

# Outdoor Science! Week 1: Grades K-2

Day	Topics	Related Standards
1	Investigating Living vs Non-Living	<u>Observe, ask questions, and explain</u> the differences between the characteristics of living and non-living things.
2	Investigating Energy Distribution	<u>Develop a model</u> representing how life on Earth depends on energy from the Sun and energy from other organisms.
3	Investigating Plant and Animal Structures	<u>Observe, ask questions, and explain</u> how specialized structures found on a variety of plants and animals (including humans) help them sense and respond to their environment.
4	Investigating Growth and Survival	<u>Develop and use models</u> about how living things use resources to grow and survive.
5	Investigating Organism Resources	<u>Obtain, analyze, and communicate</u> evidence that organisms need a source of energy, air, water, and certain temperature conditions to survive.

# Outdoor Science! Week 1

## Day 4: Investigating Growth and Survival

### Teacher/Parent Background

In order to survive, all living things need air, water, and food. Animals obtain their food from plants and other animals, which provides them with the energy they need to move and grow. An animal's home (habitat) must provide these basic needs (air, water and food) along with shelter from bad weather and predators.

### Overview

In this activity, students will learn about plant and animal survival, and how they adapt to their habitat to help them meet their basic needs. After learning how different plants and animals adapt they will create their own "super human" with adaptations they learned about that will give them super powers.

### Related Standards

- Develop and use models about how living things use resources to grow and survive.

### Key Terms

- Adaptation
- Habitat

### Materials List

- Journal
- Computer or tablet with internet access (for extension activities)
- Crayons, colored pencils, or markers

### Activity Description

#### Activity 1: Name that Adaptation

1. Prompt learner to think about the last thing that they ate or drank and ask them the following questions:
  - *How did you get [food or drink]?*

- *How did you know where to find [food or drink]?*
  - *Why did you choose [food or drink] instead of something else?*
2. Refer back to students explorations of plant and animal structures. Using your knowledge about plant and animal structures, answer these same questions:
- *How does [plant or animal] get food and water?*
  - *How does [plant or animal] know where to get food and water?*
  - *Why does [plant or animal] eat this type of food and not something else?*
  - *How do living things survive besides eating and drinking?*
3. The strategy or way that living things survive in their habitat are their **ADAPTATIONS**. Adaptations can be structures, internal or external, or behaviors.
- *Look at the following animals below. How do you think they have adapted to their habitats and basic needs?*
  - *Can you spot where they might have adapted to survive against bigger and stronger organisms?*



Elephant



Scorpion



Cactus



Desert Horned Lizard

## Activity 2: Design your SUPER Adapted Hero!



1. Explain to the student that adaptations are like the plants' and animals' super powers. Adaptations help them to survive.
  - Ask the learner, "If you could have any adaptation, what would you have? Why?"
2. Ask the student to brainstorm about super heroes.
  - What do you know?
  - How do their powers help people?
  - If you could be a superhero, what would your powers be?
3. In their journal, have the student work on a list of adaptations they would create for their own super hero.
  - As they brainstorm be sure to ask why they chose one thing over another.
    - Example" I noticed you chose fins as an adaptation for your superhero, why not \_\_\_\_\_?"
4. Next, have the student draw in their notebook using crayons, markers, or colored pencils an image of their own superhero.

## Closure

Check for understanding by using their super hero to start the conversation about today lessons on survival and adaptations.

- How did your SUPER adapted super hero adapt to help people?
- What parts of your hero do you get ideas from plants or animals?
- How will their adaptation impact their environment?

## Extension

### Play and Learn!

- Arizona-Sonora Desert Museum's [Desert Animal Adaptations Game](#)

### Read!

- We Can't All Be Rattlesnakes- Patrick Jennings