Students look at their animal and list as many adaptations as they can observe (or research online). How do all of these features work together to help the animal survive? Decide which one physical adaptation they think is the most important for that animal's survival. Students should identify that feature and draw it in their journal.
3. Then write an argument for why they think it is the most important adaptation.
4. Next, students think how they might change that one feature in some way and redraw it differently.
5. Write an explanation about how or why this new adaptation may be better or worse for this animal.
6. Students work in small groups to share ideas.

## **Discussion Questions:**

1. How are an animal's adaptations influenced by the habitat in which they live? Provide examples and explanations.
2. What type of adaptations would an animal need to survive in a desert, wetland, frozen tundra, etc.?

### **Science and Engineering Practices:**

2. Developing and using models; 7. Engaging in argument from evidence.

### **Crosscutting Concepts:**

2. Cause and Effect: mechanism and explanation; 6. Structure and function.

### **Disciplinary Core Ideas:**

Life Sciences: LS1: From molecules to organisms: Structures and processes; LS3: Heredity: Inheritance and variation of traits.

### **Background Information:**

- Animals depend on their physical features to help them obtain food, build homes, keep safe, attract mates and tolerate weather. These physical features are called physical adaptations.
- Physical features, such as head shape and size, eyes, ears, teeth or beak, outer covering, body shape and size, legs, feet, and tail all have functions that help an animal survive in its environment.
- **Camouflage:** A color or shape in an animal's body covering that helps it blend into its environment.
- **Habitat:** The place where an animal lives, the physical characteristics of an animal's surroundings.

### **Additional Resources:**

- *What Do You Know About Animal Adaptations?* by Suzanne Slade

### **Correlates with:**

Greeting - Adaptation Match (p. 1)

Activity - Observing Animal Adaptations (p. 60)