

# Adaptations

(Activity based off of Predator Predator Prey, learned at NatureBridge)

## Eco-Schools Topic:

Biodiversity

## Objective:

Student will

- better know animals in our community
- understand the meaning of an adaptation
- be able to identify animal adaptations in nature
- have a better understanding of predator/prey relationships

**Grade Level:** Grades 2-8

## Background Knowledge:

**Adaptation:** A characteristic of an animal that helps them survive and reproduce (you can describe as an animal superpower!)

**Predator:** The animal that eats the prey

**Prey:** The animal that is eaten

## Prep:

- Find a place outside or in a gym where students can run around
- Set up coloring supplies/ paper inside

**Time:** 45 min

## Materials:

- Print off Picture Cards (see below)
- Whiteboard/ Whiteboard Marker (for discussion)
- Paper and coloring supplies (if you do the Additional Component)

## Engaging Intro: (5 minutes)

- Did you know that animals have superpowers? We call them adaptations.
- How do animals interact with each other? *Sometimes in a predator, prey relationship.*

## Exploratory Activity: (15-20 minutes)

- Students stand in a circle
- One person goes in the center (instructor starts)



- The center person points with his/her finger to a person on the outside of the circle and says the first rule below (Black- center person says, Red- outside person says/does)
  1. Predator, predator, *prey (prey must be said after predator, predator and before the person in the middle says prey)*
  2. Prey (*silence*)
  3. For all cards, the person on the outside acts out their adaptation (ex. Tail drop (*kid turns around and makes tail with hand*), speed (*person in the middle chases the other student around the circle duck duck goose style*))
- When the person on the outside messes up he/she change places with the person in the middle of the circle and continue to challenge other kids
- After a few minutes, a new adaptation can be added, and then the person on the inside of the circle has the option of saying any of the learned adaptations.

#### Reminders:

- Only play for 15-20 minutes- otherwise kids will get bored
- Keep each student to a max of 5 tries in the middle and make sure that everyone gets a turn
- Split up into smaller circles for the activity if you have enough volunteers (10-15 students per circle)

#### Meaningful Discussion: (10-15 minutes)

- Have students sit down
- What do these different rules represent? *Adaptations.*
- What is an adaptation?
- Go through picture cards below and how each student guesses what animals practice each adaptation.
- What are other examples of adaptations?
- What are examples of human adaptations?
  - (speak to each other, our instincts, collaborate,)
- What should the relationship be between humans and animals?

#### Additional Component (AC):

- Inside or Outside: Write down the different adaptations so all students can see and have students draw pictures/ write stories to demonstrate those adaptations. Or, students can create their own adaptation.
- If there is additional time, you can play “Oh, Deer” and talk about changes in predators and prey populations with increases and decreases in resources (water, food, shelter).





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# BLUE TAILED SKINK (The five-lined skink):

## *tail drop*

Like many lizards, the blue tailed skink will drop its tail to distract their predators while they escape. The tail continues to move for moments even after it is detached from the skink.



## GREAT BARRED OWL: *head turn*

Like many owl species, the great barred owl can turn its head  $270^{\circ}$  which helps it spot its prey. Listen for its call “*Who cooks for you?*”



Photo source: [wallpaperswide.com](http://wallpaperswide.com)

## BOBCATS: *Speed*

They can reach speeds of 25-30 mph in short bursts to catch prey.





## AMERICAN TOAD: *Poison sacs*

They have poison sacs on their back so that predators don't want to bite into them. The poison sacs can irritate human hands too--so make sure to wash your hands after touching them!



EASTERN BOX TURTLE: *shell*

The shell protects it from being eaten by predators.



Jeffrey

# NORTHERN WATER SNAKE: swimming

They can stay underwater for 90 minutes at a time to avoid being eaten by predators.

Note that they look similar to copperheads however they are NOT venomous. You can find northern water snakes by the water.



## DADDY LONGLEGS: *The bob*

Daddy longlegs are arachnids, but not spiders since they only have one pill-like body segment. They both “whirl” (move the body in horizontal circles) and “bob” (move legs up and down) as defense mechanisms. They eat decomposing vegetative and animal matter, but will also eat certain types of insects.