



Frisch's Outreach: Birds (1-3) Extensions

At a glance

This program will allow students to gain an understanding of the characteristics of birds by engaging in activities and animal encounters.

Goals

This class is designed to familiarize students with the many different qualities and adaptations birds have compared to other species.

Theme

Birds have specific qualities and characteristics that differentiate them from other animals.

Objectives

1. Students will be able to differentiate between birds and other classes of animals.
2. Students will be able to name at least three different species of birds.
3. Students will be able to describe the different feathers and their uses.
4. Students will develop a respect for animals and the role they play in the natural world.

Sub-themes

1. Birds are Endothermic.
2. Birds have different types of feathers that serve different purposes.
3. Birds have different shaped beaks and feet, depending on what they eat, and where they live.

Academic standards

Ohio Science Academic Content Standards	Life Sciences <ul style="list-style-type: none"> • Characteristics and Structure of Life (1:2, 1:3, 2:2) • Diversity and Interdependence of Life (1:4, 2:5, 2:6, 3:2, 3:3)
Kentucky Core Content—Science	Life Science K-4 <ul style="list-style-type: none"> • The Characteristics of Organisms (SC-E-3.1.1, SC-E-3.1.3) • Life cycles (SC-E-3.2.1) Organisms and Their Environments (SC-E-3.3.1, SC-E-3.3.2)

Vocabulary

Adaptations- Something that helps an animal survive.

Bird-feathers, warm blooded, eggs

Cold Blooded- pertaining to animals, as fishes and reptiles, whose blood temperature ranges from the freezing point upward, in accordance with the temperature of the surrounding medium.

Contour Feathers- medium size feathers that give a bird its shape, and help wind stream the bird for easy flight.

Down feathers- smallest feathers, closest to the birds body

Ectothermic- cold blooded

Endothermic- warm blooded

Fledge- when baby birds leave the nest

Flight Feathers- the large tail feathers

Habitat- Natural home or dwelling place of an organism.

Hair- grows from the skin of humans and animals.

Mammal- endothermic, hair, live birth, take care of young,

Migration—the mass movement of animals to and from feeding or reproductive/nesting areas.

Molting—the act or process of shedding the outer covering of the body or a part of it.

Plumage—the entire covering of feathers of a bird.

Reptile- scales, cold blooded, eggs

Survival- Living or continuing longer than something else; existing.

Talons—sharp claws, especially on a bird of prey.

Vertebrate- having a backbone or spinal column.

Warm Blooded- pertaining to animals, as mammals and birds, whose blood ranges in temperatures from about 98° to 112°F (37° to 44°C) and remains relatively constant.

Extension

Flaps per 10 seconds-

Have the students stand in an area that they can spread their wings (arms) out to their sides with out hitting anyone. Time them to see how many times they can flap their wings up and down in 10 seconds. Compare their results to other birds.

Crow.....	20 beats/ 10 seconds
Robin.....	23
Pigeon.....	30
Starling.....	45
Chickadee.....	270
Hummingbird...	700

Make a Bird Caller- Take two popsicle sticks and put a piece of grass between the two sticks. Wrap one end with a rubber band. Hold it length-wise. Close the other end with your thumb and index finger. Blow like a harmonica.

Have the students create, draw and/or sculpt their own bird. Have them use features that bird possess. They can name their birds and show what they have created to the rest of the students.

Make a bird feeder. (could use pine cones, peanut butter and seeds) Set it

outside the window, let students observe the birds that come visit. Let the students keep a daily record of the birds they see.

Can you eat like a bird?

Try to use chopsticks to pick up little foam or plastic insects. Make it a relay game!

Eagles Eye View

Get an object that is 1 inch long. Place it on the ground. Walk backwards away from the object until you can't see it anymore. Measure that distance, multiply that number by 8 to see how far an eagle can see.

Have students pick a bird and write a story of its life from the bird's perspective.

Resources

Activity guides:

Doris, Ellen. Ornithology. Thames and Hudson, Inc. New York. 1994.

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