

# Wildlife Express

## April 2022 – Pocket Gopher

### Activities:

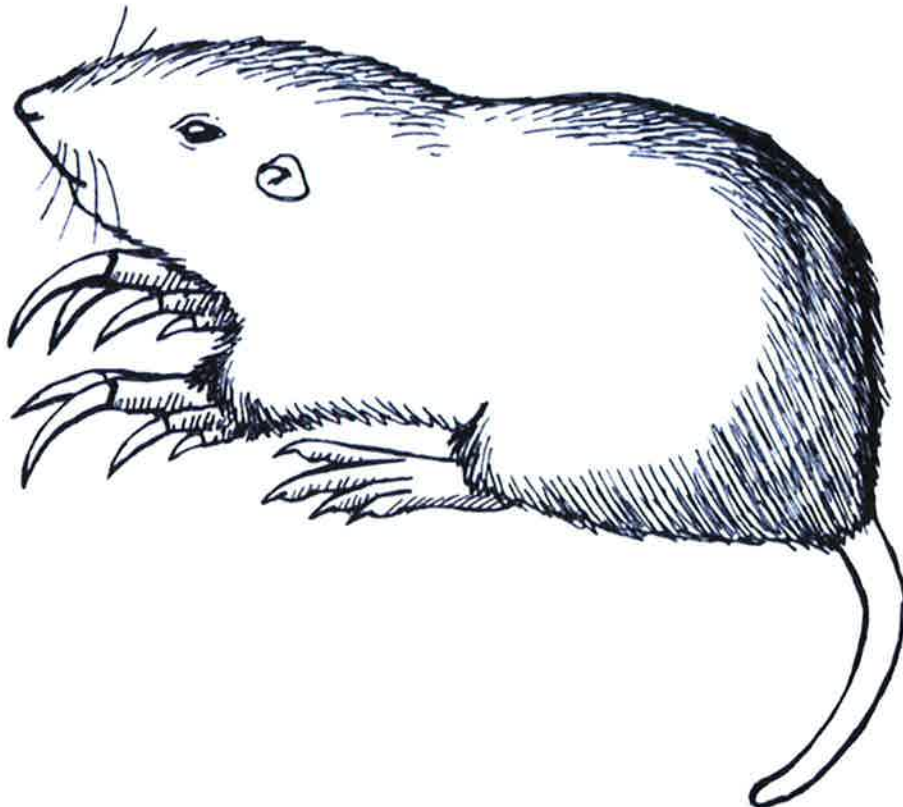
**My Kingdom for a Shelter:** Students create a list and compare the survival needs of wildlife and people. Then they design and create a model of a shelter for at least one animal.

**Food Chain Stackers:** Students create a 3-D food chain.

**Skull Match up Activity:** Students look at skulls and match to correct animal species.

**Web of Life:** In this activity, students “weave a web of life” by standing in a circle with a large ball of yarn. The end result is a great discussion of how all things are connected.

**Springtime Haiku:** Students review articles in Wildlife Express (Let Them Be & Springtime Fun) and write a Haiku poem.



# My Kingdom for a Shelter



**Grade Level:** Lower Elementary, Upper Elementary, Middle School

**Content Areas:** Science, Language Arts, Environmental Education, Expressive Arts

**Method:** Students will make a list to compare the survival needs of wildlife and people. Then, they will design and create a model of a shelter for at least one animal.

**Materials:** Whiteboard/chalkboard; writing materials; journals/science notebooks; natural materials such as leaves, twigs, dirt, mud, moss, and bark;  
**OPTIONAL:** camera(s)

**CAUTION:** Do not harm animals or their habitat while gathering materials. Contact your state wildlife agency for information on regulations and permits required to collect certain items such as feathers.

**Activity Time:** minimum of two 45-minute sessions

**People Power:** any

**Setting:** outdoors and indoors

**Conceptual Framework**  
**Topic Reference:** WPIC, HNIIA, HNIIA1, IDI2B, BDIIIA

**Terms to Know:** habitat, shelter, survival needs, cover

**Appendices:** Outdoors, Field Ethics

*Discover some of the fascinating shelters animals construct.*

## Objectives

Students will (1) identify the basic survival needs for people, pets, and wildlife, and (2) create a model of an animal shelter using techniques and materials similar to what the animal would use.

## Background

All animals—including people, pets, farm animals, and wildlife—need food, water, shelter, and space in which to live. These components must be available in a suitable arrangement to meet the particular animal's needs both in terms of quality and quantity. The place where an animal can find all of its needs in the right arrangement is called its home, or its "habitat."

People establish their habitats by building houses, apartments, trailers, houseboats, and other kinds of shelters in an arrangement that allows them to meet their other needs, including food, water, and space. Similarly, animals need shelters in such a way that they can be protected and find what they need. An animal may find shelter underground, in a bush, in the bark of a tree, in some rocks, or by building a shelter out of materials such as twigs, mud, leaves, and moss. Wildlife biologists refer to this as "cover" to indicate the protection it provides from weather or predators, or as a place to hide from prey.

A habitat for an animal is like a neighborhood with everything in it that is needed for survival. Exploring habitats can help us understand how the living and nonliving parts in an animal's "neighborhood" interact as an ecosystem.

## Procedure

1. Draw a three-column chart on a whiteboard/chalkboard with the headings "People," "Pets," and "Wildlife." Ask the students what people need in order to live. List the students' ideas in a column under the word "People." Complete the same for "Pets" and "Wildlife."





2. After the chart is complete, ask the students to cluster ideas together into larger themes. For example, warmth might be combined with physical comfort, and both might fit within the concept of shelter. Help the students to define the lists and to establish the essential survival needs for people, pets, and wildlife. The most basic survival needs will be the same for each of the three groups. The lists could include or be limited to these:

People	Pets	Wildlife
Food	Food	Food
Water	Water	Water
Shelter	Shelter	Shelter
Space	Space	Space
Arrangement	Arrangement	Arrangement
Sunlight	Sunlight	Sunlight
Soil	Soil	Soil
Air	Air	Air

3. Ask students what types of animal shelters they have observed. Make a list of their observations. Some animals with architecturally interesting shelters are beavers, termites, mud daubers, caddis flies, spiders, cliff and barn swallows, chimney swifts, osprey, prairie dogs, and mound-building fish such as cutlips minnows. Discuss why shelters are important to humans and wildlife.

4. Have students, either individually or in groups, choose a wild animal and research its shelter. During the research, students will need to identify the characteristics of the animal's shelter (nests, dens, caves), including what construction materials the animal uses. Identify the techniques the animal uses and the length of time it takes to build the shelter. Pay attention to scale and form. Have students record and organize their notes in their journals or science notebooks.

5. In addition to using reference materials, go outside to learn what animals use to construct their shelters. Pay close attention to how and where the shelters are constructed. (If observing animal shelters, do not harm or destroy the shelters. It is recommended that educators do not conduct this activity during the animal's mating and reproductive seasons.) To document their observations, students can use journals or science notebooks for notes/sketches and take photographs.

## WILD Work



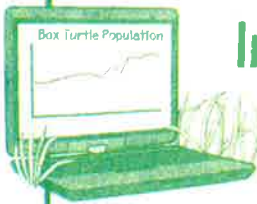
A **Zoologist** is a scientist who studies animals. How do Zoologists assist in the design of animal enclosures for zoos and other animal shelters?

Why would a **Land Developer** (Urban Planner, Building/Landscape Architect, Construction Worker) need to be concerned about the native habitat when building? What sort of research and conditions need to be addressed before building?

Find out more about these occupations at [www.projectwild.org](http://www.projectwild.org).

*An animal may find shelter underground, in a bush, in the bark of a tree, in some rocks, or by building a shelter out of materials such as twigs, mud, leaves, and moss. A habitat for an animal is made up of the resources and shelters that are being used and are depended upon by that animal.*





## In Step with STEM

■ When designing animal shelters, zoologists and zookeepers have to keep in mind how an animal finds protection in the wild in order for the animal to be comfortable and healthy. What other things besides shelter does your animal need? Could you design a habitat for that animal? For more information and links to design games, visit [www.projectwild.org](http://www.projectwild.org).

■ Using cameras is a great way to observe wildlife without harming or disturbing them. Have students plan and set up nest or trail cameras. If these are not accessible, go online with students to observe nest or trail cameras. Visit [www.projectwild.org](http://www.projectwild.org) for links to wildlife camera access.

■ Have students determine how to enhance the schoolyard to make it more suitable habitat for various bird species. Then brainstorm and design ways to observe the birds up close without disturbing them, such as vegetative cover or creating bird blinds. For information on constructing bird blinds, go to [www.projectwild.org](http://www.projectwild.org).

6. Ask the students to collect representative materials from the environment that are similar or comparable to those the animals would use in constructing their shelters. Caution the students to be careful in collecting materials, again doing no harm to the animal or its habitat, and not to collect or disturb actual nests, burrows, or other shelters animals have constructed. Encourage students to think about using recyclable materials, just like the animals would.

7. Build models of each animal's shelter. If possible, build these to scale. If not, indicate the difference.

8. Display the completed shelters, asking the students to describe their shelter and identify the animal that uses it. Contrast how much time it took to replicate the shelters with how much time it might take the animal to build it. Contrast the techniques the students used during the activity with those the animals might have used. Compare similarities and differences in the shelters and kinds of habitats in which the animals live. Discuss consequences of habitat loss for each of the animals. Which animals are most vulnerable to loss of materials for creating shelter?

## Extensions

1. Create a diorama, putting the shelter within a model of the habitat in which the animal lives.

2. To get students thinking about how communities function like an ecosystem, have students individually or in groups draw a rough sketch of their neighborhood. They should include housing, as well as where they get their food and water. Discuss the dependencies everyone has on resources and with each other. Are there parts missing from their sketches that the students rely upon, like a grocery store, or a water-processing plant?

3. Have students write a poem that contrasts the characteristics of the shelter needed by at least two different kinds of animals.

## Aquatic Extension

Have students create models of aquatic animals' shelters.

## Assessment

1. What are four essential survival needs for people, pets, and wildlife?

2. Choose an animal and describe the materials and techniques it uses to build its shelter.

3. Write and illustrate a "For Rent" advertisement that describes the habitat of a wild animal.



# Food Chain Stackers

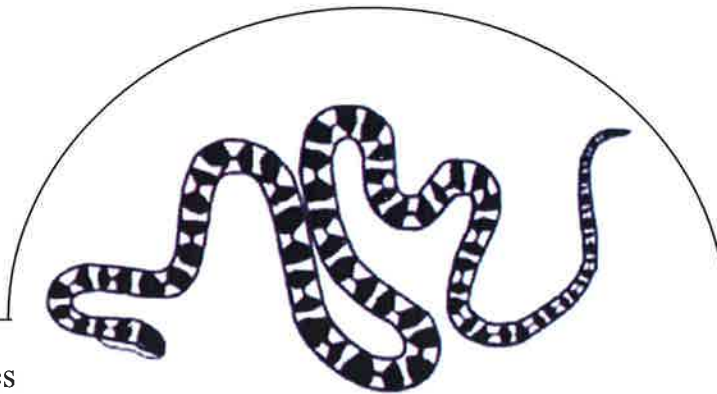
This simple activity shows how energy travels through a food chain.

## Directions

1. Carefully cut each piece out on the solid black line
2. Tape the ends of each piece together using the dotted line as a guide.
3. Stack the pieces in this order: sun, plant, mouse, snake, and owl.

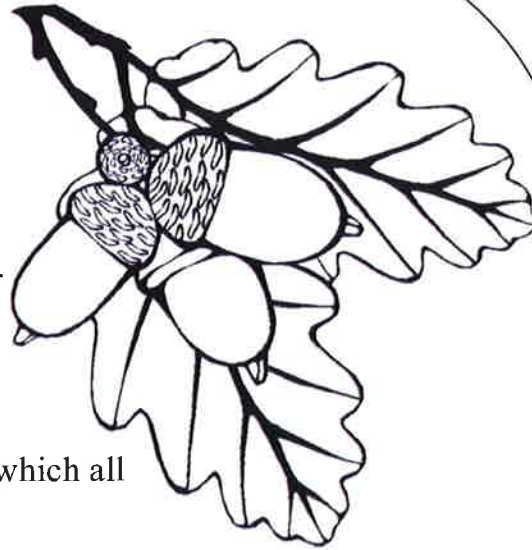
## Take it a Step Further

Once students understand how a food chain works, cut out the blank pieces on pages 4 – 6 and have students create their own food chains. They can draw a picture of the animal or plant and write a short description identifying them as producers, consumers, herbivores, carnivores, etc.



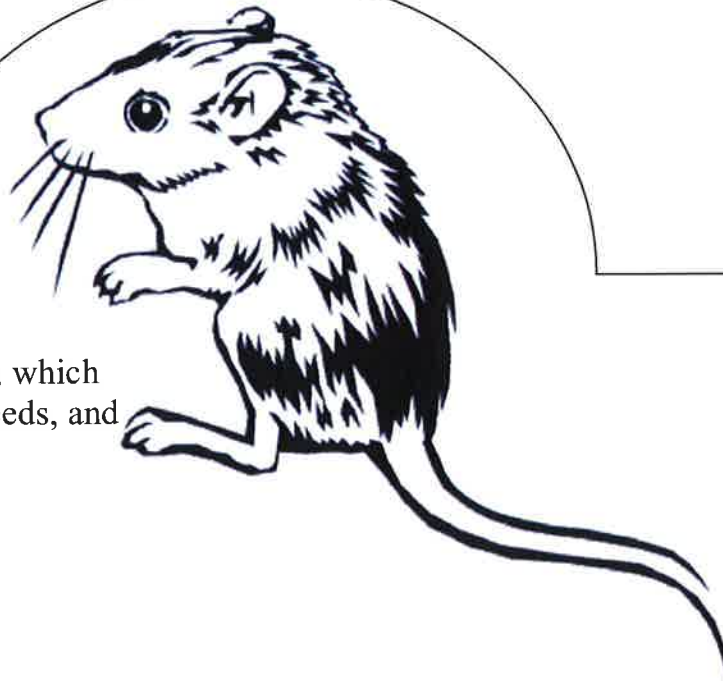
Snakes are reptiles that eat smaller animals such as mice and frogs. This makes them *CARNIVORES*.

Plants are *PRODUCERS*.  
They use the *ENERGY*  
of the sun to make their  
own food, called  
*PHOTOSYNTHESIS*.  
They also make oxygen which all  
animals need to live.



© 2007 KidWings.com

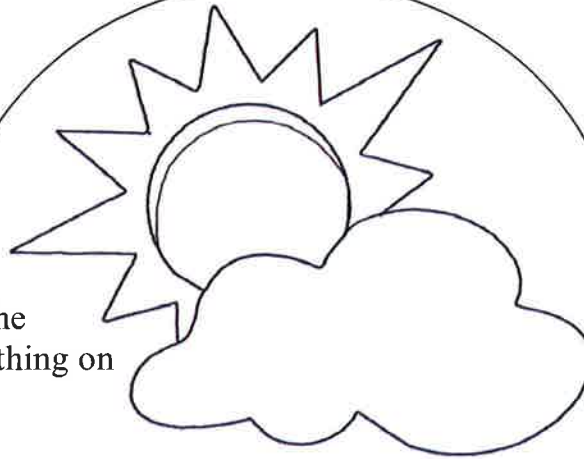
Mice are *CONSUMERS*.  
They are *HERBIVORES*, which  
means they eat plants, seeds, and  
berries.



© 2007 KidWings.com

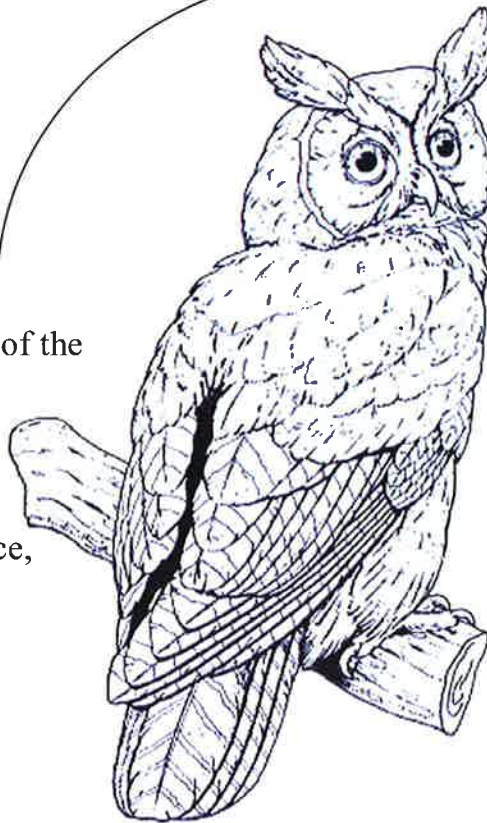


The Sun provides the *ENERGY* for everything on the earth.



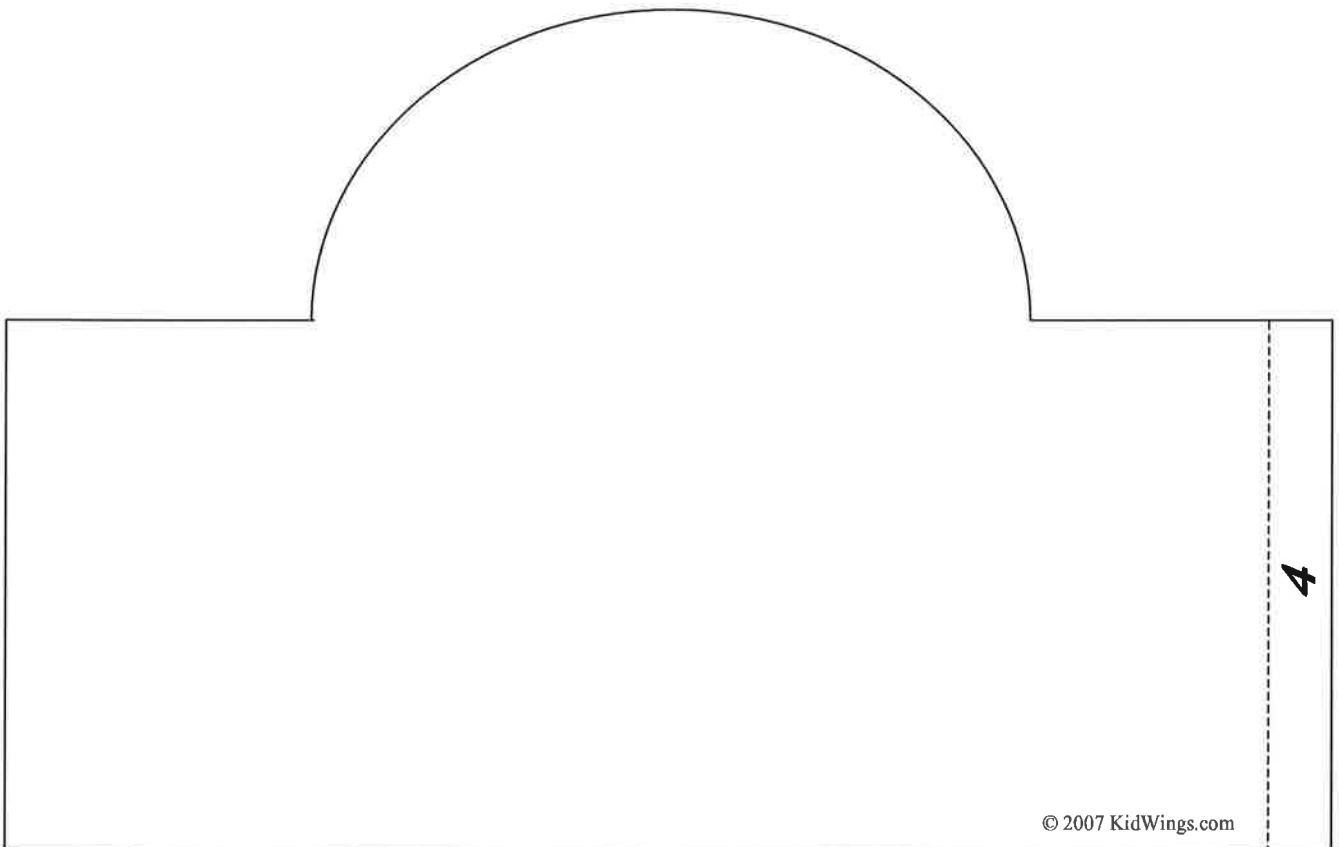
© 2007 KidWings.com

Owls are at the top of the *FOOD CHAIN*. They are *CARNIVORES*, eating smaller animals such as mice, snakes, frogs, and even skunks.



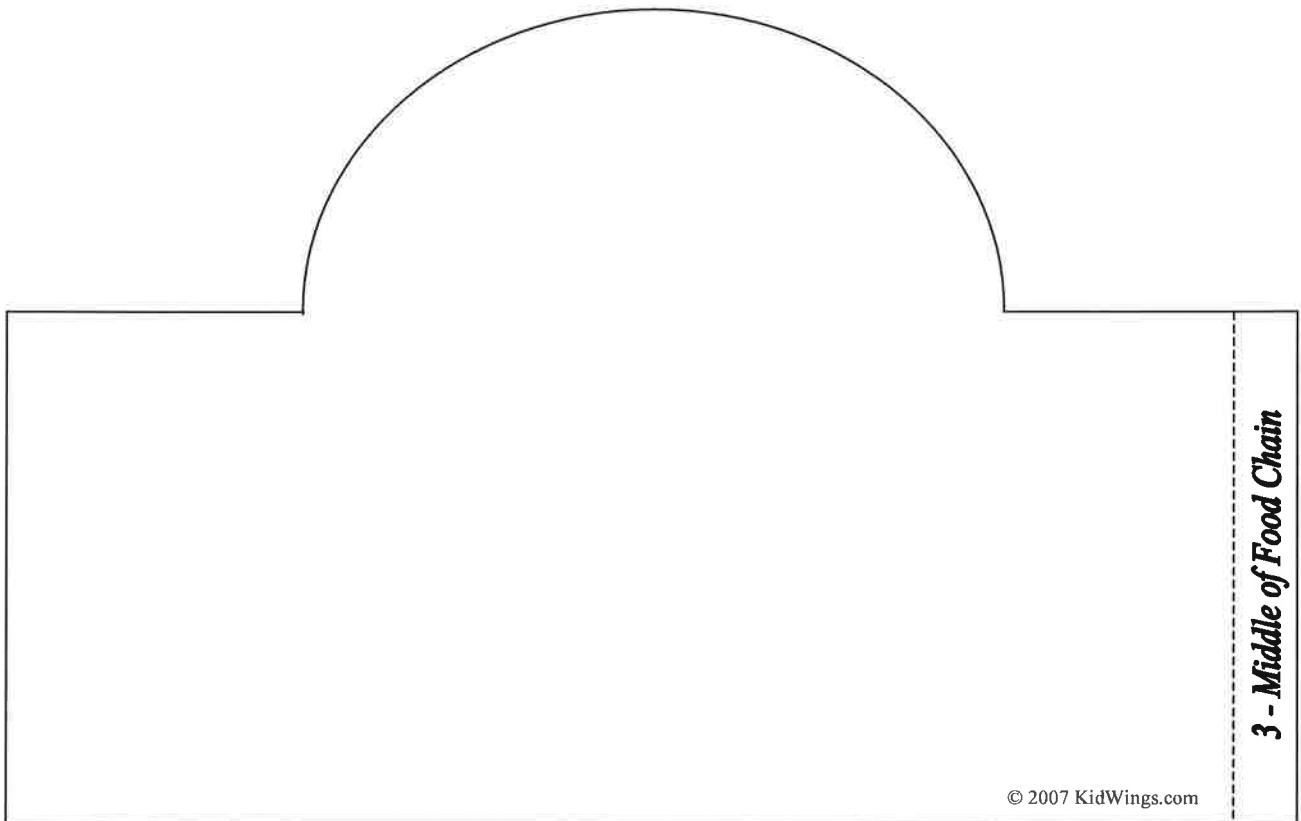
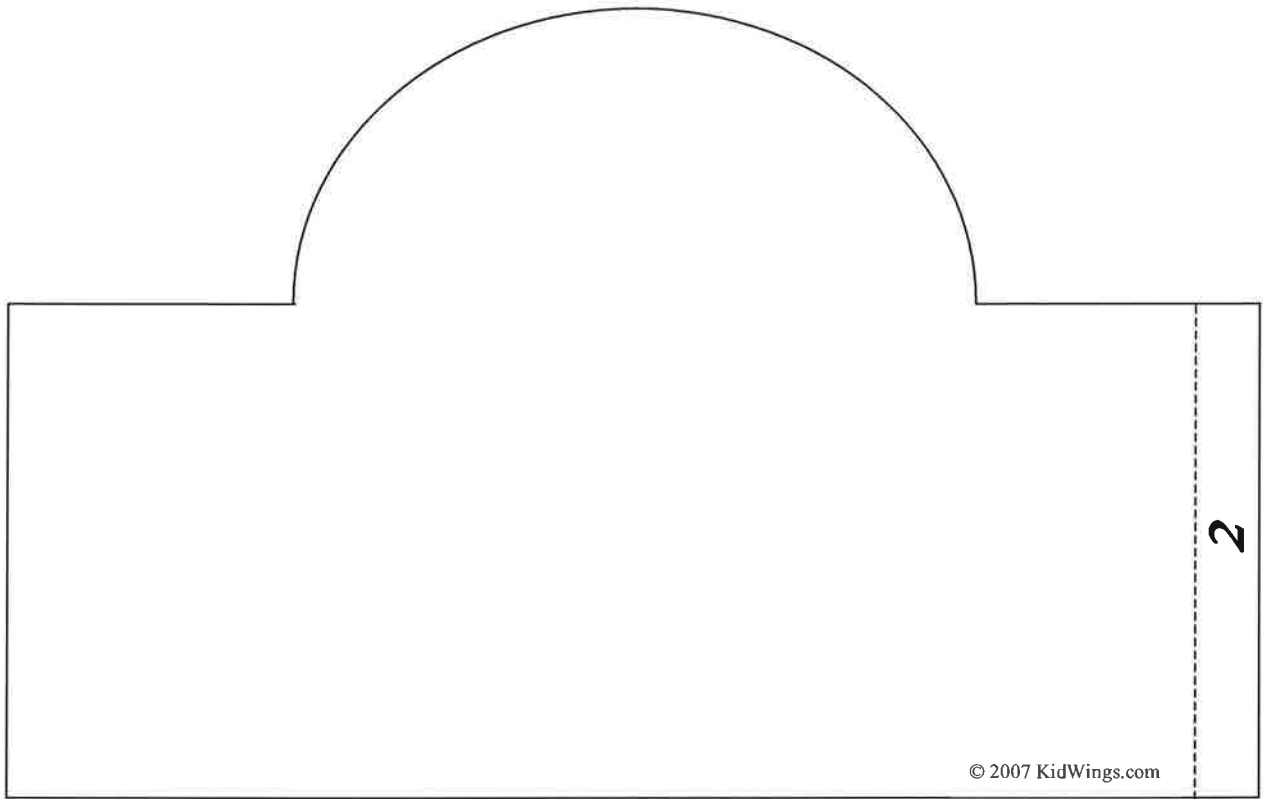
© 2007 KidWings.com

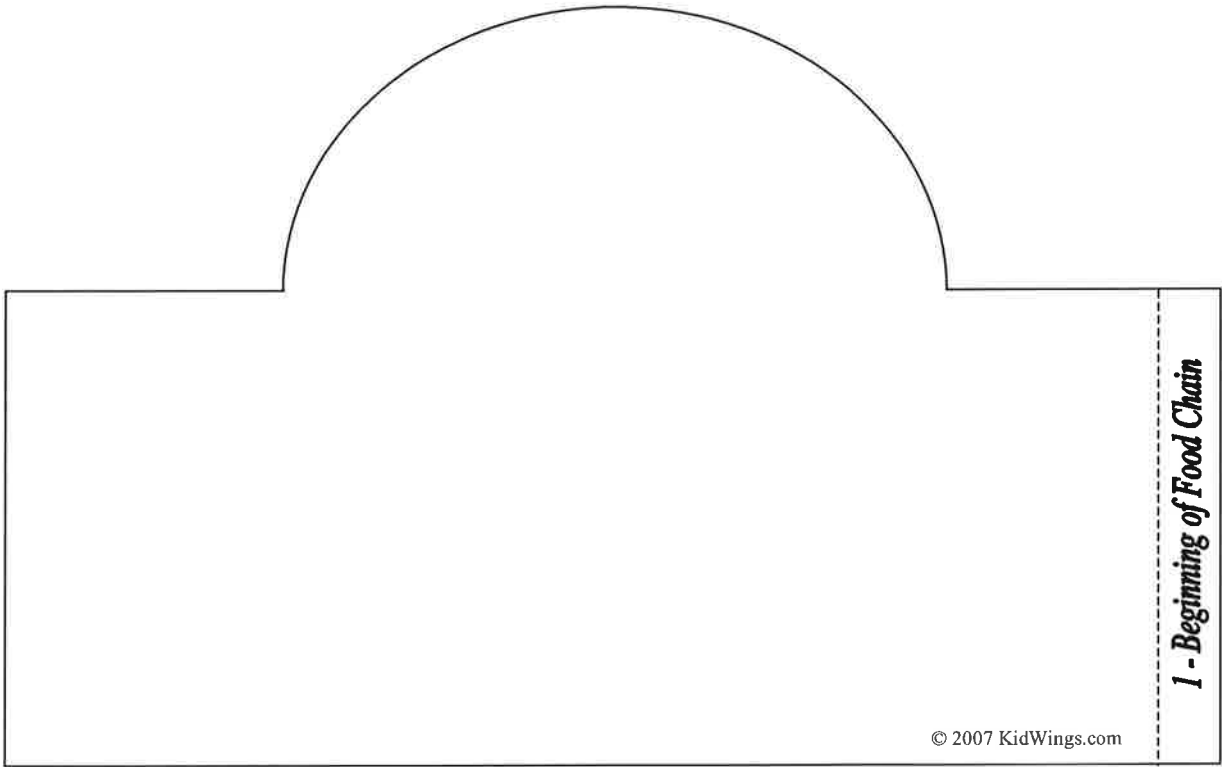
*Blank Food Chain Stackers*



© 2007 KidWings.com

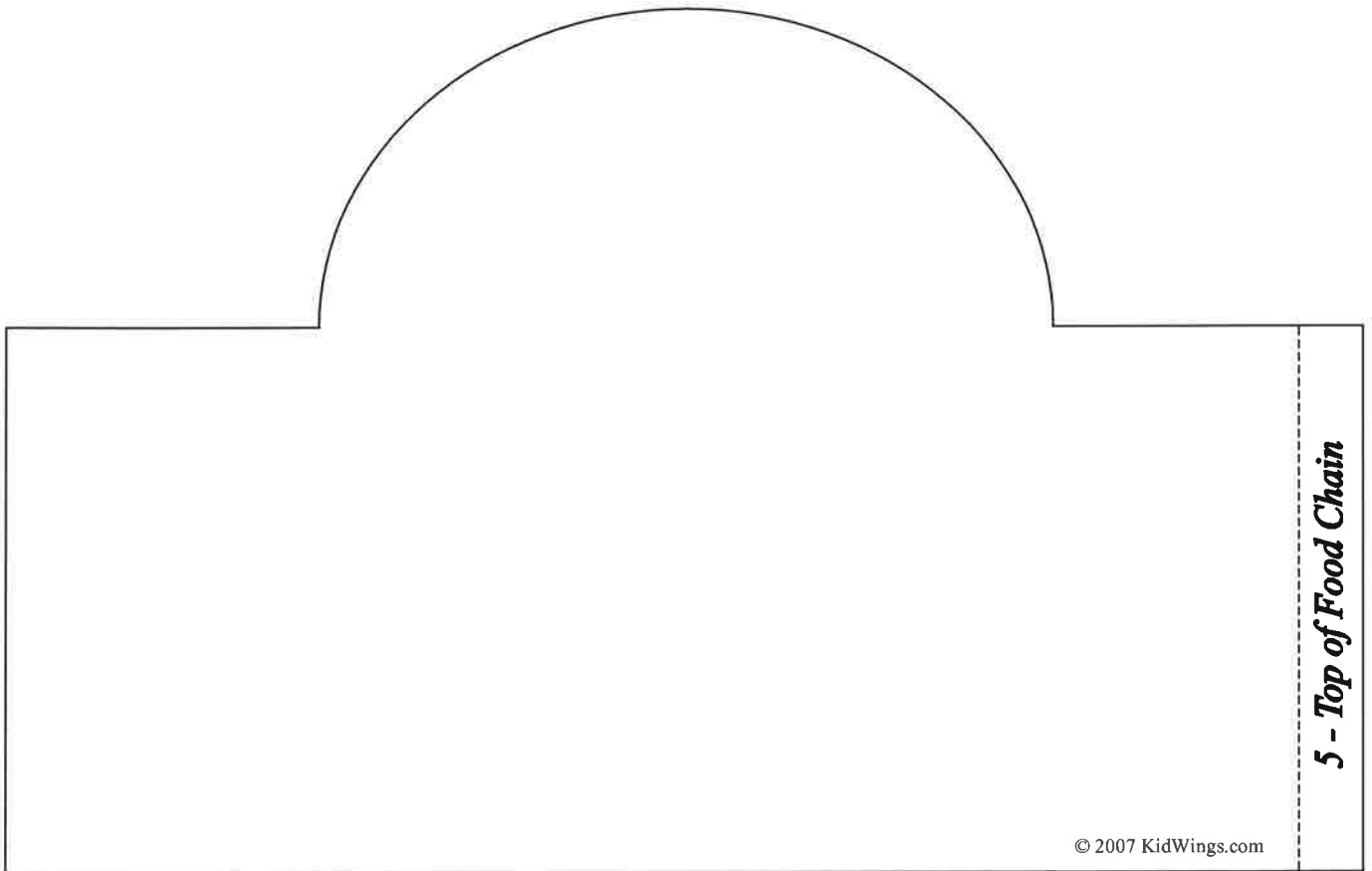






*1 - Beginning of Food Chain*

© 2007 KidWings.com

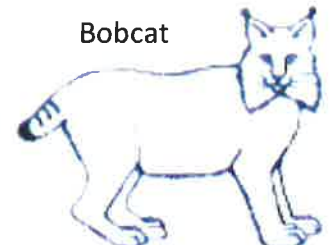
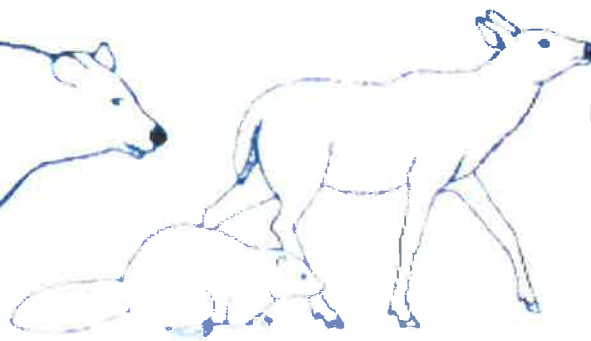
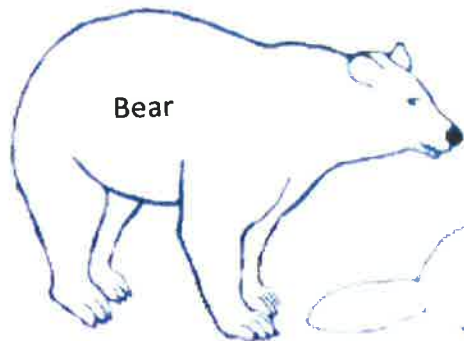
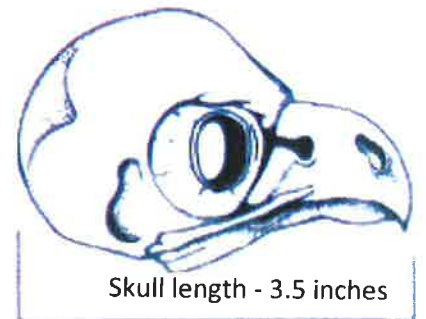
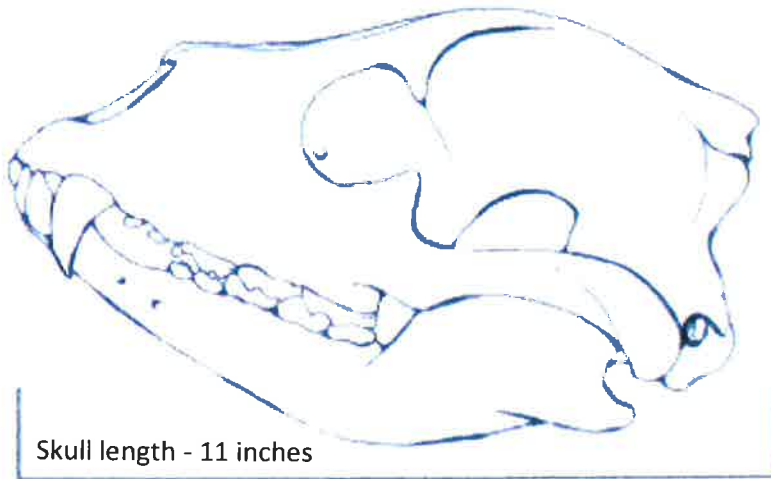
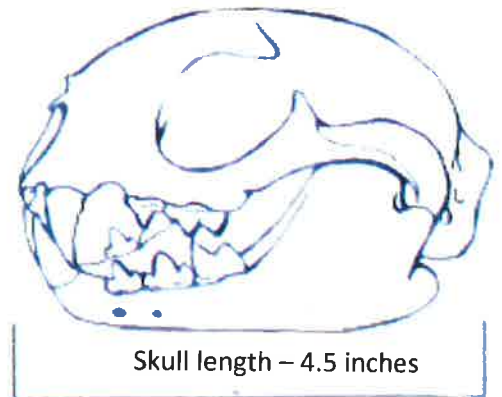
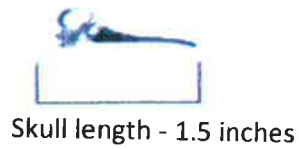
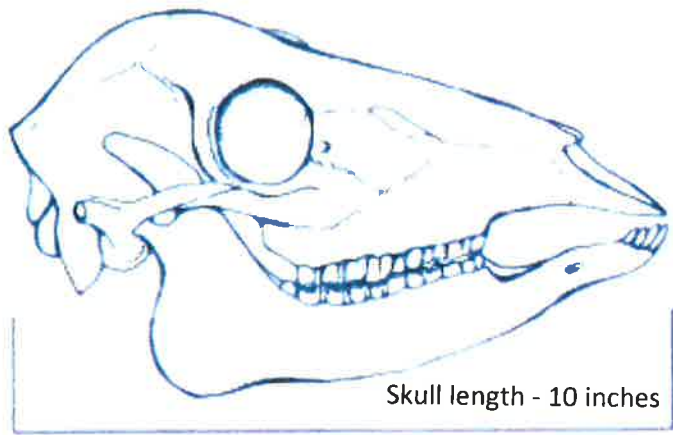
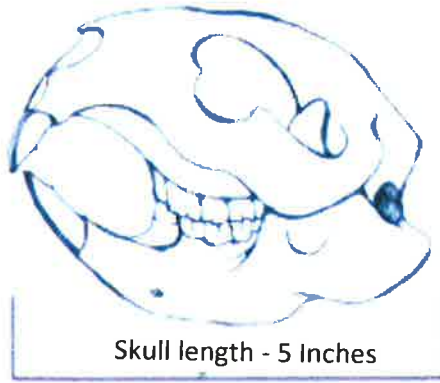


*5 - Top of Food Chain*

© 2007 KidWings.com

# Skull Match up Activity

After reading this month's *Wildlife Express*, use your knowledge to match the skulls to the animals below by writing the animal name near the correct skull. Size may be a great indicator but think of eye placement and teeth to support your answer, too!



©Sheri Amsel

Beaver

Deer

Owl

www.exploringnature.org



# Web of Life

**Subject:** Science

**Objective:** Students will be able to analyze how organisms are linked to one another in the environment.

**Materials:**

- area large enough for class to stand in a circle
- one large ball of yarn

**Procedure:**

1. Have students stand in a circle.
2. Tell each student to think of an animal or plant.
3. Teacher begins by sharing the name of an animal or plant.
4. After naming the animal, the teacher holds on to the end of the yarn and tosses the ball of yarn to someone in the circle.
5. The person who now has the yarn names an animal or plant, holds the string and tosses the ball of yarn to someone in the circle who has not had a turn. This continues until all students are holding onto the yarn. A web will be created.
6. Go around the circle again having the students repeat their choice.
7. Tell the students as a group they will be playing “Mother Nature” and must decide what animal or plant should disappear. Hold a vote.
8. When it is decided who shall be the unfortunate ‘victim,’ tell that person to let go of the yarn. When others feel the tightness of the yarn leaving their hands, they should let go of their piece, as well. All of the yarn will eventually fall to the ground.
8. What conclusions can be drawn from the activity? Some think gophers, spiders and other animals should just disappear. How would that affect other species?



# Springtime Haiku

**Subject:** Language Arts

**Objectives:**

Students write in a variety of formats to record, generate and reflect upon ideas.

**Materials:**

□ *Wildlife Worksheet*

**Procedure:**

1. Discuss the purpose of poetry with students. Introduce or review what a haiku poem is and where it originated. If possible share some examples. (see below)
2. Review syllables with students.
3. Hand out *Wildlife Worksheet* and let students write a haiku poem related to springtime.
4. When rough drafts are completed give students a piece of construction paper to complete their final drafts.
5. Display the poetry for a fun Spring Bulletin board.

**Sample Poems:**

**Lives in the mountains  
Flying high in the sky  
Sharp Talons, hooked beak**

**Not as alone  
As I thought I was --  
Animal Tracks**

**Black and white colors  
Gentle creatures eating fish  
Swimming with webbed feet**

**Panda's face, eyes sad  
Black and white, soft, silky fur  
Endangered species**



# WILDLIFE WORKSHEET

## Springtime Haiku

**Haiku is a form of poetry that originated in Japan in the 1890s. It is usually written about nature. It does not rhyme and should be written in the present tense.**

The seventeen-syllable poem has three lines. It goes like this:

Line 1: 5 syllables

Line 2: 7 syllables

Line 3: 5 syllables

To get started writing a haiku about a springtime activity or sight you've seen, write down some words and thoughts you have about springtime below. Look over this month's *Wildlife Express* for more ideas. (Let Them Be and Springtime Fun)

Write your poem on the lines provided.

---

---

---



Check your spelling with a partner. When finished, write your poem on a piece of construction paper and illustrate it or shade it with light colors for a special effect. Add a border if you would like!