

# My nature connection

ANIMAL
ADAPTATION
SUPERPOWERS

GRADES: 1-5 TIME:40-60 MIN.

# ADAPTATIONS AND SUPERPOWERS

Most of us are familiar with super heroes and their super abilities, either through watching movies or reading comic books.

While super powers may seem like fiction, we can actually find them all across the natural world.

Except we don't call them super powers, we call them animal adaptations.

#### ACTIVITY

#### INTRODUCTION

What is a Superpower?

 Superpowers are extraordinary abilities that super heroes use to defend themselves and protect others.

What is an Animal Adaptation?

 Adaptations are special skills or traits animals have to help them survive in nature.

#### WHAT YOU'LL NEED

Comfortable Shoes and a hat and gloves if it's cold outside

Notebook or Nature Journal

Art materials: paper, pencils, markers, and any other you'd like to use for your design

Link to matching game

#### STUDENTS WILL:

- I.Identify the animal adaptations and skills associated with particular animals
- Practice the art of mindfulness and observation
- Create their own animal adaptation superhero

SETTING: Indoors and Outdoors

#### ADAPTATION OBSERVATION

Let's get inspiration by observing animal adaptations for ourselves!

Grab a notebook or nature journal and a pencil/pen. Please find five different animals and write down two of their adaptations for each animal.

Explore your home, yard, or neighborhood and look for animals. Write down the type of animal, their adaptations, and where you observed them.

#### Questions to consider:

Do you have any pets in your home?
What do you notice about their teeth?
What color and texture is their fur, scales, etc?
What noises do they make?
Did you find any birds?
What allows them to fly?
What shape are their beaks?
Do you see any squirrels or chipmunks?

What sort of adaptation do they have that lets them climb trees so quickly?

After you've observed adaptations from the animals near you, feel free to brainstorm other adaptations that you've seen either on field trips to the zoo or aquarium or on television or the internet.

#### MATCHING GAME

Many superheroes are directly inspired by animals and their adaptations. See if you can match the superhero to the animal that they are based on.

Click on the link below to play a matching game.

#### **Elementary School Students**

https://www.educaplay.com/learning-resources/5410818-animal\_superhero\_matching\_game.html

#### Middle and High School Students

https://www.educaplay.com/learning-resources/5411695-animal\_adaptation\_superpowers.html

### MATCHING GAME ANSWERS

#### Elementary School Ages Matching Game Answers

- 1. Batman = Brown Long-Eared Bat
- 2. Spider-Man = Black Widow Spider
- 3. Black Panther = Black Panther
- 4. Bumblebee = Bumblebee
- 5. Squirrel Girl = Red Squirrel
- 6. Ant-Man = Carpenter Ant
- 7. The Wasp = Common Wasp
- 8. Hawkgirl = Red-Tailed Hawk
- 9. Krypto the Superdog = White Swiss Sheperd Dog
- 10. Earthworm Jim = Common Earthworm
- 11. Catwoman = Bombay Cat
- 12. Blue Beetle = Blue Milkweed Beetle

#### Middle and High School Ages Matching Game Answers

- 1. Batman using his cape to glide between buildings = Flying Squirrels using the flaps of skin between their arms and legs to glide between trees to find food
- 2. The Invisible Woman becoming invisible to hide from villains = Chameleons changing their color to hide from predators
- 3. Thor channeling the power of lighting through his hammer = Electric Eels generating an electrical current inside themselves to shock predators
- 4. Iron Man's suit protecting him from damage = Armadillos shells protecting them from the bites and scratches from predators
- 5. Wolverine using his heightened sense of smell to locate missing people and objects = Bloodhounds using their incredible sense of smell to help humans find other animals
- 6. Captain Marvel flying at supersonic speeds = Peregrine Falcons diving at speeds of 200 miles per hour
- 7. Superman's super strength = Ants being able to lift 50 times their body weight
- 8. Spiderman's ability to quickly climb up walls = Spiders use the small hairs on their legs (called "setules") to help them climb vertical surfaces

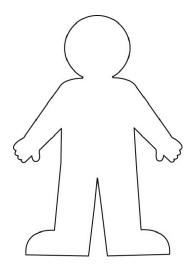
#### CREATE YOUR OWN ANIMAL ADAPTATION SUPERHERO

#### Let's create our own superhero!

- 1. Choose three adaptations from your observation notes and use them as inspiration. Example: Let's say, you want to reach apples from tall trees, maybe you adapt to have a long neck like a giraffe. Or, maybe you want to stay warm in the winter and you adapt to grow thick fur to keep you nice and cozy.
- 2. Now use a pen, pencil, markers, paint or crayons to draw your superhero.
- 3. After you finish don't forget to give them a name!
- 4. Clean up and put away any supplies you used.

#### TIP

Having trouble starting your drawing? You could start by drawing a simple human shape (like the one pictured to the right) and add your adaptations from there.



# **CONNECTING WITH QUESTIONS:.**

What sort of problems is your superhero able to solve?

What animals are your superhero similar to?

How have humans been able to adapt to meet their needs over time?

#### TELL US WHAT YOU THINK!

take a short survey at: <u>campfiremn.org/mynatureconnection</u>

or here: Kids Survey - <u>click here</u> | Teachers/Parents Survey - <u>click here</u>

# **EDUCATION STANDARDS**

Social Emotional Learning Competency: Social Awareness, Self-Awareness

Grade Level	Science Education Standard
Grade 1	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
Grade 2	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
Grade 3	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
Grade 4	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
Grade 5	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
Grade 6	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
Grade 7	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
Grade 8	2.1.1 Students will be able to represent observations and data in order to recognize patterns in the data, the meaning of those patterns, and possible relationships between variables.
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Grades 9-12