



Frisch's Outreach: Creepy, But Cool (Gr. 4-6) Extensions

At a glance

This program will help students discover that animals have very unique adaptations that some people may find disturbing yet those very same adaptations enable these animals to make important contributions to our world.

Goal(s)

This program is designed to familiarize students with the many different adaptations some animals possess.

Objective(s)

1. Students will be able to discover and name the adaptations of some introduced animals.
2. Students will be able to state how those adaptations enable the animals to survive.
3. Students will be able to tell how some animals, who possess what some people find disturbing attributes, have a vital role in our world.

Sub-themes

1. Animals possess very unique adaptations that aid them in survival.
2. Some animals possess specific adaptations that may seem disturbing or even frightening to some people.
3. Knowledge about individual animal's adaptations will reveal how important those adaptations are to the animal's survival.
4. Each living thing is intricately connected to the natural balance of our world.

Theme

Some animals possess adaptations that some people find disturbing.

Academic standards

Ohio Science Academic Content Standards	Science Life Science <i>Grade 4</i> Diversity and Interdependence of Life 5
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	<p>Life Science <i>Grade 5</i> Diversity and Interdependence of Life 5,6 Doing Scientific Inquiry 3</p> <p>Life Science <i>Grade 6</i> Diversity and Interdependence of Life 8 Doing Scientific Inquiry 3 Science and Society 3</p>
Kentucky Core Content— Science	<p>Science</p> <p>Life Science <i>Grade 4</i> Characteristics of Organisms SC-E-3.1.2 Organisms and Their Environments SC-E-3.3.3</p> <p>Life Science <i>Grade 5,6</i> Structure and Function in Living Systems SC-M-3.1.1 Regulation and Behavior SC-M-3.2.1 Populations and Ecosystems SC-M-3.5.1, SC-M-3.5.2</p>

Background

In our culture, we can find many examples of peoples’ feelings toward animals. Some animals elicit a loving or nurturing response while others cause some people to recoil in fear or disgust.

Many times it is the animal’s appearance or behavior that causes a negative reaction from people. Misinformation, misunderstanding, or negative experiences cause some animals to suffer not only from people’s lack of knowledge about their needs for survival but, at times, it may cost them their lives.

Knowledge about animals, their unique adaptations and their important contributions to our world, can do much to reverse unpleasant feelings or adverse reactions to all living things. Understanding can help us realize that all species have unique roles and importance in our world.

Vocabulary

Adaptation(n) a body part or behavior that helps an animal survive

Constrict (v)-to compress or squeeze

Decomposer (n)-any of various organisms that return constituent substances to ecological cycles by feeding on and breaking down dead materials

Diversity (n) a great deal of variety

Exoskeleton (n)-an external supportive covering of an animal

Food Chain(n) a hierarchy of different living things, each of which feeds on the one below

Food Web (n) the interlocking food chains within an ecological community

Jacobson’s Organ (n)-region of chemically sensitive nerve endings in the oral cavity of many vertebrate animals (mostly reptiles and amphibians) to detect scent

Natural (adj) in accordance with the usual course of nature

Scat (n) fecal dropping of an animal

Scavenger (n) any organism that feeds on dead flesh or discarded food scraps

Venom (n)-a poisonous matter normally secreted by some animals and transmitted to prey or enemy chiefly by biting or stinging

Venomous (adj)- full of venom

Assessment

The classroom teacher can assess the student's progress by observing the students during the program and by performing at least one of the extensions.

Unsatisfactory-student seems uninterested, does not participate, and does not answer questions.

Satisfactory-student seems somewhat interested, participates to some degree, and attempts to answer questions when asked

Excellent-students seem very interested; participate willingly in all activities, and answers questions. Student offers his or her own questions.

Extensions

It's Not Easy Being Me!

Write some journal entries as if you were a "Creepy" animal. What is your life like? How do you try to survive? How are you treated by people? Be sure to tell in the journal entries how your way of life actually helps our world!

And The Winner Is.....!

Organize a class or school wide "Beauty Contest". Through research find the

contestants, but they must be animals (photos, drawings, sculptures, etc.) that people may find "Creepy". During the contest try to creatively let everyone know what each animal looks like. Also, be sure to creatively give each contestant a chance to show their wonderful attributes (how they move, eat, defend themselves, and especially how they benefit our natural world). Give everyone the chance to vote. You may even want to define categories so to have many "winners"!

Design a Critter!

Make a new animal through drawing, painting, sculpture, or even a written description! What kind of adaptations will your animal possess? Would some people consider your animal "Creepy"? Is your animal truly "Cool"? How do your animal's adaptations help it survive? How does your animal help the natural balance in our world?

Resources

Louv, Richard. Last Child in the Woods: Saving Our Children From Nature Deficit Disorder. Algonquin Books, 2005.

Websites:

ALA's Great Websites for Kids: Animals <http://www.ala.org/gwstemplate.cfm?section=greatwebsites&template=/cfapps/gws/displaysection.cfm&sec=1>

Awesome Library – Kids

<http://www.awesomelibrary.org/Classroom/Science/Animals/Animals.html>

Awesome Library – Teachers

<http://www.awesomelibrary.org/Classroom/Science/Animals/Animals.html>

Cincinnati Zoo & Botanical Garden
www.cincinnati-zoo.org

National Geographic Kids
kids.nationalgeographic.com

ENature
www.enature.com

Background

Provide a framework to inform teacher of the topic and related background.

Do not indent paragraphs in *any* section.

Vocabulary

Adapt- (verb) - Changing in structure, Form, or habits to fit different conditions.

Adaptations- (noun) - Something that helps an animal survive.

Behavior- Activity or change in relation to an environment; the way an organism acts in response to a stimulus.

Biomes- A natural community of plants and animals that is largely controlled by climate.

Defense- Resistance to, Or protection from attack.

Display- A means of attracting attention.

Habitat- Natural home or dwelling place of an organism.

Hibernation- Spending the winter in close quarters, in torpid or lethargic state.

Migration- To pass periodically from one region or climate to another for feeding or breeding.

Mimicry- The superficial resemblance which some animals exhibit to other animals or to the natural objects among which they live; thereby, securing concealment, protection or the like.

Movement- Change of place, position or posture; particular act or manner of moving.

Sense- The faculty by which an organism is aware of an environmental change.

Survival- Living or continuing longer than something else.

Activity

Getting ready

What the teacher needs to do to prepare

Doing the activity

How the teacher will introduce or begin the activity with the students. Then describe the main part of the activity.

Wrap-up

How the teacher will wrap up the activity

Assessment

Suggest ways to assess student learning (e.g. write report, graph, etc.) and provide a rubric when possible.

Unsatisfactory—define elements required at this level

Satisfactory—define elements required at this level

Excellent—define elements required at this level

Extension

Suggest at least one related activity to supplement curriculum or take concepts farther.

Each additional activity suggested should begin a new paragraph.

Resources (Provide list of resources for teacher on the topic.)

Activity guides:

Author's last name, first name or initial.

Title. Organization/publisher (optional).
Year.

Double space between resources.

(other category options include books, magazines/articles, material sources, web sites, organizations...)

Any activity pages necessary follow on separate pages. Can alter number of columns to need for activity pages.

Use line art in public/pictures/line art. If you request illustrations from Graphics, be sure to add new line art to appropriate folder. Original line art is much preferred over generic clip art.

Note: no header on 1st page.