



Inquiring Minds Want to Know

Science Activities for Young Minds

Create a Critter

WHAT YOU'LL NEED

- Drawing and coloring materials (markers, crayons, colored pencils)
- Paper (for drawing)
- Photos or magazines of all kinds of animals (fish, insects, reptiles, birds, mammals)

WHAT TO DO

Remember: The purpose is NOT to teach a specific topic but to help children experience the excitement of **science exploration!**

GETTING READY

Lay out pictures of various animals that show their adaptations (long-necked giraffes; animals with claws for climbing, defense or catching prey; animals with large eyes or ears, colors for camouflage, etc.).

LET'S GO

- 1. Observe** the pictures of the various animals. *What do you **observe** about an animal that makes it the same as another animal? What makes the animal different from another animal? How might the animals' differences help them survive? Might they help it get food easier? Might they protect it from animals that might try to eat it? Might they help the animals move around better? What does looking at the animal tell you about where it might live?*

Explain that these differences are called adaptations, and that they help an animal survive in the wild.
- 2.** Ask the children to draw their own creatures with adaptations. Encourage them to be creative with their creatures. *What adaptations does your creature have? Why did you draw that animal? What will help the animal survive? Where might your animal live? How does it move? If it lived in another part of the world or in another environment, what different adaptations would it need? What does it eat? Why is it that color? Why is it that shape?*
- 3.** Ask the children to group their animals. Then ask the children why they grouped the animals the way they did. (They can group them according to any number of characteristics: number of legs, where they live, whether they have feathers, color, what they eat or other characteristics discussed).



TALK IT OVER

How did you decide what kind of critter to make?

What kinds of characteristics does your critter have? Why did you choose those?

Which critter do you think would thrive in Michigan? Why?

GOOD TO KNOW

Older students:

Discuss reproductive adaptations, such as how animals might find a mate, the tradeoffs between producing a large number versus a small number of offspring, and competition for mates and nesting habitats. We've been talking about animals. Do plants have adaptations that help them survive and reproduce? Why do cacti have spines? Why do some flowers smell good?

THE SCIENCE BEHIND IT

ALL organisms need four key things in their environment: food, water, shelter (safety) and space (for example, hunting or nesting territories). Animals and plants are adapted to a particular environment. Adaptations enable them to better meet these key needs, improving their ability to access food, avoid predators, reproduce, and resist disease and environmental stresses (such as severe weather).

RESOURCES

- ▶ Your local university Extension office – <http://msue.anr.msu.edu/county>.
- ▶ Science Blast website – http://4h.msu.edu/programs/science_technology/science_blast. (This activity is similar to the “Fashion A Fish” Science Blast activity (1st - 7th grades) at 4h.msu.edu/uploads/files/sbasfashionafish.pdf.)

MICHIGAN STATE UNIVERSITY | Extension

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jeffrey W. Dwyer, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned. The 4-H Name and Emblem have special protections from Congress, protected by code 18 USC 707. Produced by ANR Creative for MSU Extension. 1P-WEB-11:2016-LJ/MR WCAG 2.0 AA.