



MINNESOTA ZOO

Virtual Empathy Program

Grade 3

Introduction:

This document provides some basic background information, key vocabulary terms, and suggested activities that support the “Animal Superpowers” empathy program from the Minnesota Zoo. It will be helpful for your students to understand the **bold** terms before their first session.

The suggested activities were designed to enhance your experience. We ask that you provide us with your program feedback and share your students’ work to help us continue to improve our programs. Your feedback is critical as we use it to make changes from year to year. Your voice makes a difference!

Provide your feedback [here](#) or by going to <https://tinyurl.com/empathyprogram>.

Scan and email student postcards to educate@mnzoo.org or mail them to zookeepers at:

Minnesota Zoo Attn: Education
13000 Zoo Blvd
Apple Valley, MN 55124

Standards Alignment

2019 MN Graduation Standards supported:

3.4.1.1.1 Compare how the different structures of plants and animals serve various functions of growth, survival, and reproduction.

3.4.1.1.2 Identify common groups of plants and animals using observable physical characteristics, structures, and behaviors.

NGSS Standards supported:

3-LS4-3 Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.



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Key Vocabulary Terms

Organism – Any living thing, including plants and animals.

Adaptation – Something on an animal's body or something animals do with their bodies to help it survive in an environment.

Structure – A physical part of a living thing that helps it to survive in its habitat. In an animal this is a body part, in a plant it may be a leaf or stem.

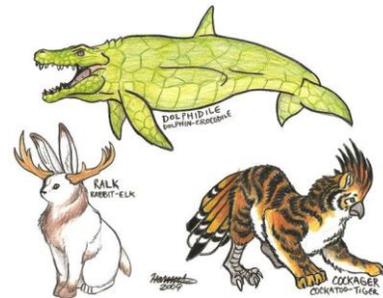
Function – The job or what a structure does.

Pre-Program Activities:

Activity: Create your own Animal Superhero

Materials:

- Piece of paper
- Pencil, markers, and/or color pencils
- Variety of animal photos for inspiration



Instructions:

- Have students share their favorite superhero and what makes their superhero so special. Does their favorite superhero have any superpowers? How do these superpowers help their superhero?
- Did they know that animals have superpowers too? Can they think of any? Animals can be invisible, move with lightning speed, leap across far distances, hold their breath for long periods of time, and so much more. These are all examples of animal superpowers and scientists call them *adaptations*. An **adaptation** is something on an animal's body or something animals do with their bodies to help them survive in an environment. Another word for an adaptation or body part is **structure**. Each structure has a special job or **function**.
- Have students create their own animal superheroes. Students can work in pairs or individually to brainstorm and write down 3 superpowers they would like their animal superhero to have. What structures or adaptations give them these superpowers? Encourage students to use their imaginations. Adaptations do not have to be realistic.
- If time allows, take some time to draw and sketch the animal superheroes.
- Share a variety of animal photos and highlight different animal adaptations to inspire student creativity.





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- Invite students to share their animal superheroes with the class. Where would their animal live? How do the animal's adaptations (superpowers) help it survive in its habitat? What would they name their animal?
- Share your animal superheroes with Zoo instructors when you meet them. They would love to see your students' creations.

Background information:

When we try something and it doesn't work, we try again and do something different. We might change our behavior to better fit the situation or solve the problem. Another word for change is "to adapt". We've all had to adapt to different things, like starting at a new school or changing the clothes we wear when the weather changes. Humans aren't the only ones that adapt. All living things including animals and plants adapt to their environment when there are changes. An **adaptation** is something on an animal's body (physical) or something animals do with their bodies (behavioral) to help it better survive in an environment. Adaptations help animals find food, water, shelter, and to reproduce.

Watch this [video](#) from the Smithsonian National Museum of Natural History for more information about animal adaptations.

Or go to: <https://naturalhistory.si.edu/education/teaching-resources/life-science/explore-animal-adaptations>

Student Challenge: Challenge your students to think about plant superheroes. What adaptations would a plant superhero have? What structures or adaptations give them these superpowers?

Watch this [video](#) from SciShow Kids for examples of desert plant and animal adaptations.

Or go to: <https://youtu.be/gaZKEc59g1w>

During your program:

We are so excited to meet and get to know your students better and to learn from them! In our sessions, we expect:

- Curiosity!
- Questions!
- Awe!
- Sharing stories!



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During the program, you can support students and zoo instructors by practicing and engaging in empathy for animals' best practices.

Examples include:

- Use language that encourages students to see the animals as individuals with unique personalities, experiences, and intentions. (*Example: Use “he or she” to describe an animal instead of “it”*)
- Model positive, empathic attitude and behavior to provide an example for students to learn how to build empathic skills.
- Encourage and invite students to observe the animal and imagine what it is like to be that animal. (*Example: “Notice how he is flicking his forked tongue out. That is how he smells. What do you think he is smelling right now?”*)
- Encourage storytelling and roleplaying to take on the perspective of an animal.
- Avoid reinforcing fear and disgust. It’s okay to acknowledge a student’s fear or disgust but refocus students’ attention to unique facts about the animal that they may find interesting.
- Connect students to caring action by suggesting and inviting students to think of simple caring actions. (*Example: recycling, picking up trash, educating others, planting flowers*)

Post-Program Student Activity: Send a postcard to a zookeeper!

The Minnesota Zoo has over 400 different species of animals that live at the zoo and we have many zookeepers that take care of the animals that you visited on your trail tour. A day in the life of a zookeeper includes food prep, feeding the animals, making behavioral observations, cleaning, and maintaining the animals’



living space, training, educating visitors, and supporting veterinary staff. Zookeepers also make sure that our animal friends are exercising, staying curious, and practicing natural behaviors by providing them enrichment. An enrichment can be any object that is safe for an animal to interact with such as a





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ball, cardboard boxes, floating objects in the water, puzzle feeders, different scents, or pine needles and leaves. You might have seen some enrichment on your trail tour.

If you enjoyed seeing the animals on your tour today, send a postcard to a zookeeper. Print and use the postcard template provided or have students use a blank piece of paper. Include a drawing of what animal you enjoyed seeing and what the animal was doing to thank the zookeepers for taking such great care of them.

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We are excited to share your postcards with zookeepers!



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