

# JONES VALLEY TEACHING FARM

## AT-HOME ACTIVITIES

### Adaptations

3<sup>rd</sup> Grade – 8<sup>th</sup> Grade

#### DESCRIPTION and OBJECTIVE:

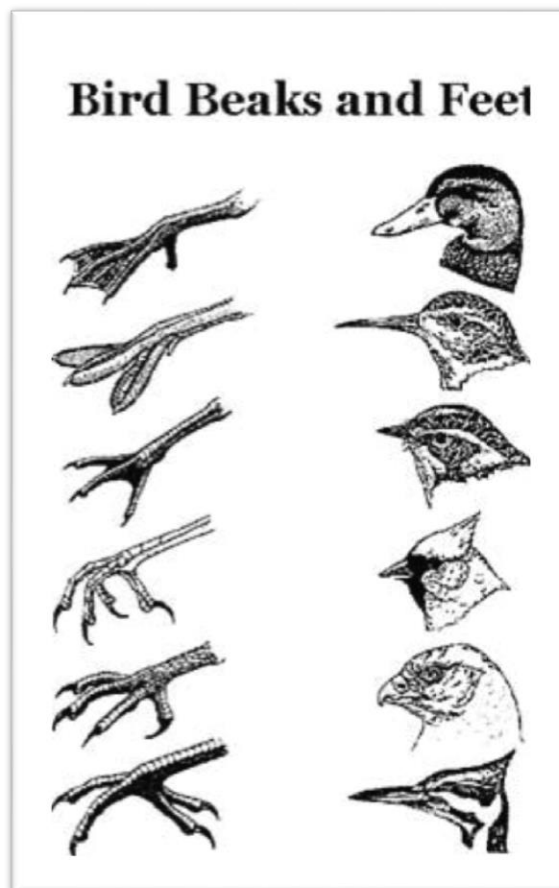
Why do bees have hair on their legs? Why do chameleons change colors when they feel threatened? Explore the wild world of **adaptations** with this activity to find out why certain plants and animals have changed or evolved over time to better survive in their chosen habitats.

#### MATERIALS NEEDED:

- ⇒ Paper
- ⇒ Pencil

#### LESSON / ACTIVITY:

- ⇒ Start this activity by reviewing the image to the right with your student. Ask your student, “What are similarities between these birds? What are differences between these birds?” Be sure to note the length of talons, webbing, length or shape of beaks, etc.
  - Ask your student, “What does it mean to **adapt**?” (to change or adjust to new conditions)
  - Ask your student, “How do you think these birds have **adapted** over time? How has this helped the birds to survive better in their environment?”
- ⇒ Explain to your student that most living things have had to **adapt** or **evolve** in



some way or another over the course of time. Biologists refer to **adaptations** as the change or the process of change by which an organism or species becomes better suited to its environment.

- ⇒ Ask your student, “What are some examples of **adaptation** that come to mind?”
  - Animals, chameleons and walking stick insects, blend into their environment. How might this camouflage help these animals survive in their environment? (*keeps them hidden from predators*)
  - Some plants, like rose bushes and citrus trees, developed thorns on their stems and branches. How might these thorns better suit these plants for their environment? (*offers protection from herbivores*)
  - Camels have humps on their back which store fat. How might these humps assist with a camel’s survival in their preferred desert environment? (*provides nutrients when the food supply is scarce*)
- ⇒ Now, make a “scavenger hunt” card like the one below. Once your card is made, head outside and try to find as many adaptations as you can.
  - When you find an adaptation, cross it off on your paper and make a note of the plant or animal you found that exhibits that adaptation.

<p style="text-align: center;"><b>Camouflage</b></p> <p>Find a plant or animal that can disguise itself or blends into its environment to hide from predators.</p>	<p style="text-align: center;"><b>Defense</b></p> <p>Find a plant or animal that has an adaptation that protects it against herbivores or predators. (Examples: rose bushes with thorns, porcupines, etc.)</p>	<p style="text-align: center;"><b>Seed Dispersal</b></p> <p>Find a plant that has adapted creatively to distribute its seeds to grow new plants. (Examples: fluffy white dandelion seeds that are carried away by the wind)</p>
<p style="text-align: center;"><b>Structure</b></p> <p>Find two trees, one with smooth bark and one with rough bark. Trees with rough bark grow taller quicker, while trees with smooth bark grow slower but their bark is denser to protect against insects and animals. Why else might they be different?</p>	<p style="text-align: center;"><b>FREE SPACE</b></p> <p>Find another adaptation of your choosing!</p>	<p style="text-align: center;"><b>Photosynthesis</b></p> <p>Find the biggest leaf you can! This leaf has a lot of space to absorb sunlight and complete the process of photosynthesis.</p>
<p style="text-align: center;"><b>Hunt or Gather</b></p> <p>Find an animal that has adapted to search or hunt for its food. (Examples: spider with prey in its web, woodpecker perching on a tree, etc.)</p>	<p style="text-align: center;"><b>Reproduction</b></p> <p>Find a colorful flower. The brighter the better! Flowers have adapted to be different colors to attract different types of pollinators which assist them in their reproductive process.</p>	<p style="text-align: center;"><b>Communal Living</b></p> <p>Find an insect or animal that has adapted to survive within a group setting. (Examples: ants, honeybees)</p>

- ⇒ When you return from your scavenger hunt, watch [this video](#) to learn more about adaptation!



## **ADDITIONAL INFORMATION:**

- ⇒ Check out the links below to learn more about topics related to this activity!
- [Animal and Plant Adaptations](#)
    - This website offers a number of other activities and discussion questions that dive deep into the world of adaptations.
  - [Adaptations \(PBS\)](#)

