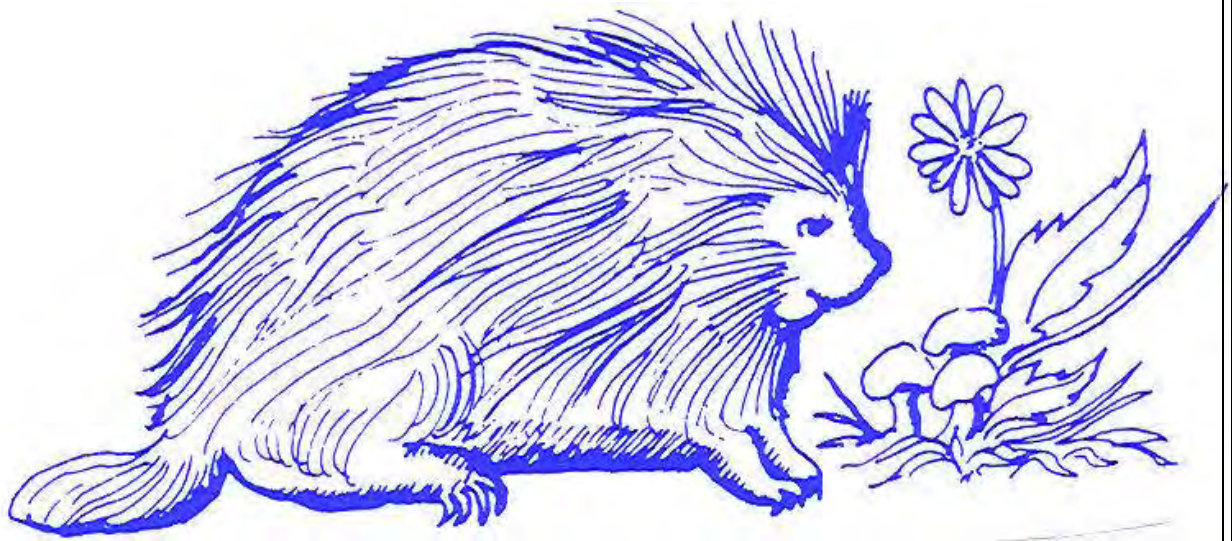


Humane Education Resource Guide



**A Guide For Elementary School Teachers
In New York State**

ACKNOWLEDGEMENTS

The lessons in this Guide serve to fulfill the requirements of the New York State Humane Education Law (Article 17, Section 809) as well as the Project Schools Against Violence in Education (Project SAVE) Act which requires instruction in character education for all grade levels.

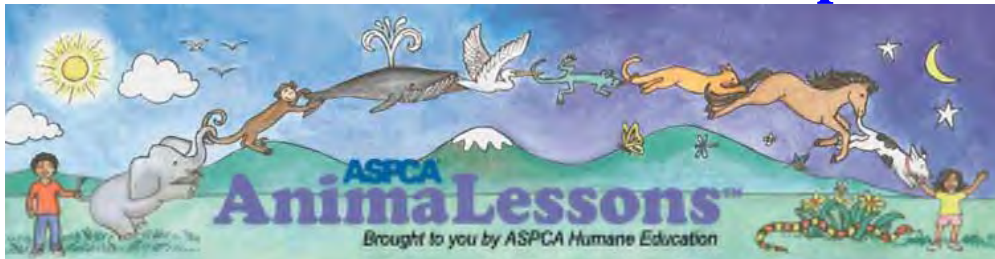
The principal writers of this Guide were:



Humane Education Advocates Reaching Teachers

Lisbet Chiriboga, M.S.Ed.
Ritalynn Forman, M.S.Ed.
Marguerite Miller, M.S.Ed.

ASPCA Humane Education Department



American Society for the Prevention of Cruelty to Animals

Jennifer Dragotta, M.S.Ed.
William Samuels, Ph.D.

UFT/HEC



United Federation of Teachers Humane Education Committee
Kay Fried, M.A.
Julie O'Connor, M.Ed., M.S.Ed.
Sheila Schwartz, Ed.D.

Thanks for assistance with individual lesson plans or worksheets go to:

- **Farm Sanctuary**
- **Kids and Critters**
- **Living Earth Learning Project (a program of the New England Anti-Vivisection Society).**
- **New York City Department of Education for permitting us to use and update lessons from their 1985 *Humane Education Resource Guide* on**
 - **Animals and Humans Have Similar Basic Needs (page 6)**
 - **Animals in Our Urban Environment (pages 13, 15)**
 - **Wild Animals Do Not Make good Pets (page 23)**
 - **Animal Rights (pages 60 – 64)**
- **New York State Bar Association, Special Committee on Animals and the Law**
- **Peninsula Humane Society**
- **Vegetarian Resource Group**
- **Wildlife Watch**

TABLE OF CONTENTS

- The Law
- Introduction

LESSONS

Companion Animal Issues

- Animals and Humans Have Similar Basic Needs (Grades Pre-K - 1)
- Companion Animal Care: Fostering a Responsible Attitude to Guardianship (Grades Pre-K – 1)
- Pet Overpopulation (Grades K – 2)
(Grades 3 – 5)
- Animal Shelters in Society (grades K – 5)
- Animal Compassion (Grades 4 – 5)
- Laws That Protect Animals

Wildlife Issues

- Pigeons in the City (Grades Pre-K – 1)
- Animals in Our Urban Environment (Grades Pre-K – 1)
- Wild Animals Do Not Make Good Pets (Grades K – 2)
- Insect Rescue (Grades K – 2)
- Monkeys and Apes (Grades 2 – 4)
- Why Are They Endangered? (Grades 3 – 5)

- Bird Observation Experiment (Grades 3 – 5)
- Bird Watching as an Alternative to Chick Hatching (Grades 4 – 6)
- Animals in Entertainment (Grades 3 – 6)
- A Whale’s Stomach (Grades 4 – 6)
- Amazing Geese (Grades 4 – 6)
- Animal Rights (Grades 5 – 6)

Farmed Animals and Food Issues

- Your Food (Grades K – 2)
- Exploring Good Food Habits (Grades 2 – 3)
- Barnyard Gossip (Grades 3 – 5)
- Studying Human Nutrition (Grade 6)
- Farm Sanctuary Selection
- New York Coalition for Healthy Food Choices

Careers Working with Animals

- Careers Working With Animals

Appendix

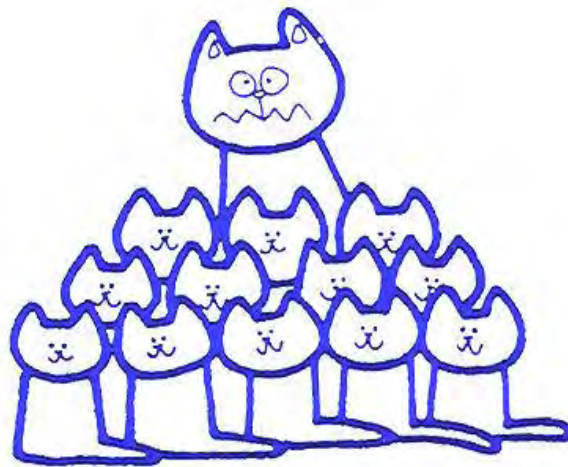
- Resource Organizations
- Bibliography

THE LAW

Section 809.

Introduction in the Humane Treatment of Animals

The officer, board or commission, authorized or required to prescribe courses of instruction shall cause instruction to be given in every elementary school under state control or supported wholly or partly by public money of the state, in the humane treatment and protection of animals and of the importance of the part they play in the economy of nature as well as the necessity of controlling the proliferation of animals which are subsequently abandoned and caused to suffer extreme cruelty. Such instruction shall be for a period of time during each school year as the board of regents may prescribe and may be joined with work in literature, reading, language, nature study or ethnology. Such weekly instruction may be divided into two or more periods. A school district shall not be entitled to participate in the public school money on account of any school or the attendance at any school subject to the provisions of this section, if the instruction required hereby is not given.



Effective July 1, 1995, as amended by L.1994, c. 542.
Originally became a law in 1947.

INTRODUCTION

The New York State (NYS) Humane Education Resource Guide was designed to help teachers integrate Humane Education into their elementary classrooms. Humane Education is the fostering of respect, understanding, compassion and responsibility toward all human beings, animals and the environment. It is an exploration of how we share the world with other living beings. New York State Education Law (Article 17, Section 809) requires elementary students be taught about the humane treatment of animals. This guide offers tools and strategies to fulfill this mandate, enhance existing curriculum, and fulfill NYS Learning Standards in all content areas. Each lesson has clear objectives for both teaching academic content and the affective domain of students.

Given the prevalence of violence in society today, it is more crucial than ever to instill compassion, empathy and tolerance in young people. Studies have shown that there is a direct correlation between violent acts towards animals and people. Additionally, research in Humane Education suggests that children's compassion toward animals is related to their empathy toward humans. The lessons in this guide promote essential character-building traits such as empathy, kindness, respect for others and personal responsibility as well as engage students' interest in learning.

As children develop the cognitive abilities needed to assume the perspective of other humans and animals (empathy), they begin to understand concepts such as fairness and reciprocity. We can nurture empathic qualities and enhance character development by including animal-related issues in the curriculum as suggested by Thomas Lickona, in his book *Educating for Character: How Our Schools Can Teach Respect and Responsibility*.

Humane Education focuses on a variety of topics and provides teachers with the tools to incorporate these themes into a standards-based curriculum. The lessons in this guide are separated according to animal category and content area so that teachers can easily locate lessons that fit into their curriculum. Animal categories are Companion Animals, Wildlife, and Farmed Animals. Content areas are Language Arts, Math, Science, Social Studies, Music, and Art. The lessons allow students to gain knowledge and understanding of animals through interactive, hands-on activities. Great importance is placed on promoting self-discovery and critical thinking as well as developing leadership skills to put compassion into action. The activities were designed for relevancy to content areas and were field-tested by classroom teachers around NYS. Children's literature was chosen especially for its unique way of contributing to humane themes.

Humane Education can spark students' interest in learning when integrated into the existing standards-based curriculum. We encourage teachers to use the lessons in this guide as a springboard to create their own Humane Education program because it will be most successful when implemented by them on a regular basis.

“Teaching a child not to step on a caterpillar is as valuable for the child as it is for the caterpillar.” –Bradley Miller

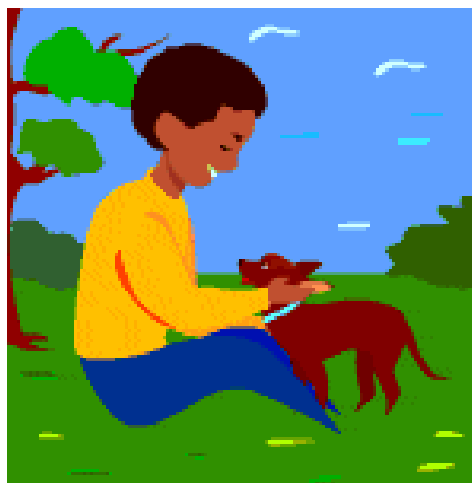
COMPANION ANIMAL ISSUES

Even though the world is teeming with well over a million different species of animals, most children learn about the animal world through the 20 or so animals embraced as companions in their homes. In no small way, how our children treat our companion animals establishes how they will treat most of the other animals in the world--including humans.

When our children learn to love and care for the companion animals in their homes, they learn many valuable skills. Children learn responsibility and long-term rewards. They can learn patience and that coaxing can be more effective than coercing. They learn that animals have feelings. They learn that animals can not only love, but can love us without prejudice and with few “strings attached.”

On the other hand, children can also learn bad things. There is strong evidence animals are abused in homes with domestic violence. It appears that the violence often works its way down in these dysfunctional families; when children witness domestic violence, they may learn to treat their companion animals the same way. These children may also grow up to be violent towards other people, too. Less dramatically, when a child watches his or her parent trying to teach their dog with punishment, the children will probably believe that this is a right and effective way of treating others. When children are told their family loves and is caring for a dog, but the dog is actually left chained in the yard in all weather, they may feel that that is all a dog needs to be happy.

In short, companion animals are Nature’s ambassadors. How we teach our children to treat our companion animals sets the stage for how they will treat other animals, as well as other people and the environment. When we treat companion animals well, they can teach us boundless love, respect, and responsibility. When we treat companion animals poorly, we can learn apathy and cruelty.



All children can learn about responsibility from companion animals. For elementary school children, companion animals provide a powerful and accessible model for understanding the need and feelings of others. Older students can learn more about social, cultural, and environmental issues that involve companion animals. Students of all ages can learn self-efficacy and the joys of helping others through age-appropriate activities.

Companion Animal themes can be easily integrated into traditional content areas. Here are some examples (many of which will be explored further in the lessons in this resource guide):

- Language Arts--In addition to the many excellent books available about companion animals, students can write about their own companion animals and what they can do to care for them. Older students can write newspaper articles about the lives of real animals in a local shelter and what they and others can do to help them.

- Social Studies--Younger children can learn about the roles of companion animals in their families and communities (as police dogs, service animals, etc.).



Students can learn ways that companion animals have helped and worked with humans for thousands of years. They can also learn about the problems companion animals face now (blood sports like dog and cock fighting, overpopulation, stray animals) and how they affect communities.

- Science--Younger students are better able to learn about what animals need to survive through the concrete examples their pets provide more than through trying to abstractly think about other animals. Through inquiry-based activities, older students can learn about animal behavior, and then consider the adaptiveness of the behaviors. Discussing how companion animals experience the world can also give older elementary students an exciting way to learn about the senses.
- Math--Overpopulation can give older elementary children a concrete example of multiplication and even a glimpse at geometric progression. Figuring out how much it costs to care properly for a companion animal can be a fun and relevant exercise for teaching arithmetic.
- Visual Arts--In cooperation with local animal shelters and rescue organizations, students can make toys, dog biscuits, adoption cards and “adopt me” bandanas. These activities can help students learn about animals’ needs and age-appropriate issues facing animals in shelters.
- In addition to helping meet state standards, our personal experience has found that many students are very interested in the following companion animals issues. Middle and high schools students’ moral reasoning and critical thinking skills can be sharpened when they discuss these issues in “Socratic” dialogues: where students explore the issues and ways to address them.

- Blood Sports--An embarrassing part of many human cultures for centuries, many people are now looking at them for what they really are--and for the damage they cause not only to the animals forced to fight, but to the communities in which they happen.
- Breed-Specific Legislation--Time to time, different areas of the country seek to address dog bites or dog fighting by proposing that certain breeds be banned. Informed discussions about these bills can not only help students understand the real problem (the deeds, not the breeds), but also be motivated to learn about the legal process--from how a bill becomes a law to how laws affect society.
- Exotics as Pets--What makes a pet a pet? Are all animals equally suited to be companion animals? What does it mean to be adapted to an environment, and what happens when an animal is in a different environment? Why is it dangerous to have exotic animals in a different environment? Are there examples of animals brought into an environment that have hurt the environment? What responsibilities does this impose on us?
- Service Animals-- Companion animals help us more than most students realize. Even if you cannot invite a guest speaker who works with a service animals (seeing-ear, assistance, rescue, etc.), you can open the eyes of your students with current news clippings and stories. What does it take to train these animals? What does it mean that they have the minds to learn these tasks? Are these animals getting enough in return?
- Stray companion animals -- Of course stray companion animals are in danger, but what can be done about them? Students can explore why this is a problem, the reasons for spaying/neutering to prevent it, and what they can do (personally and as a society) to intelligently help homeless companion animals -- such as through education and trap-neuter-return programs.

Additional information can be found at:

- www.animalessons.org
- www.animaland.org
- www.asPCA.org
- www.nahee.org
- www.hsus.org
- www.aphe.org
- <http://www.latham.org>
- <http://nyshumane.org>



The following lessons cover some of the most basic lessons we can learn from our relationships with our fuzzy and feathery and scaly friends.

Animals and Humans Have Similar Basic Needs

Grades: Pre K - 1

Objectives:

Affective:

- Students will be able to identify that animals and humans have similar basic needs.

Academic:

- Students will listen and read to acquire information and understanding.

Materials:

Pictures of animals and humans: eating, drinking, in their shelters, protected from cold and heat, playing, etc.

Motivation:

Ask students, “What do your cats and dogs (and other companion animals) need? Do people need the same things?”



Procedure:

Mini-Lesson:

- 1) Show students pictures of people eating.
 - Show students pictures of animals eating.
 - Have students conclude that both companion animals and people need food.
- 2) Show pictures of people drinking water, juice, soda, etc.
 - Show pictures of animals drinking.
 - Have students conclude that both companion animals and people need water.
- 3) Show pictures of animals and people in various shelters and have students conclude that both humans and companion animals need shelter.
- 4) Show pictures of people wearing different clothing depending on weather, (e.g., children’s sweaters in autumn).
 - Discuss how animals have their own way of protecting themselves from various weather conditions. (Cats and dogs shed hair, some animals change their coat or grow a thick winter coat of fur or feathers.)

Small-Group Activity

- 1) Students may work in pairs or small groups.
- 2) Have students cut out the cards on the “What Do All Companion Animals Need?” sheet.
- 3) Students will identify the six cards that represent the needs of companion animals and paste them in the empty boxes of the “What Do All Companion Animals Need?” activity sheet.

Alternate Activity:

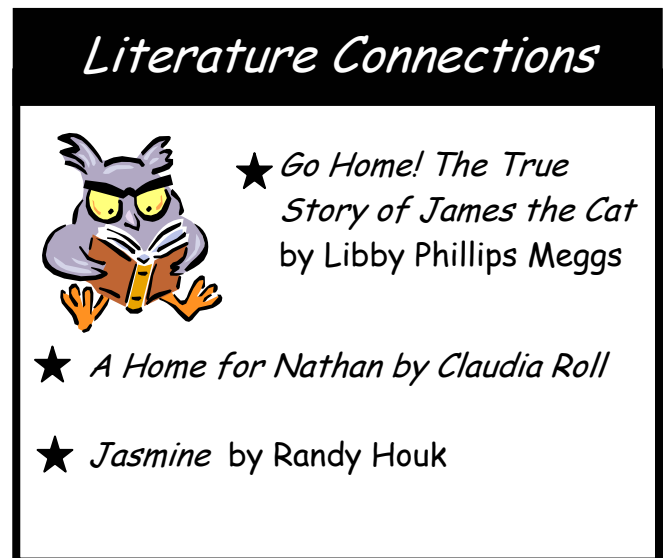
- 1) Teacher cuts out cards on the “What Do All Companion Animals Need?” sheet in advance and has a set in an envelope for each group.
- 2) Have each group of students select and display the cards that show what companion animals need.
- 3) Distribute copies of “All Companion Animals Need” sheet (the one with the needs already in the boxes) and have groups check their selections.
- 4) Students may color “All Companion Animals Need” sheet.

Summary:

- Using an experience chart, ask students to name the things that both animals and humans need.
- Have students draw pictures of companion animals, shelters and food using the activity sheet as an example.

Follow-up Activities:

- Have children bring photographs of their companion animals to school to share with the class. How do you help to take care of your companion animal? What does your companion animal need?
- Encourage children to care for stuffed companion animals in the housekeeping center. Be sure to supply a leash (can be made out of ribbon or cord), a license for dogs, food and water dishes, a brush or comb, toys).
- Read aloud books about companion animals that reinforce their need for care, responsibility and love.
- Have students visit the Pet Care Guide at www.animaland.org. In addition to great information, there are short cartoon clips on companion animal care.
- Send literature home to the parent concerning the care of companion animals.



Additional Concepts:

- All companion animals need a schedule: a regular time for feeding, exercising and cleaning.
- Provide a safe and clean environment -- if not, the animal will get sick or may die.
- Don't give candy or junk food to animals. Not only is it unhealthy, their systems are not used to it.
- Loving a companion animal means giving him/her food, water, exercise, his/her own clean environment, affection and attention.

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding - Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

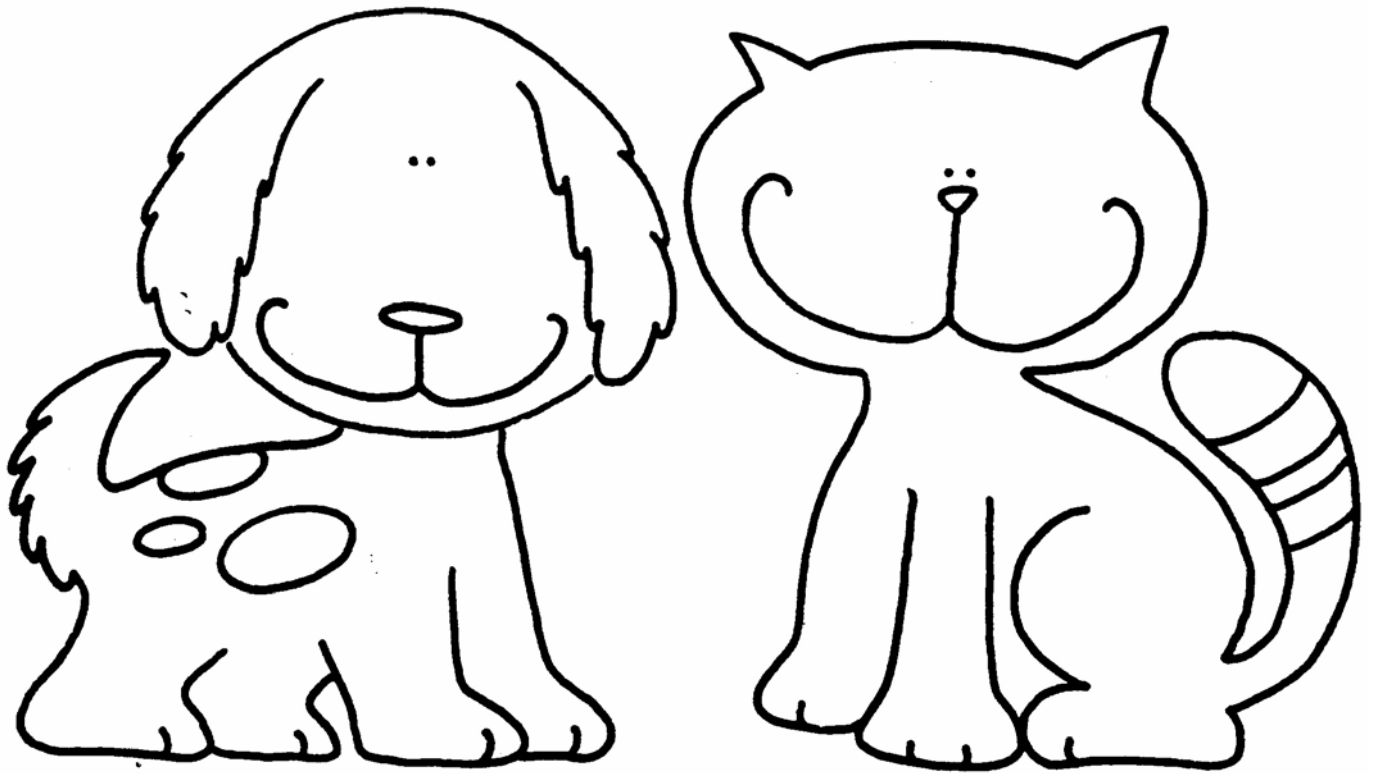
1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.








Name _____

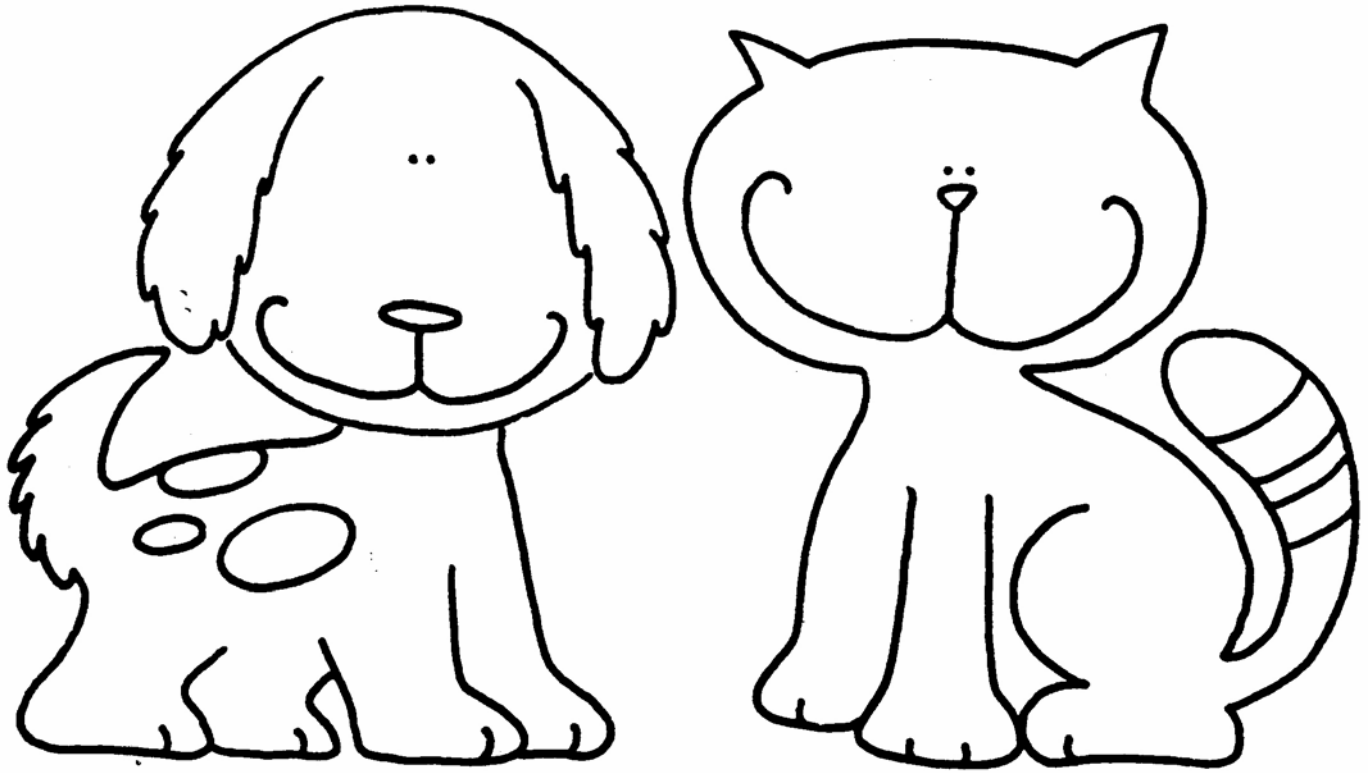
Date _____

All Companion Animals Need



 <p>Food</p>	 <p>Clean House</p>	
 <p>Exercise</p>	 <p>Safe Toys</p>	 <p>Love</p>

Companion Animals Need



This page reprinted with permission from the Peninsula Humane Society Education Department.

Cut out the cards.



Food



Telephone



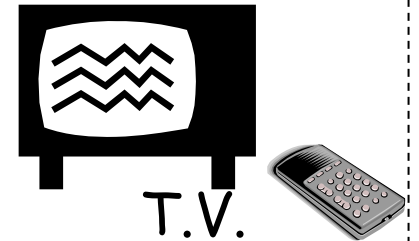
Book



Pencil



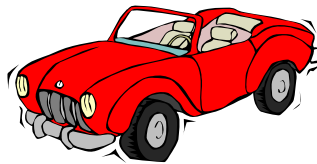
Water



T.V.



Spoon



Car



Love



Glasses



Exercise



Fork



Clean House



Money



Safe Toys

Companion Animal Care

Fostering a Responsible Attitude Towards Guardianship

Grades: Pre-K - 1

Objectives: Objectives:

Affective:

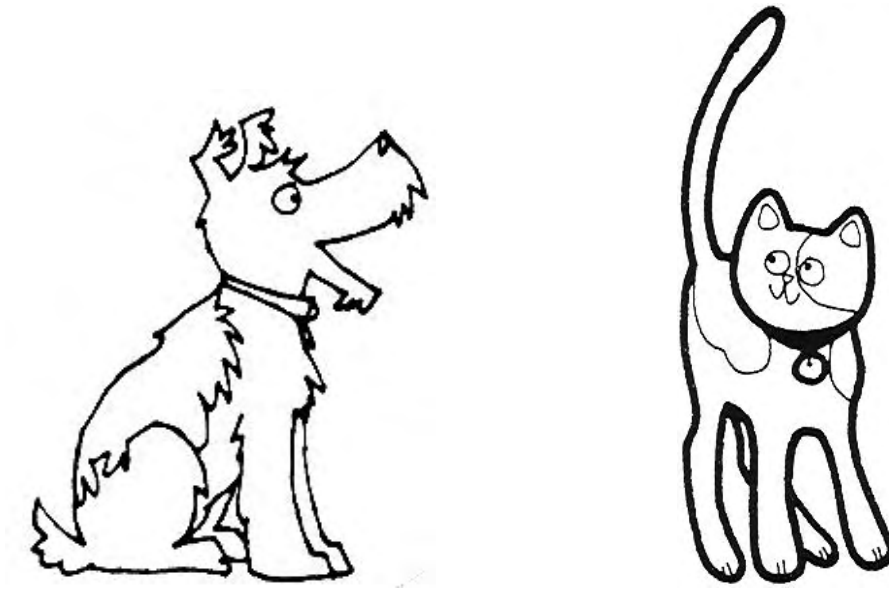
- Students will give examples of responsible companion animal care.
- Students will understand the difference between companion animals and wildlife.

Academic:

- Students will listen to acquire information and understanding.
Students will acquire and transmit information.

Materials: Leash, food and water bowls, stuffed toy animals, toys for cats, dogs, and other companion animals, animal hair brush, collar and tags, dog license, litter box, scratching post, photographs and pictures of people and their companion animals depicting similar emotions, paper, crayons, magic markers, blocks, assorted kinds of paper, post-its, index cards, magazines (to cut out pictures).

Motivation: Have students bring in pictures of their companion animals or pictures of companion animals from magazines. Clip-art you can use is included as part of this lesson.



Procedure:

Day 1

Mini-Lesson:

- 1) Have students show pictures of their companion animals to the class and share some information about them.
- 2) On a large piece of paper write "*Companion Animals.*" On a second sheet write "*Not a Companion Animal.*" (See small group activity #1)
- 3) Brainstorm what it means to be a companion animal (the difference between domestic and wild animals).

Small-Group Activity:

- 1) Individual or small groups of children will cut out pictures of animals from magazines.
- 2) They will place these pictures into two stacks -- animals that can be companions and animals that cannot be companions.

Summary for Day One: After showing each picture of an animal to the class and identifying whether or not that can and cannot be a companion, students will glue pictures onto the appropriate large sheet of paper.

Day 2

Mini-Lesson #2:

- 1) Have students brainstorm what companion animals need and how it is similar to what the children need.
- 2) Create a T-chart with "companion animals" on one side and "children" on the other.
- 3) Have students compare (among other things):
 - a) a dog on a leash to a child holding an adult's hand when crossing the street
 - b) collar and tags on a dog or cat to ID or name tag on students going on a class trip
- 4) Ask children to bring in stuffed animals from home (make sure you explain that it will be staying in school for a while, so it should not be an animal they sleep with or that they are attached to). Discuss: What do students know about each companion animal care item and clarify the proper use of each item by demonstrating on the stuffed animals.
- 5) Have children act out various situations involving the appropriate handling and care of a companion animal. At center time they can act out the situations in the dramatic play area.
 - a) What should you do when you meet an animal for the first time? How should you approach the animal? How should you physically handle the animal?
 - b) How should you behave when an animal is sleeping or eating?
 - c) What should you do if an animal is angry?
 - d) What can happen if you scare an animal?

- e) How do you think an animal might behave if he/she is sick and should that change the way you treat the animal?

Small Group Activity #2:

- 1) Have small groups of students role-play the proper use for some of the items that the teacher calls out - (e.g. petting an animal when putting his leash on, feeding an animal at the appropriate time.
- 2) Have small groups of students role-play improper or dangerous human behavior in interacting with companion animals. The teacher facilitates by calling out the behavior (e.g., tying a dog on a short leash and leaving tied for a long period of time is uncomfortable for the dog, taking away the food dish while the animal is eating might lead to a dog growling at or biting the person taking it away).

Summary for Day Two: Have students complete the “Who Needs What?” student activity sheet and review it as a class.

Day 3

Mini-Lesson #3:

- 1) Write the words “dog” and “chair” next to each other. Elicit from students the differences between those two nouns.
- 2) Discuss what students own -- hold up pencils, toys, etc. Demonstrate sentence structure like, “Lucy owns this pen.” Ask students, “Does a pen feel happy? sad? frightened? hungry? Does a cat? Can a student own a cat the way he owns a pen? Can he throw the cat away like he throws the pen away?” While discussing non-living property versus pets, record students’ responses on chart paper.

Small Group Activity #3:

- 1) Small groups of students will draw pictures of companion animals in situations in which guardians are acting responsibly. The students generate these ideas, not the teachers because this is their third day of activities.

Summary for Day Three:

- 1) Pictures students draw can be used to create a big book on the topic of “Caring for My Companion Animal.” The teacher can write sentences dictated by the students on responsible care.
- 2) The students and teacher can create an experience chart in which children list how we can give companion animals responsible care.

Follow-Up Activities:

- Invite a pet “therapy” dog or cat to come visit the class. For information on therapy animals contact the American Society for the Prevention of Cruelty to Animals at phone #212-876-7700 or www.asPCA.org and/or the Delta Society at phone #973-376-2682 or www.deltasociety.org.
- While many teachers like having a class pet, it is extremely difficult to care for an

animal properly in a school atmosphere. Holidays, week-ends and evenings can pose special problems as there is no heat or light. There will likely be feeding problems and cleaning problems during these times as well. While some children may treat animals appropriately others may be rough or careless in their interactions. Some students may be allergic to animals and there is always the potential for an animal scratching or biting a student. Therefore, we do not recommend animals in the classroom and would suggest that you have a trained animal come visit the students.

- In Defense of Animals wants to replace the words pet “owner” with companion animal “guardian.” For more information about their guardianship campaign and free literature for teachers log onto www.idausa.org.
- Trips and Visitors
 - a) Take a trip to a veterinarian office for a tour. Pre-plan the trip and carefully explain the rules prior to the visit.
 - b) Have a veterinarian visit the classroom. Prepare the children for a visitor and talk about the kinds of questions that are appropriate to ask. Make up some questions before the visit, so that you do not waste a visitor’s time.
- Interdisciplinary Activities
 - a) Block area: Children can build homes that have companion animals, an animal hospital, a dog run and other places related to companion animals.
 - b) Painting Area: Create a mural collage of a city with apartment buildings. Make sure to cut big windows so that you can put pictures of each student’s family in the windows. Photographs of families with their companion animals as well as drawing may be used.
 - c) Housekeeping Area: Periodically change this area into a veterinarian’s office, an animal shelter or a home. The children can act out the roles of the various grown-ups.

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

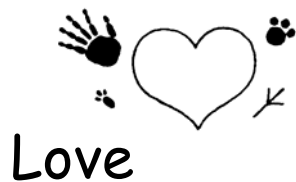
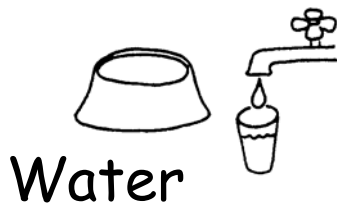
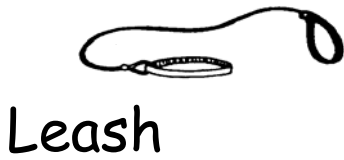
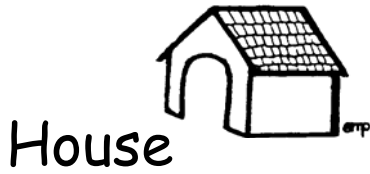
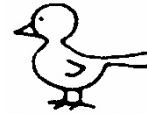
1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one’s own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

Name _____

Date _____

Who Needs What?

Different animals have different needs. Use a crayon to make an "X" in the appropriate columns, matching the animals with items in the column on the left.



Pet Overpopulation

Teacher Background Information:

Pet overpopulation can be a hard topic to discuss as it can bring up two difficult issues for elementary students - spaying/neutering and euthanasia. For grades K – 2, neither of these topics is appropriate. However, the first activity allows students in the younger grades to understand the concept that not all animals have homes and the role of an animal shelter. For grades 3 – 5, spaying and neutering should just be discussed only as an operation to prevent cats and dog from having puppies and kittens. Regarding euthanasia, it should be explained as a humane alternative to an animal living on the street, having no food or water. Some students in grades 3 – 5 may already be aware that animals have to be put down at their local shelter and may condemn a shelter for this action. In this sense, it is very important to challenge the students on this remark, discuss why so many animals have to be put down (because there are so many and not enough homes) and not put blame on the shelter for having to euthanize its animals.

Grades: K - 2

Objective:

Affective:

- Students will be able to understand that there are not enough homes for all homeless dogs and cats in New York.

Academic:

- Students will add, subtract, multiply and divide whole numbers.

Motivation: Ask students how many of them like animals. Do any of them have a dog or cat?



Mini-Lesson:

Have students fill out the activity sheet. See Addendum #1.

Small Group Activity:

Have students make up posters/signs for the school walls. Posters can have a theme such as “Animals Need a Home,” “Please Go to Your Animal Shelter to Adopt an Animal.”

Summary:

- 1) Students can show their posters to the class.
- 2) Discuss why animals need a home and why we need animal shelters. Include the name, location and phone number of your local shelter in the lesson.
- 3) Explain that if students encounter a lost or abandoned animal, they should ask an adult to call the local shelter or animal control facility. Children should never approach or touch an animal they do not know.
- 4) Let students know that the animal shelter is a place to look if your family has decided to bring a new pet into the home.

Follow-up Activity:

The students can survey the school to see how many students/teachers have adopted animals from the shelter.

Special Education and English and a Second Language:

Students will probably be able to grasp the concepts of animals needing a home. They may not be able to do the math in the activity but they can draw a line from an animal to a home and there will be four animals that do not find a home. From there, you can discuss the fact that all animals do not have homes and the role of animal shelters.

New York State Standard Addressed:

Standard 3 – Mathematical Reasoning, Number and Numeration

1. Students use mathematical reasoning to analyze mathematical situations, make conjectures, gather evidence and construct an argument.
2. Students use number sense and numeration to develop an understanding of multiple uses of numbers in the real world.

=====

Grades: 3 – 5

Objective:

Affective:

Students will be able to solve simple addition and multiplication problems to find out how many kittens (or puppies) can result from one unsprayed female cat (or dog).

Academic:

- Students will add and multiply whole numbers.

Motivation:

Ask students if they like puppies? Kittens? What do they like about them?

Procedure:

Mini-Lesson:

- 1) Read each sentence and write the correct number of new kittens in the column to the right. When you finish, add all the numbers. This will help you understand how quickly cats can fill up shelters!

1. Last December, a family adopted **ONE** unsprayed female. She was two months old. Her name is Samantha. _____

2. In March, Samantha had **FIVE** kittens. Two were male and three were female. _____

3. In July, Samantha had her second litter. She had **FOUR** kittens, two males and two females. _____

4. In September, Samantha's **THREE** daughters from her first litter each had **FIVE** kittens. Seven were female. (3x5) _____

5. In November, Samantha had her third litter of **SIX** kittens. They were all female. _____

6. In January, her **TWO** daughters from her second litter each had **FOUR** kittens. Five were female. (2x4) _____

7. In March, **SEVEN** of Samantha's granddaughters each had **FIVE** kittens. (7x5) _____

Total number of kittens that were born because of one unsprayed _____

female cat in one year!

2) When you are finished with the math activity, discuss the following:

- a) How easy do you think it would be to find homes for all of these kittens?
- b) What could the family have done to prevent so many kittens without homes from being born?
- c) What can happen to animals that don't have a home (starvation, hit by a car, go to a shelter)? Have they ever seen any stray cats or dogs in their neighborhood?
- d) What is spaying and neutering?

Small-Group Activity:

The United States Postal Service has a spay/neuter stamp that sends a message to the whole USA that pet overpopulation is a problem. Can you think of any other ways to send a message to your community about spaying/neutering?

Follow-up Activities:

Researching spay/neuter statistics and learning about euthanasia rates may be too overwhelming for kids of this age. Try focusing on the positive and what efforts are being made to reduce overpopulation. The students can ask their local veterinarian/local animal shelter about how many spay/neuter operations they have performed.

Resources:

- www.asPCA.org, ASPCA Cares offers free spay/neuter to low-income families in the five boroughs of New York City.
- www.spayusa.org, SPAY/USA, a program of The Pet Savers Foundation, is a nationwide network and referral service for affordable spay/neuter services.
- www.ddaf.org/SpayDay, The Doris Day Animal Foundation supports Spay/Neuter Day. Great ideas about promoting Spay/Neuter in your community.
- www.americanpartnershipforpets.org, Organization responsible for creating the United States Postal Service Spay/Neuter Stamp.

New York State Standard Addressed:

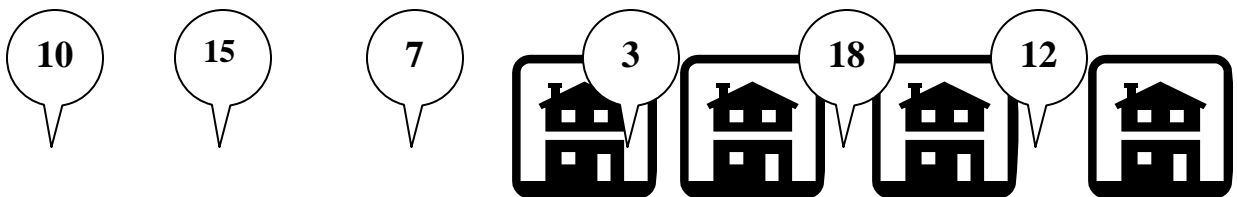
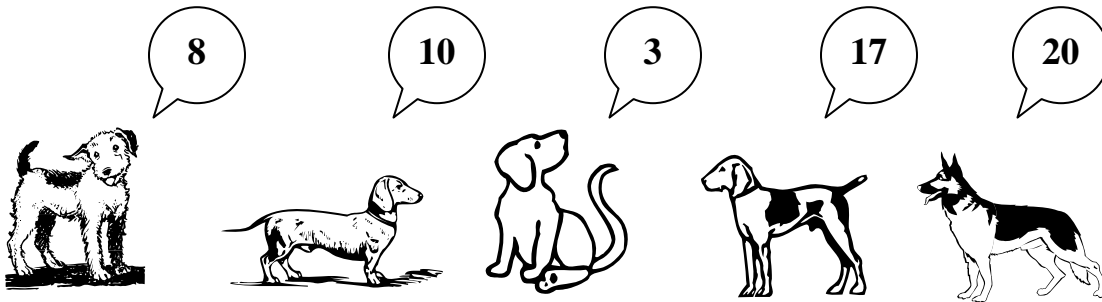
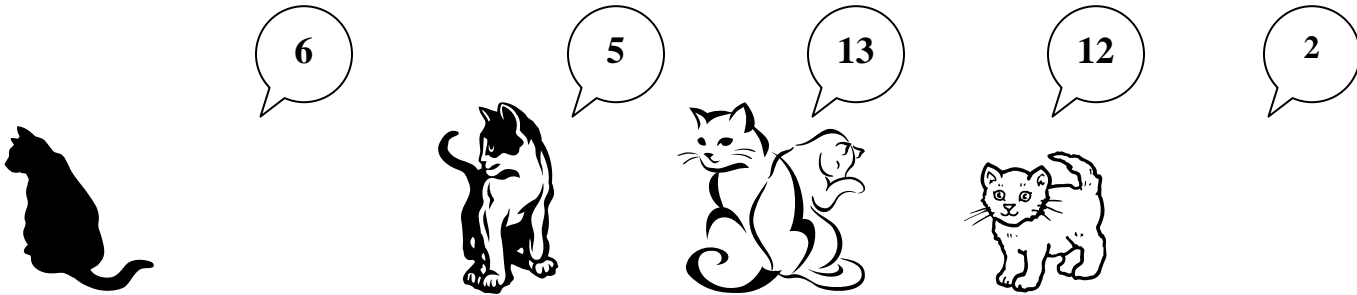
Standard 3 – Mathematical Reasoning, Number and Numeration

1. Students use mathematical reasoning to analyze mathematical situations, make conjectures, gather evidence and construct an argument.
2. Students use number sense and numeration to develop an understanding of multiple uses of numbers in the real world.

Addendum #1: Name: _____ Date: _____

Help Me Find a Home

Match the **animal** to the **home** so that the two numbers sum to 20.



- 🐾 Did all of the animals find a home?
- 🐾 How many cats found a home?
- 🐾 How many dogs found a home?
- 🐾 How many cats did not find a home?
- 🐾 How many dogs did not find a home?
- 🐾 Where can the animals that did not find a home be taken care of until they find a home?



ASPCA® Humane Education

Activity: Help Me Find a Home (Teacher Copy)

Students learn that all pets do not find homes and are introduced to animal shelters as a place where companion animals should be taken if they are lost and/or need to find a new home. Students match the cats and dogs to homes so that the numbers add up to 20.

Include the name, location and phone number of your local shelter in the lesson. Explain that if students encounter a lost or abandoned animal, they should ask an adult to call the local shelter or animal control facility. Children should never approach or touch an animal they do not know. Let students know that the animal shelter is a place to look if your family has decided to bring a new pet into the home.

Please review these questions with your students. The following questions are provided on the student handout.

- 🐾 Did all of the animals find a home?
- 🐾 How many cats found a home?
- 🐾 How many dogs found a home?
- 🐾 How many cats did not find a home?
- 🐾 How many dogs did not find a home?
- 🐾 Where can the animals that did not find a home be taken care of until they find a home?



Animal Shelters in Society

Grades: K - 5

Background Information for Teachers

Animal shelters and animal control facilities play important roles in the community. They are usually not so high-profile as other community facilities such as police and fire stations, and many students do not know many--if any--of the services they provide. In learning about animal shelters and control facilities, students can also learn what roles they themselves play in being community members by learning to whom to turn when problems arise. For grades K-2, students can understand that they should turn to adults for help, and that different parts of a community have different jobs. Older students can understand the difference they personally can make by being active, helpful members of a society by working with established civic organizations to identify and address various problems. Students of all ages can understand that animals have needs, and that domesticated animals have needs very similar to those of humans, including special care.

Objectives:

Affective:

- Students will understand the role animal shelters and animal control facilities play in society by helping animals.

Academic:

- Students will read and comprehend non-fiction stories.
- Students will government and civic life.

Motivation:

Tell students, “The city needs your help! Usually, Marcus helps the mayor of the city by answering phone calls from people who have problems. Marcus directs the person’s call to the place that could solve the problem. But, today Marcus is sick! Can you help out by listening to the phone calls and figuring out where to send the caller?”

Procedure:

Mini-Lesson:

- 1) On the board, place the illustrations of the police station, hospital, and animal shelter. You may want to enlarge the pictures and either color



- them or have students color them.
- 2) Help students describe what each of these places is, and the types of jobs it does.
 - 3) Hand out the cards with calls on them.
 - 4) Have students read what the callers say on the cards.
 - 5) Decide which place, the police station, hospital, or animal shelter, would be the best place to help the caller.
 - 6) After students have decided, write the problem under the place on the board.
 - 7) Read what happened to each caller's problem.

Small-Group Activity:

- 1) Have students make posters/signs/collages that describe the things animal shelters do to help the community.
- 2) Students can show their posters to the class and display them for other classes to see.

Follow-Up Activities:

- Discuss why animals need a home and why we need animal shelters. Explain that if students encounter animals outside, they should ask an adult to call the local animal shelter or animal control facility. Children should never approach or touch an animal they do not know. Let students know that the animal shelter is a place to look if your family has decided to bring a new pet into the home.
- Ask the students if they have seen dogs or cats roaming their neighborhood. Do they think these animals are happy and healthy? Ask them where they think these animals have come from. Discussion about abandoned pets, defining "abandoned" for the younger grades. Have students discuss why someone might abandon their pet. As appropriate for the age, discuss what things may happen to abandoned pets. Pets are domesticated animals, they have been bred to live in homes and cannot survive as well in the wild. Stray animals can be dangerous, especially since children will be more likely to approach a feral dog or cat than wild animals (like bob cats or coyotes).
- Ask the students why they think the people who abandon them really knew what could happen to their pets? Do they think that the people who abandon their pets know of the dangers their pets will face? What should the people do instead of abandoning their pets.

Special Education and ESL:

Talk to the students about the idea that if they feel someone or some animal is in trouble, that they should talk to a trusted adult about it. Even they do not understand the different roles of police and animal control officers, they can understand that they should speak to adults about trouble they see.

Addendum #1:

Caller Scripts

“Hello? Everybody I know is getting sick. They are getting the flu. I am worried that I will get sick too. Where can I go to help so I do not get sick?”

Correct place: Hospital

Under Location on Board Write: Flu Shots

That’s right! Sometimes people go to a hospital when they are not sick! People go to hospitals to get “shots.” Shots can help people not get sick in the first place. The person who called goes to the hospital and gets a flu shot. Because she [or “he” if the child reading the script is a boy] got a flu shot, she does not get the flu from her sister. Instead, she is able to help take care of her sister until she gets better.

“Hello? I saw a dog walking around my neighborhood. He does not have a collar, and he looks hungry. Who can I call to help the dog?”

Correct place: Animal Shelter

What do you think happened?

The shelter sends out a Carla, an animal control officer. This is someone who helps stray animals and sometimes looks to see if people’s companion animals are doing O.K.



Carla, the animal control officer, finds the stray dog. The dog is sick, hungry, and scared. Judy takes the stray dog to the shelter. She names him Max.

At the shelter, Max gets shots to help him not get sick again. Max also gets “neutered” so that he won’t have children that could have become hungry and scared stray puppies.

For the next week, Max lives at the shelter. The people at the shelter give Max lots of love so he isn’t so scared anymore. Then a responsible family adopts him.

“Hello! My name is Mister Chu. I am the father of a little girl named Mindy. Mindy would LOVE to have a dog. She knows that dogs take work. But, she knows that pets love you, and she will help take care of the dog. Now, we have find a place to adopt a nice dog! Can you help me find a place where we can adopt a dog?”

Correct place: Animal Shelter

Under Location on Board Write: Adopting a Dog

What do you think happened?

Mr. Chu and his daughter, Mindy, go the shelter. While they are there, they see a beautiful dog with long, beige fur and big, brown eyes. Mindy falls in love with the dog right away! Mindy asks the people at the shelter what the dog’s name is. They tell her that her name is Willow, and that she’s a very nice dog.



Mr. Chu and Mindy adopt Willow, and take her home. They’re careful to let Willow get used to her new home. Not everything goes perfectly right away, but in very soon, Willow understands what she can do, and where she can do it. Willow becomes Mindy’s best friend!

“Hello! Hello! I just saw my neighbor trip and fall! He looks hurt! Who can I call to help him?”

Correct place: Hospital.

Under Location on Board Write: Helping a Hurt Person

What do you think happened?

Isn’t it nice when neighbors help each other?! Luckily, the man who fell was not hurt badly. At first, the man was nervous about going to the hospital. But, the doctors and nurses were very nice to him. After he got back from the hospital, he felt much better. And to thank his neighbor for calling for help, he baked him an upside-down cake.

“Hi. I was walking down the street when I saw a dog. He was chained up in someone’s yard. The chain was very short and the dog barked a lot. He didn’t have any food or water, and it was a hot day. The dog looked very upset and angry. Is there anything I can do to help him? Is there someone I can call?”

Correct place: Animal Shelter

Under Location on Board Write: Helping a Stray Animal

What do you think happened?

In some places, the police do something about animals that are not treated well. But, in many other places, animal shelters can help. And that’s what happened here! Remember Carla, the animal control officer? Well, it looks like today is another busy day for her!

Carla goes out to visit the people who own the yard and the dog. The dog’s name is Sam. She talks to the people and helps them realize that they are not treating their dog, Sam, well. Carla tells the family that by being mean to the Sam, the people are breaking the law! The family has to pay fines.

Carla and other people from the animal shelter work with the family. They teach them how to train Sam, and pretty soon, Sam is a loving member of their family! He doesn’t bark all the time anymore, and the family wonders how they could ever have treated him so badly!

“Hello there! My name is Mrs. Rivera. I am a first grade teacher. I want my students to be safe. I would like someone to teach my students how to be safe with dogs. Where could I go to find someone to teach my students how not to get bitten by dogs?”

Correct place: Animal Shelter

Under Location on Board Write: Teaching Students About Animal Safety

What do you think happened?

Mrs. Rivera calls the animal shelter. She talks to Audrey. Audrey says that she often goes out to schools to talk to students about how to be kind and safe with animals.

Audrey visits Mrs. Rivera’s class. Audrey tells the class that they should only get close to a dog after they have gotten permission from the dog’s guardian and only when the guardian is with the dog.

Audrey also told the class that there are times when dogs do not like to be disturbed. She said that dogs like to eat alone. She also said that sometimes dogs are cranky when they wake up too quickly--just like some people!

Audrey even taught the class a foreign language--dog language! She told them that dogs talk with their bodies. She said that dogs will show people how they are feeling by making faces and by moving in different ways. Audrey said that a lot times, if a person knows how to read a dog's body language, the person can avoid being bitten by the dog.

“Hello? This is Mrs. Rivera again! It was so nice having Audrey come talk to my class. They learned a lot about dogs and how not to get bitten. I still want my students to be safe. Who could talk to my class about being safe around strangers?”

Correct place: Police station

Under Location on Board Write: Teaching Students About Being Safe Around Strangers

What do you think happened?

The class is visited by someone named Officer McGruff®! McGruff talks to the kids about many safety issues, and how they can help “take a bite out of crime.”

McGruff told the kids how to be safe from strangers. He said they should never walk or bike alone. They should always have someone else with them. He told them to stay away from empty buildings, too. If a stranger did say something to them, McGruff told them not to say anything back. They should run away and tell an adult they trust what happened.

McGruff said that a stranger might ask them to help find their lost dog or cat. But if someone loses their pet, what should they do? Call the animal shelter! Never go anywhere with a stranger, no matter what the stranger says!

“Help! My name is Chloe. We lost our cat! We used to keep her in our backyard. I came home from school today, and she was gone! I’m so scared something bad happened to her! I wish we had never let her go outside. What can I do? Where should I go to try to find my cat?”

Correct place: Animal Shelter

Under Location on Board Write: Finding a Lost Pet

What do you think happened?

Chloe goes to the animal shelter and . . . finds her cat there! Her cat, Mittens, looks very scared and confused. The animal shelter said that when they brought her in, she was very dirty and may have gotten into a fight. The shelter cleaned her up and took care of her.

Chloe's family had never put a collar on Mittens. The animal shelter said Chloe's family was lucky. Without a collar, a cat or dog can be very hard to find.

Chloe took her cat home. Her family put a collar on Mittens, and kept her inside. Mittens was much happier being an inside cat. She was much safer inside, too!



“Oh my goodness! Hello! Hello! I think I just saw an elephant! Who should I call?”

Correct place: Police station

Under Location on Board Write: Wild Animal Problems

What do you think happened?

Well, it turns out that the person did see an elephant! An elephant got scared and escaped from a circus. The elephant didn't know what to do, so it was running through the streets! My, what confusion that caused!

The police called in specialists to help calm the elephant down and catch her. After they caught the elephant, they took her to a place called a sanctuary. At the elephant sanctuary, the elephant was able to live with other elephants just like she could when she lived in Asia. The elephant was very happy at the sanctuary.

Resources:

- www.asPCA.org The ASPCA provides information, material, and assistance to people and shelters across the nation. The humane law enforcement officers have jurisdiction over all of New York State. In many other states, animal control officers are also vested with the power to arrest violators of animal cruelty laws.
- <http://www.asPCA.org/site/FrameSet?style=Shelter> A list of shelters in New York State and across the nation.
- <http://www.petfinder.org> A directory of some animals that are available for adoption at shelters around the nation. Also has information on animals, activities, message boards, etc.
- <http://www.nyheart.org/links.html> Links to sites on several topics addressed by animal shelters and other animal welfare organizations

New York State Standards Addressed:

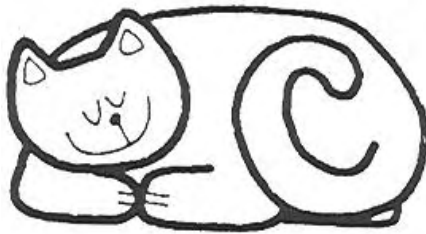
ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

Social Studies Standard V: Civics, Citizenship, and Government

1. The study of civics, citizenship and government involves learning about political systems, the purposes of government and civic life; and the differing assumptions held by people across time and place regarding power, authority, governance and law.



Animal Compassion

Grades: 4 - 5

Objectives:

Affective:

- Students will give examples of how animals are capable of helping each other and humans in need.

Academic:

- Students will read and comprehend non-fiction stories.
- Students will draw and write about a personal situation related to the stories read.

Materials:

- Story: *Animals Save Lives! Priscilla, a 2-month-old piglet, saves a young boy from drowning*
- *True & Amazing Animal Tales* sheets
- Construction paper for drawing
- Lined paper for writing

New Vocabulary:

empathy – being sensitive to the feelings and experience of another person or animal

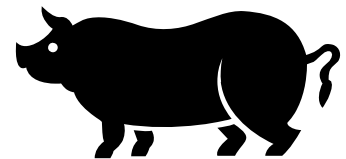
Motivation:

- 1) Ask students if they have companion animals at home.
- 2) Ask students to share if they have ever observed their companion animal exhibiting acts of kindness toward animals or humans (i.e., “When I am feeling sad my dog comes over to me and licks my face.”)

Procedure:

Mini-Lesson:

- 1) Read aloud *Animals Save Lives! Priscilla, a 2-month-old piglet, saves a young boy from drowning*
- 2) Have students discuss how they think Priscilla must have been feeling and why she acted the way she did.
- 3) Have students describe situations where they have seen an injured person or animal. Ask them how this made them feel and how they acted.
- 4) Discuss the word “empathy.”



Small-Group Activity:

- 1) Divide class into 4 groups.
- 2) Assign each group a different animal story and distribute *True & Amazing Animal Tales* sheets.
- 3) Have each group read the story with their group and respond to the Discussion Questions following their story.
- 4) Have each group briefly explain their group's story and share their responses with the whole class.

Summary:

- 1) Have students draw a picture to illustrate a situation when they felt the way an animal in one of the stories felt.
- 2) Then write a paragraph describing the situation and explain how their behavior was similar or different to the animals'.

-OR-

Have students write about a situation when they felt the way an animal in one of the stories felt. Have them include an explanation of how their behavior was similar or different to the animals'.

Follow-Up Activities:

- Students' pictures and writing can be compiled into a class book.
- Students can keep an observation journal of a companion animal or wildlife (i.e. pigeons, squirrels, etc). Students will observe the animals for several days making sure not to disturb his/her normal habitat or routine and note changes in the animals' behavior (see note below). Students will note what may have influenced these changes (i.e. going for a walk, getting a treat, oncoming car).


***Note: Explain to students that a feeling or emotion will generally cause a behavior. For example, a dog receiving a treat is feeling happy and will wag his/her tail. An animal who is frightened may react in various ways (such as cowering, bearing teeth, shivering, growling, whimpering).*

- Read Aloud a book about animal compassion or empathy.
- Watch the Share the World Video and complete accompanying lessons and/or activity sheets.

References and Literature for Teachers:

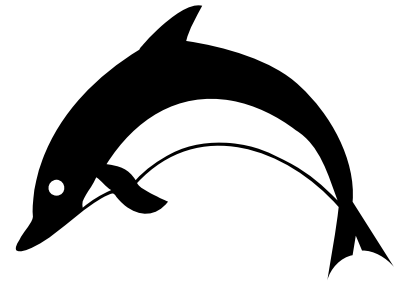
- *Share the World* Activity Program (FREE video & lesson plans)
www.sharetheworld.com

Literature Connections



- ★ *Black Beauty* by Anna Sewell
- ★ *Real Animal Heroes* by Paul Drew Stevens
- ★ *Cousin Charlie the Crow* by Marshall Houts
- ★ *Redruff, the Partridge of Don Valley* by Ernest Thompson Seton
- ★ *Charlotte's Web* by E.B. White

- *Animal Angels: Amazing Acts of Love and Compassion*
by Stephanie LaLand
- *Peaceful Kingdom: Random Acts of Kindness*
by Stephanie LaLand
- *The Compassion of Animals: True Stories of Animal Courage and Kindness*
by Kristin von Kreisler
- *The Pig Who Sang to the Moon: The Emotional World of Farm Animals*
by Jeffrey Moussaieff Masson



New York State Standards Addressed:

ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

ELA Standard 4 - Language for Social Interaction – Students will read, write, listen, and speak for social interaction.

Listening and Speaking

1. Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

MST Standard 4 – Science – Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

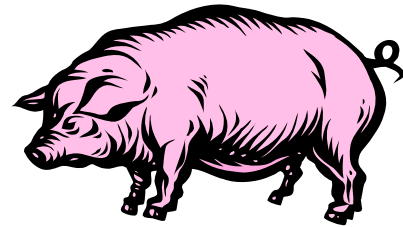
The Living Environment

1. Living things are both similar to and different from each other and nonliving things.

Animals Save Lives!

Priscilla, a 2-month-old piglet, saves a young boy from drowning.

One hot July day in 1984, Carol Burk and her 11-year-old son, Anthony, went swimming in Texas' Lake Somerville. They were joined by Priscilla, a 22-pound, 2-month-old piglet they had raised. Priscilla loved the water and was a great swimmer, but Anthony, a mentally handicapped child, was not.



For hours, Anthony, his mother, and Priscilla played hide-and-seek in the shallow waters. Finally, Anthony was tired and his mom turned to get ready to leave. When she turned back, Anthony was far out in the water, struggling. She started swimming toward him, and so did Priscilla. Despite being very tired from swimming all day, the little pig reached Anthony first. He grabbed for her halter and leash. In his panic he pulled too hard and went under, this time taking Priscilla with him!

Now both Anthony and Priscilla were drowning and he weighed almost four times more than she did. Priscilla struggled to get to the surface of the water. Finally, with enormous effort, she succeeded. With Anthony clinging to her small body, Priscilla swam back to shore.

Priscilla, like all pigs, has a very long memory. Years after the rescue, she still became upset whenever she saw young children playing near the water. For her heroism, Priscilla was honored with a "Priscilla the Pig" day in Houston, Texas.

Adapted from Real Animal Heroes, by Paul Drew Stevens.

Chico, Calif.: Sharp & Dunnigan, 1989.

ANIMAL TALES

Directions: Read the story and discuss the questions with your group.

Doctor Ants!



A Russian entomologist named Dr. Marekovsky discovered something unusual. He had been filming insects for a long time and finally noticed an odd behavior he had not seen before: a scene in which three Amazonian ants were removing a splinter from the side of another ant. Other ants formed a circle around them to protect the ants who worked to remove the splinter.

New Words

entomologist (en-tu-mâ-lu-jist) – scientist who studies insects

amazonian– (am-a-zōn-ē-en) - from the Amazon region in South America

Discussion Questions:

- 1) How did the ants help each other?
- 2) Why do you think the ants behaved this way?
- 3) How do you think the ants feel about each other?
- 4) Did your feelings about ants change after reading this story? Explain your answer.

* Excerpted from PEACEFUL KINGDOM by Stephanie Laland with permission of Conrari Press, an imprint of Red Wheel/Weiser (1-800-423-7087).

ANIMAL TALES

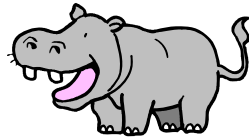
Directions: Read the story and discuss the questions with your group.

Two-Ton Help!

One day, a young impala was drinking by a river when he was grabbed by a crocodile hiding beneath the muddy surface. The crocodile started to pull his victim underwater.

A nearby hippopotamus witnessed the attack and chose to defend the victim. The furious hippo (capable of biting a crocodile in two) charged; the crocodile released the impala and swam away.

Then the hippo gently nudged the impala to the shore with his nose and onto higher ground. Not content to simply rescue the impala, the hippo stood guard against other predators for fifteen minutes. Then the two-ton animal began sniffing the impala and gently licking his wounds. Twice the hippo took the impala's head into his mouth in what seemed to be an attempt to get him to stand. But the impala was mortally wounded. Since hippos are strictly vegetarian, his interest in the dying impala was purely altruistic.



New Words

impala (im-pâ-lâ) – a graceful African antelope

mortally wounded (mōr-tel-ē wūn-ded) – injuries so severe that death is about to happen

altruistic (al-troo-is-tik) – when a person or animal behaves in a way that is not beneficial to his or herself, but that benefits others

vegetarian (ve-je-ter-ē-en) – someone who eats only vegetables, grains, fruits, and nuts and does not eat animals

Discussion Questions:

- 1) How did the hippo help the impala?
- 2) Why do you think the hippo behaved this way?
- 3) How do you think the hippo felt about the impala?
- 4) How do you think the impala felt about the hippo?
- 5) How do you feel about what the hippo did? Explain your answer.

* Excerpted from PEACEFUL KINGDOM by Stephanie Laland with permission of Conrari Press, an imprint of Red Wheel/Weiser (1-800-423-7087).

ANIMAL TALES

Directions: Read the story and discuss the questions with your group.

Mother Duck?

One day a scientist gave a chicken hen some duck eggs to nurture. The hen sat on them anyway and the scientist thought that she was too dumb to notice that they were duck eggs. Eventually, the eggs hatched and baby ducks came out, but the mother hen was unperturbed. Again the scientist thought that she didn't have the intelligence to understand that these were not baby chickens.

Then she did what no chicken in the world would ever do with her own chicks. She led them to water and cajoled them to swim.



New Words

unperturbed (un-per-terb-d) – not thrown into confusion

nurture (ner-cher) – to care for

cajole (ke-jōl) – to persuade or gently urge someone to do something

Discussion Questions:

- 1) How did the hen help the baby ducks?
- 2) Why do you think the hen behaved this way?
- 3) How do you think the hen felt about the baby ducks?
- 4) How do you think the baby ducks felt about the hen?
- 5) Do you think the scientist was surprised by what the hen did? Why?
- 6) What did the scientist learn about the chicken?

* Excerpted from PEACEFUL KINGDOM by Stephanie Laland with permission of Conrari Press, an imprint of Red Wheel/Weiser (1-800-423-7087).

ANIMAL TALES

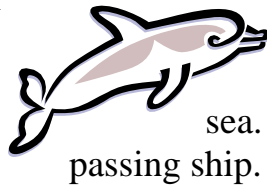
Directions: Read the story and discuss the questions with your group.

Rescue Dolphins

In June 1971, Yvonne Vladislavich was sailing on a yacht in the middle of the Indian Ocean when suddenly it exploded. She was thrown clear, but the yacht sank and she was left completely stranded.

Terrified, she floated in the water awaiting certain death. Then she saw three dolphins approach her. To her surprise, one of them swam underneath her and lifted her up with his large body. Gratefully, she held on to the dolphin's body. The other two dolphins swam in circles around her to protect her from sharks.

The dolphins carried and arrived at a buoy floating at was soon picked up by a



protected her for many hours until they sea. They left her on the buoy from which she passing ship.

It was estimated that from the position of the buoy and the position of her yacht when it exploded, that the dolphins had carried her and kept her alive through two hundred miles of dangerous seas.

New Words

yacht (yât) – a large boat

strand (strand) – to leave in a strange or unfavorable place without means to depart

buoy (boo- ē) – floating object anchored to the bottom to mark something lying under the water

Discussion Questions:

- 1) How did the dolphins help Yvonne Vladislavich?
- 2) Why do you think the dolphins behaved this way?
- 3) How do you think the dolphins felt about Yvonne Vladislavich?
- 4) How do you think Yvonne Vladislavich felt about the dolphins?
- 5) Did your feelings about dolphins change after reading this story? Explain.
- 5) What did you learn about dolphins?

* Excerpted from PEACEFUL KINGDOM by Stephanie Laland with permission of Conrari Press, an imprint of Red Wheel/Weiser (1-800-423-7087).

LAWS THAT PROTECT ANIMALS

This unit was developed in conjunction with the New York State Bar Association, Special Committee on Animals and the Law.

Grades: 4 - 8

Unit Overview:

People have a responsibility to refrain from behavior that causes injury to other human beings or to animals. That responsibility is defined in laws and in the decisions of our courts and administrative agencies, such as health and state departments of agriculture. This unit will explore laws that are designed to protect animals as well as provide information about organizations that help to make and enforce laws.

Objective I:

Affective:

- Students will be able to explain the reasoning behind a variety of laws that exist to protect animals.

Academic:

- Students will read and comprehend laws.

Motivation: Encourage students to volunteer their own experiences about interacting with their companion animals? Do they walk their dogs on leashes in public places and why? Have their cats or dogs been spayed or neutered? If their companion animals have had puppies, kittens, how do they find suitable homes for these animals?

Procedure:

Mini-lesson:

- 1) Discuss one or more of the following laws with students. See Appendix A for copies of the laws. Visit the ASPCA Law Manual, New York State Laws at <http://www.asPCA.org/site/PageServer?pagename=nyslaw> for more information on other New York State laws pertaining to animals.
 - Law 353: The Anti-Cruelty Law
 - Law 353-a: The Aggravated Anti-Cruelty Law
 - Law 355: The Anti-Abandonment Law

- Law 351: The Anti-Dog-Fighting Law

- 1) What does each law require?
- 2) What are the penalties for breaking the law?
- 3) Why do you think that each law is important?
- 4) Watch for information on Law 353-b. This law is important because it deals with providing dogs that are kept outside with adequate shelter to protect them from rain, snow, cold and heat.

Note: The readability level of these laws is high. Teachers may have to translate these laws into simpler language for students in grades 4 – 8.

Small Group Activity:

- 1) Divide the students into groups and have each group search periodicals -- suitable to the group's reading level -- for news stories and features about (a) cruelty to companion animals, (b) abandonment of companion animals and (c) dog-fighting.
- 2) Have each group of students report back to the class about what they learned. What law was broken? What penalties were imposed upon people for breaking the law?



Objective II:

Affective:

- Students will be able to give examples about the role of law enforcement agencies and legislators in preventing cruelty to animals.

Academic:

- Students will listen and read to acquire information.
- Students will analyze and evaluate information and issues using evaluative criteria from a variety of perspectives.

Motivation:

Invite a law enforcement officer to address the class by contacting your local humane society or police department. Ask her/him to discuss unlawful activities involving animals such as cruelty to animals, abandonment of animals and dog-fighting. Have her/him address efforts underway to stop the illegal activity. Ask the officer to explain how the students

can assist law enforcement officers merely by being observant in their own community. The students may also be encouraged to watch *Animal Precinct* as a means of learning more about the role of law enforcement agencies. If you are unable to get a law enforcement officer to visit the class, assign specific episodes of *Animal Precinct* and then discuss the program viewed with the class. What illegal activities did officers interfere with? What happened to the animal in each episode? Were any fines or other penalties imposed on the people?

Mini-lesson:

- 1) The teacher may want to spend some time discussing how a bill becomes a law as part of this unit. For background information, go to *American History Syllabus* at www.socialstudieshelp.com. Click onto "American History." Type in "Bill Becomes Law" in "Search this site" box and click onto "find." Click onto "How a bill becomes a law."
- 2) Select a recently introduced bill dealing with animal issues to discuss with your class. To find information on the Internet, log onto www.assembly.state.ny.us. Click onto "Bill Search and Legislative Information." Click onto "Search by Keyword." Type in "Animal." Click on "Search." This will get you to a list of bills (proposed legislation). A summary of each bill you select, the number of the bill, the senate equivalent and the name of the sponsor can be found at this site. A similar listing can be found at www.senate.state.ny.us. Try to choose a bill that appears important and logical. You may want to call your local or state humane society's education department for help in selecting a bill for class discussion.
- 3) Highlight the key points of the bill on a chart or overhead transparency. Introduce the chart and discuss the key points with the students. At several points have the students "turn and talk" to their partner discussing why they think the bill is useful or important or why not. Stress accountable talk. During turn and talk, the teacher circulates and participates in various discussions. Bring the class together to share key points of their discussions.

Small Group Activity:

- 1) As a class, have the students select an animal-related problem in their community that they think could be solved by legislation.
- 2) Have groups of students develop ideas for how this problem could be solved. Have each group draft a proposal to be submitted to community leaders, which would solve the problem to the benefit of the animals and people who live there. Have each group report back to the entire class with their ideas.

Summary:

- 1) As part of a computer lab, library project or homework, have groups of students identify local legislators or public officials who have introduced legislation pertaining to animal

matters. This can be done by visiting the web sites of the legislative bodies under study at www.assembly.state.ny.us and www.senate.state.ny.us. If their own representative has not introduced legislation of this nature, students can identify other legislators or public officials within New York State who have done so. What legislation has been introduced? Does the student think the legislation is important or not, and why?

- 2) Help students to learn about additional laws that exist to protect animals. Log onto www.assembly.state.ny.us. Click onto "Bill Search and Legislative Information." Click onto "New York State Laws," then on to "New York State Consolidated Laws," then "Agriculture & Markets," and "Article 26." There will be a listing of laws. Select one or two to discuss as a class. Why are they important?

Follow-up Activities:

- Using a topic -- if possible determined by the students themselves (otherwise one of two or more ideas suggested by the teacher) -- divide the class into groups advocating differing points of view. Have the students research their topic in the library and on the Internet. Have each group present their findings and recommendations to the class. Conduct a brief debate between the groups for different viewpoints for each topic discussed. Students may wish to address situations that occur within the school itself. For example:

a) Chick-Hatching (opt-in and out is now permitted: review Education Law provisions for Study and Care of Live Animals in Section 809-2).

- Should chick-hatching be required in elementary schools?
- Should chick-hatching be banned in elementary schools?
- Should teachers and students be allowed to opt-in or out of chick-hatching projects?



b) Frog-Dissection and dissection of other animals and animal-parts (opt-in and out is now permitted: review Education Law provisions for dissection of animals in Section 809-4).

- Should animal-dissection be required in elementary schools?
- Should animal-dissection be banned in elementary schools?
- Should teachers and students be allowed to opt in or out of animal-dissection projects at the



elementary school level?

- Is there any local or state legislation regarding the topic chosen by the students? Your local humane society should be able to tell you or you can contact the ASPCA Education or Legal Department.
- Have each of several groups of students select an organization that deals with animal welfare, including non-profit organizations, government agencies, and profit-making enterprises. Ask the students to interview spokespersons about how they achieve their objectives and help the communities that they serve such as the local animal-shelter.
- Visit www.assembly.state.ny.us/kids to reach the Kid's Pages of the New York Assembly website. Learn what the assembly does. Who is the current speaker? Who is your assemblyperson?
- Learn about the local and federal laws designed to help protect animals. Visit the ASPCA Law Manual at <http://www.aspca.org/site/PageServer?pagename=disclaimerr>. You will have to register and select a password to use this site. Try to get a local congressperson (your federal representative) or councilperson (your city representative) to address the class concerning the different laws and bills designed to help protect animals.

Resource Organizations:

- Animal Legal Defense Fund 127 Fourth Street, Petaluma, CA 94952, (707) 769-7771
www.aldf.org
- American Society for the Prevention of Cruelty to Animals, 424 East 92nd Street, New York, NY 10128-6804. (212) 876-7700, www.aspca.org
- Association of the Bar of the City of New York, Committee on Legal Issues Pertaining to Animals, 42 West 44th Street, New York, NY 10036, 212-382-6600, www.abcny.org
- Cornell Cooperative Extension, Cornell University, 365 Roberts Hall, Ithaca, NY 14853-5905
www.cce.cornell.edu (For your local county office)
- New York Farm Bureau, Inc., Route 9W, P.O. Box 992, Glenmont, NY 12077-0992
(518) 436-8495, www.nyfb.org
- Farm Sanctuary, P.O. Box 150, Watkins Glen, NY 14891, (607) 583-2225
info@farmsanctuary
- Humane Society of New York, 306 East 59th Street, New York, NY 10022, (212) 752-4842
www.humanesociety.org
- Humane Society of the United States, 2100 L Street, NW, Washington, DC 20037
(202) 452-1100, www.hsus.org
- New York State Bar Association, Special Committee on Animals and the Law, One Elk Street, Albany, NY 12207, (518) 487-5536, www.nysba.org
- New York State Veterinary Medical Society, 9 Highland Avenue, Albany, NY 12205-5417
(518) 437-0787, www.nysvms.org
- Wildlife Conservation Society (Bronx Zoo, etc.), Teacher Workshops, Ann Robinson,

Bronx Zoo Education Department, 2300 Southern Boulevard, Bronx, NY 10460, www.wcs.org
New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation:

Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 4 – Science:

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

7. Human decisions and activities have had a profound impact on the physical and living environment.

MST Standard 7 – Interdisciplinary Problem Solving:

Students will apply the knowledge and thinking of mathematics, science, and technology to address real-life problems and make informed decisions.

Connections

1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of

science/technology/society, consumer decision-making, design, and inquiry into phenomena.

Attachment A

Example of Laws Pertaining to Animals

NEW YORK AGRICULTURE AND MARKETS LAWS

ARTICLE 26. ANIMALS

§ 353. Overdriving, torturing and injuring animals; failure to provide proper sustenance

A person who overdrives, overloads, tortures or cruelly beats or unjustifiably injures, maims, mutilates or kills any animal, whether wild or tame, and whether belonging to himself or to another, or deprives any animal of necessary sustenance, food or drink, or neglects or refuses to furnish it such sustenance or drink, or causes, procures or permits any animal to be overdriven, overloaded, tortured, cruelly beaten, or unjustifiably injured, maimed, mutilated or killed, or to be deprived of necessary food or drink, or who willfully sets on foot, instigates, engages in, or in any way furthers any act of cruelty to any animal, or any act tending to produce such cruelty, is guilty of a misdemeanor, punishable by imprisonment for not more than one year, or by a fine of not more than one thousand dollars, or by both.

Nothing herein contained shall be construed to prohibit or interfere with any properly conducted scientific tests, experiments or investigations, involving the use of living animals, performed or conducted in laboratories or institutions, which are approved for these purposes by the state commissioner of health. The state commissioner of health shall prescribe the rules under which such approvals shall be granted, including therein standards regarding the care and treatment of any such animals. Such rules shall be published and copies thereof conspicuously posted in each such laboratory or institution. The state commissioner of health or his duly authorized representative shall have the power to inspect such laboratories or institutions to insure compliance with such rules and standards. Each such approval may be revoked at any time for failure to comply with such rules and in any case the approval shall be limited to a period not exceeding one year.

(Effective 1967, amended 1985.)

§ 353-a. Aggravated Cruelty to Animals (2000)

1. A person is guilty of aggravated cruelty to animals when, with no justifiable purpose, he or she intentionally kills or intentionally causes serious physical injury to a companion animal with aggravated cruelty. For purposes of this section, "aggravated cruelty" shall mean conduct which: (i) is intended to cause extreme physical pain; or (ii) is done or carried out in an especially depraved or sadistic manner.

2. Nothing contained in this section shall be construed to prohibit or interfere in any way with anyone lawfully engaged in hunting, trapping, or fishing, as provided in article eleven of the environmental conservation law, the dispatch of rabid or diseased animals, as provided in article twenty-one of the public health law, or the dispatch of animals posing a threat to human safety or

other animals, where such action is otherwise legally authorized, or any properly conducted scientific tests, experiments, or investigations involving the use of living animals, performed or conducted in laboratories or institutions approved for such purposes by the commissioner of health pursuant to section three hundred fifty-three of this article.

3. Aggravated cruelty to animals is a felony. A defendant convicted of this offense shall be sentenced pursuant to paragraph (b) of subdivision one of section 55.10 of the penal law provided, however, that any term of imprisonment imposed for violation of this section shall be a definite sentence, which may not exceed two years.

(Effective 1999.)

§ 355. Abandonment of Animals (2000)

A person being the owner or possessor, or having charge or custody of an animal, who abandons such animal, or leaves it to die in a street, road or public place, or who allows such animal, if it become disabled, to lie in a public street, road or public place more than three hours after he receives notice that it is left disabled, is guilty of a misdemeanor, punishable by imprisonment for not more than one year, or by a fine of not more than one thousand dollars, or by both.

§ 351. Prohibition of Animal Fighting (2000)

1. For purposes of this section, the term "animal fighting" shall mean any fight between cocks or other birds, or between dogs, bulls, bears or any other animals, or between any such animal and a person or persons, except in exhibitions of a kind commonly featured at rodeos.

2. Any person who engages in any of the following conduct is guilty of a felony and is punishable by imprisonment for a period not to exceed four years, or by a fine not to exceed twenty-five thousand dollars, or by both such fine and imprisonment:

(a) For amusement or gain, causes any animal to engage in animal fighting; or

(b) Trains any animal under circumstances evincing an intent that such animal engage in animal fighting for amusement or gain; or

(c) Permits any act described in paragraph (a) or (b) of this subdivision to occur on premises under his control; or

(d) Owns, possesses or keeps any animal trained to engage in animal fighting on premises where an exhibition of animal fighting is being conducted under circumstances evincing an intent that such animal engage in animal fighting.

3. (a) Any person who engages in conduct specified in paragraph (b) of this subdivision is guilty of a misdemeanor and is punishable by imprisonment for a period not to exceed one year, or by a fine not to exceed fifteen thousand dollars, or by both such fine and imprisonment.

(b) The owning, possessing or keeping of any animal under circumstances evincing an intent that such animal engage in animal fighting.

4. (a) Any person who engages in conduct specified in paragraph (b) hereof is guilty of a misdemeanor and is punishable by imprisonment for a period not to exceed one year, or by a fine not to exceed one thousand dollars, or by both such fine and imprisonment.

(b) The knowing presence as a spectator having paid an admission fee or having made a wager at any place where an exhibition of animal fighting is being conducted.
(Effective 1984.)

WILDLIFE ISSUES

The lessons in this unit are designed to help students understand the relationship between humans and animals in the natural environment. Students of all ages can discuss humane approaches to living with urban wildlife as well as human responsibility towards endangered animals. The goal will be for students to come to recognize the need for empathy and responsible action in maintaining a healthy environment for people and animals.

Younger students can learn the names of various species of wildlife, their relative size, their family structure and techniques for observing them in the wild. Topics to be studied by grades pre-kindergarten to three students might be infused into:

- Language Arts – Learn vocabulary to identify animals and their habitats. Use the word habitat correctly and describe forest, water and other habitats. Differentiate between living and non-living things. Understand the difference between wild and domesticated animals.
- Social Studies – Identify wild animals that live in the school community. Recognize the natural habitats of various wild animals. Recognize that some animals, like humans, live in family groupings in the wild.
- Science – Match wild animals with the places in which they live. Observe animals in natural habitats. Demonstrate respect for animals and their homes by leaving them unharmed. Recognize that human action can affect animals.
- Math – recognize that extinct means zero. Know that animal populations are decreasing due to human interference.



Older students can examine human interaction with animals in the wild including hunting, trapping, habitat loss and wildlife trade. The lives of wild animals that are brought into captivity including the capture of exotic animals as pets, and the use of animals in circuses, and whether or not animals should be kept in zoos can be explored. Topics to be studied and discussed, by grades four to six students, in a unit on wildlife might include the following:

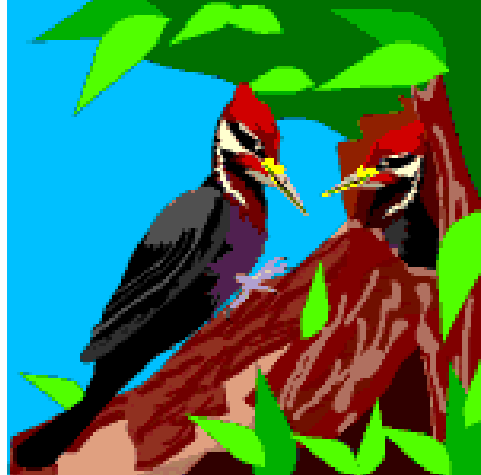
- Hunting – Is hunting today largely for food or for recreation? Which animals are generally hunted? What weapons other than guns are used to shoot animals? Is sports hunting -- the killing of wild animals as recreation – in sync or at odds with the values of a humane, just and caring society?
- Fur and Trapping – What methods used to raise and kill animals on fur farms? In the wild? Have synthetic fabrics -- known as faux furs eliminated the need to kill animals for their fur?
- Habitat Loss – How is wildlife habitat lost course due to urban development, oil and gas exploration and the conversion of land to agricultural uses? Which animals are routinely disturbed? How can people learn to live in areas where large wild animals such as bears once lived and may sometimes appear today?



- Wildlife Trade – How does the multi-billion dollar business threaten the survival of many species and results in the questionable treatment of billions of animals every year? How is wildlife used to produce products that people wear, eat and use in medical research?

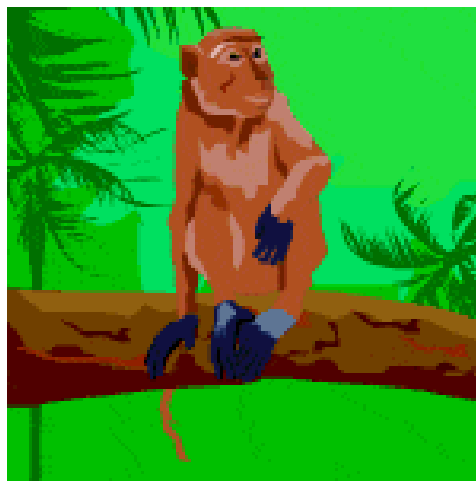
- Captive Exotics and Wild Animals as Pets – How are wild animals captured? How long do these animals generally live as pets compared to their life in the wild? What kind of injuries have these animals caused to humans? What diseases do they carry that are transmissible to humans?
- Circuses – How are animals confined during travel and on performance days? Are they allowed to move naturally or to socialize with other members of their species? What methods are used to make them perform tricks? What do we learn -- if anything -- by watching them perform?
- Protecting Threatened and Endangered Species – Which species are listed as endangered or threatened under the Endangered Species Act are protected in the U.S. by state and federal laws?

- Urban Wildlife – How do people act toward wildlife species in urban areas? Include such animals as deer, raccoons, woodchucks, squirrels, beavers, and birds in the discussion. What are humane solutions and inhumane solutions to conflicts with wildlife?
- Zoos – What do advocates and opponents think about zoos? Which zoos have “state-of-the-art” exhibits? Which animals are still kept in roadside zoos and menageries? Which zoos are accredited by the American Zoo and Aquarium Association (AZA)? Do any of the AZA-accredited zoos contain exhibits that do not simulate the animals’ natural habitats in size and design?



Lesson plans have been developed to guide educators in leading classroom programs on some of the aforementioned topics. Additional information can be found at:

- www.hsus.org
- www.asPCA.org
- www.cwu.edu/~cwuchci/
- <http://fund.org/home/>
- <http://school.discovery.com/lessonplans/programs/greatapes/resources.html>
- www.janegoodall.org
- www.nahee.org
- www.uft.org/member/today/committees/humane
- <http://birds.cornell.edu/ppw/>
- www.wildwatch.org



PIGEONS IN THE CITY

Grades: Pre-Kindergarten - 1

Objective I:

Affective:

- Students will be able to observe pigeons.
- Students will be able to make a list of pigeons' basic needs, to prove that pigeons are living animals with needs. The list developed must include shelter, food and water.

Academic:

- Students will develop observational skills.
- Students will conduct research using their observational skills.

Materials: Paper and pen for the teacher to record answers, bread crumbs in a bag, binoculars and camera optional. Plan this activity when the weather is warm enough for the students to be able to sit on the ground.



Procedure:

Mini-Lesson:

- 1) Discuss the fact that everyone is going to watch pigeons as a class. They must sit as quietly as possible and watch what the birds do. After a while, they will discuss what they see and the teacher will list their responses.
- 2) The children are then taken to a park, quiet street or lot where pigeons gather. Sit and observe pigeons. Use the bread to attract and keep the pigeons nearby. Take pictures to be used for a big book.
- 3) Key Questions: What keeps pigeons warm? What do most birds do with their wings? Where do they live? What do they eat? Where do they get their food? How do they get water? How do they keep clean? Who takes care of them when they are sick? Do pigeons make sounds? How do people treat them? What do you parents/friends say about them? If people do not like pigeons, why not?

Objective II:

Affective:

- Students will be able to collect fallen pigeon feathers, examine them and classify them by size, shape or color

Academic:

- Students will collect and examine materials.
- Students will classify materials by size, shape and color.

Background Information for Teachers:

Pigeons have feathers made from a protein called keratin and they are strong and flexible. As the feathers grow, they split apart. This cuts off their blood supply, so that fully-grown feathers are dead. They are lost by molting or as a result of accidents. Feathers may become dirty and lice-infested, so pigeons must clean them, by combing their beaks through the feathers. They also take dust baths to absorb or scrape away bits of dirt.

The feathers must hook together to produce a smooth surface for flight. Pigeons preen their feathers back to the correct position when they become separated. There are four main types of feathers: down, body, tail and wing.

- **Wing:** These feathers are light yet strong. By changing their position the pigeons use these feathers to steer during flight. Wing feathers are not all the same. Inner wing feathers are usually shorter.
- **Body:** These feathers vary greatly in size and shape. Some insulate the body while others are for display and camouflage.

- Down: These feathers are next to the bird's skin. The edges spread out to form a soft, fluffy mass. Down is an excellent insulating material.
- Tail: These feathers have three functions: to steer the birds while in flight, to help them balance when not flying and to impress a male during courtship.

Materials: Pigeon feathers, oak tag, stapler or glue, marker and magnifying glass.

Small Group Activity:

- 1) Have the students collect pigeon feathers. Have students wash their hands thoroughly after they have done this. Teacher should wash the pigeon feathers.
- 2) Using a magnifying glass, the students will examine and describe different feathers.
- 3) Separate the feathers into three equal piles. Divide the students into three groups and give each group a pile of feathers and a piece of oak tag. Tell each group which category (size, shape or color) they will glue on the oak tag and allow the students to make their displays and label them.
- 4) Check each display to see that students have categorized the feathers properly.

Objective III:

Affective:

- Students will be able to make pigeon hats and a nest.
- Students will be able to dramatize the life of a pigeon

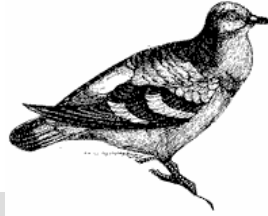
Academic:

- Students will present information they have collected clearly, concisely, and comprehensibly.

Materials: Paper plates, gray paint and brushes, scissors, paper scraps, glue or tape, stapler and yarn. For the nest: many foot long twigs, yarn and a tablecloth.

Mini-Lesson:

- 1) Cut plates in half and have the students paint them with the gray paint. Use paper scraps to make facial features. Make a head-band from paper and attach a six inch piece to each side with the stapler. Attach yarn to the headband ends. Make a pair of wings to attach on each side. Make sure to staple from the inside out so that hair won't get caught in staples.
- 2) Place the tablecloth on the floor and make a child-sized nest, using the twigs and yarn. The students may take turns sitting in the nest and then act like the pigeons they have observed.
- 3) Groups of students should alternately: strut, peck at food, fly, puff their pretend feathers or flap their wings.



Objective IV:

Affective:

- Students will be able to feed the pigeons using a variety of foods.
- Students will be able to chart the results.
- Students will be able to determine what pigeons like and dislike to eat.

Academic:

- Students will collect data.
- Students will discover relationships and make generalizations.

Materials: Kernels of corn, lettuce, breadcrumbs, birdseed, apples, peanuts, oak tag, markers and camera (optional).

Mini-Lesson:

- 1) Put some of each food in separate bags. Take the students to a pigeon site, feed one food at a time and observe results. Clean up and dispose of food not eaten (likely to be lettuce and apple).
- 2) When back at school, chart the results. Discuss findings.

Objective V:

Affective:

- Students will be able to observe pigeons.
- Students will be able to notice and record the attitudes of people towards pigeons.

Academic:

- Students will collect data.
- Students will discover interpret information and make generalizations.

Materials: Paper and a pen are needed. Camera optional.

Small Group Activity:

- 1) Take the class to your pigeon observation site. Keep a group of students with you and have another group observe with the paraprofessional and/or class parent.
- 2) Sit several feet from the pigeons and record what other people do when they walk by the pigeons.

- 3) Key Questions: How many people stopped to feed or talk to the pigeons? Did anyone notice them or did most people walk right by? Did anyone chase them? Did anyone do something negative to them? Was anyone scared of them? Did you see any people feeding them? As a pigeon, what would you do if children chased you, if no food was available or if someone threw a rock at you?

Follow-up Activity:

Language Arts and Art

Students will create a big book about pigeons. They will title the book and decide what information is to be included. The pictures may be drawn by the students or cut from magazines. They may use the photos taken during previous activities. The book should be at least ten-pages. Because of the humane awareness used in each activity, the big book must reflect this attitude along with the general information the children have acquired.

Math

Count the number of pigeons that you observe during each activity.
Count the different color patterns you see on pigeons.
Count the pigeons in a group who have a particular color pattern.

Resources and Literature

- Burnie, David, *Eyewitness Books: BIRD*, Alfred A. Knopf, NY 1988
- Cohen, Caron Lee, *Pigeon Pigeon*, Dutton Books, 1992
- Garber, Steven D., *The Urban Naturalist*, John Wiley & Sons, Inc., 1987
- Herberman, Ethen, *The City Kid's Field Guide*, Simon & Schuster, 1989
- Hinshaw, Dorothy, *Pigeons*, Clarion Books, 1997
- Mainwaring, Jane, My Feather, Doubleday, 1989
- Naether, Carl, Pigeons, T.F.H. Publications, 1984
- Nature Scope - Birds, Birds, Birds, National Wildlife Federation, 1988
- Sales, G. and J.M. Parraon, My First Visit to the Aviary, Barrons, 1990.

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and

generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

Animals In Our Urban Environment

Grades: Pre-K - 1

Objectives:

Affective:

Students will be able to identify animals that share our community.

Academic:

- Students will listen and read to acquire information.
- Students will acquire and transmit information.
- Students will present information clearly, concisely, and comprehensibly.

Materials: Pictures of animals in various habitats.

Motivation: Ask students: “Where do squirrels live?”

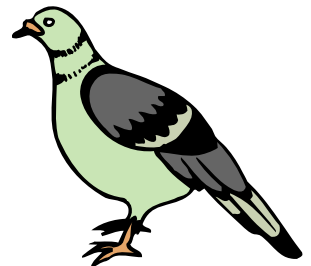
Mini-Lessons:

- 1) Ask students to name animals they see in their neighborhood.
- 2) Make a list of animals seen by the students. Use pictures you have gathered for this activity.
- 3) Make a chart indicating what each animal eats and where it lives. For younger children, use only the picture of the animal for the chart and discuss what the animal eats and where it lives without recording the information.
- 4) Ask students: “Where do birds live in the city?” (Some birds build nests under air-conditioning or storefront areas.)

NAME OF ANIMAL	WHAT ANIMAL EATS	WHERE ANIMAL LIVES

Small Group Activity:

- 1) Take students for a walk around the schoolyard and immediate neighborhood. Have half of the students walk with you and the others with a paraprofessional, teacher’s aide or parent. Have both groups within your line of visibility.
- 2) Look for animals on the sidewalk, trees, buildings, sky, etc.
- 3) When you are all back in the classroom, discuss animals observed and



location at which they were seen. Note: If stray companion animals (dogs, cats) are observed, discuss that when companion animals are left homeless, they cannot take care of the selves. Reinforce responsible behavior toward companion animals.

- 4) Divide the class into groups. Have the children draw what they saw. Have the children show their drawing to the group they are in. What animal have they drawn? Where does it live?

Summary:

- Have children cut pictures of urban animals out of magazines.
- Prepare a bulletin board with the drawings children have done of animals in their neighborhood. Include the pictures they have cut out of magazines as well.

Follow-up Activity:

- Collect cardboard cylinders, one for each child. Use the tubes as “telescopes” or “spyglasses” to focus attention on things and animals - both in the classroom and outdoors. Children spy interesting objects and describe what they see. Entire class may focus on selected scenes and compare individual descriptions. By discriminating colors, shapes, textures, animal activities, students will build their vocabulary.
- Read library books to the class dealing with urban animals such as birds and squirrels.

Literature Connections



★ *Feathers: Poetry About Birds*
by Eileen Spinelli

★ *The City Kid's Field Guide* by
Ethen Heberman

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding -

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

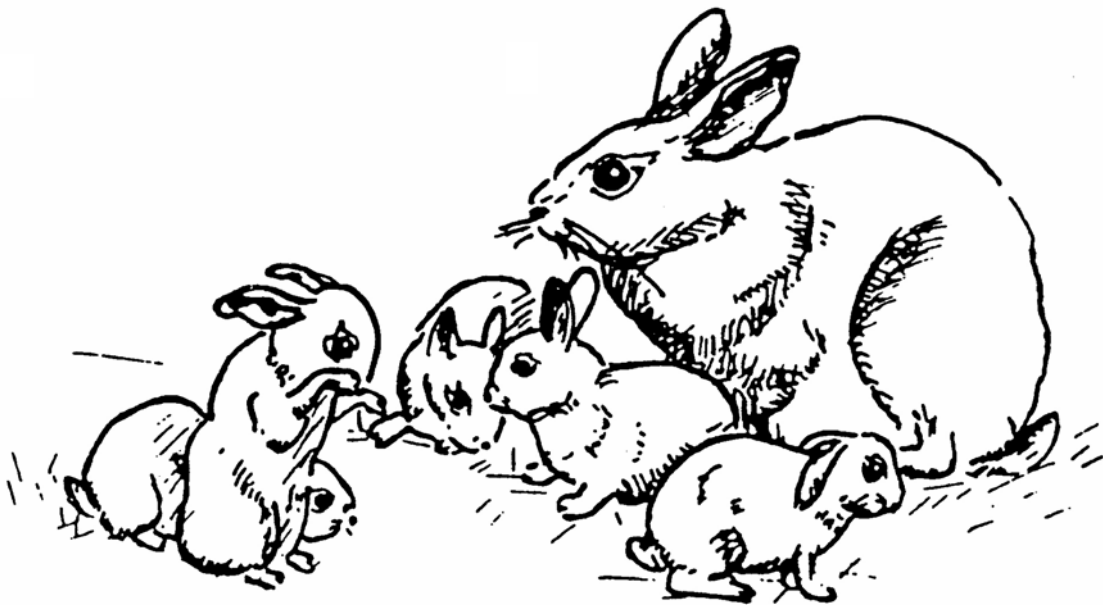
1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

Name _____

Date _____

What Do Animals Eat?

Complete the picture below by drawing in what the animals eat.
Add other things to the picture, too!



Name _____

Date _____

What Do Animals Eat?

Complete the picture below by drawing in what the animal eats.
Add other things to the picture, too!



Wild Animals Do Not Make Good Pets

Grades: 1 - 2

Objectives:

Affective:

- Students will be able to identify animals that do not make pets (companion animal).

Academic:

- Students will develop observational skills.
- Students will listen and read to acquire information and understanding.

Materials: pictures of companion animals and wild animals

Motivation: Ask students: “Would a tiger make a good pet?”



Procedure:

Mini-Lesson:

- 1) Discuss what a tiger needs to live.
- 2) Show pictures of companion animals and wild animals. Have students discuss specific differences in the needs of wild animals and companion animals. Also mention farmed animals including cows, ducks, chicks, etc.
- 3) Attention should be drawn to food, shelter, space and environmental medium (water, land, sand, mud, etc.)
- 4) Read and discuss “Samuel” poem.
- 5) Have students complete “I’m So Sad!” sheet. Where might the frog be happier?

Small-Group Activity:

- 1) Have groups of students complete the handout “Which Animals Do Not Make Good Household Companions?” Circulate in the room working with individual groups.
- 2) Have representatives from each group explain why the animals shown – in order – could or could not be a household companion animals.

Summary:

- 1) Wild animals do not make good pets.
- 2) Wild animals should be allowed to live in the wild.
- 3) Horses can be companion animals but do not live in your house.



Follow-Up Activities:

- Take a neighborhood walk to identify wild versus companion animals.
- Draw pictures or cut out pictures of wild versus companion animals and place them in the correct columns on a class chart.

Resources for Teachers:

- Acorn Naturalists
www.acornnaturalists.com/store/category.asp?Category_ID=523
- Dawn Publications www.dawnpub.com
- KIND News www.kindnews.org
- ASPCA AnimaLessons
www.asPCA.org/site/PageServer?pagename=al_home
- ASPCA Lesson Plans
www.asPCA.org/site/PageServer?pagename=al_lessonplans

New York State Standards Addressed:

ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

ELA Standard 4 - Language for Social Interaction – Students will read, write, listen, and speak for social interaction.

Listening and Speaking

1. Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

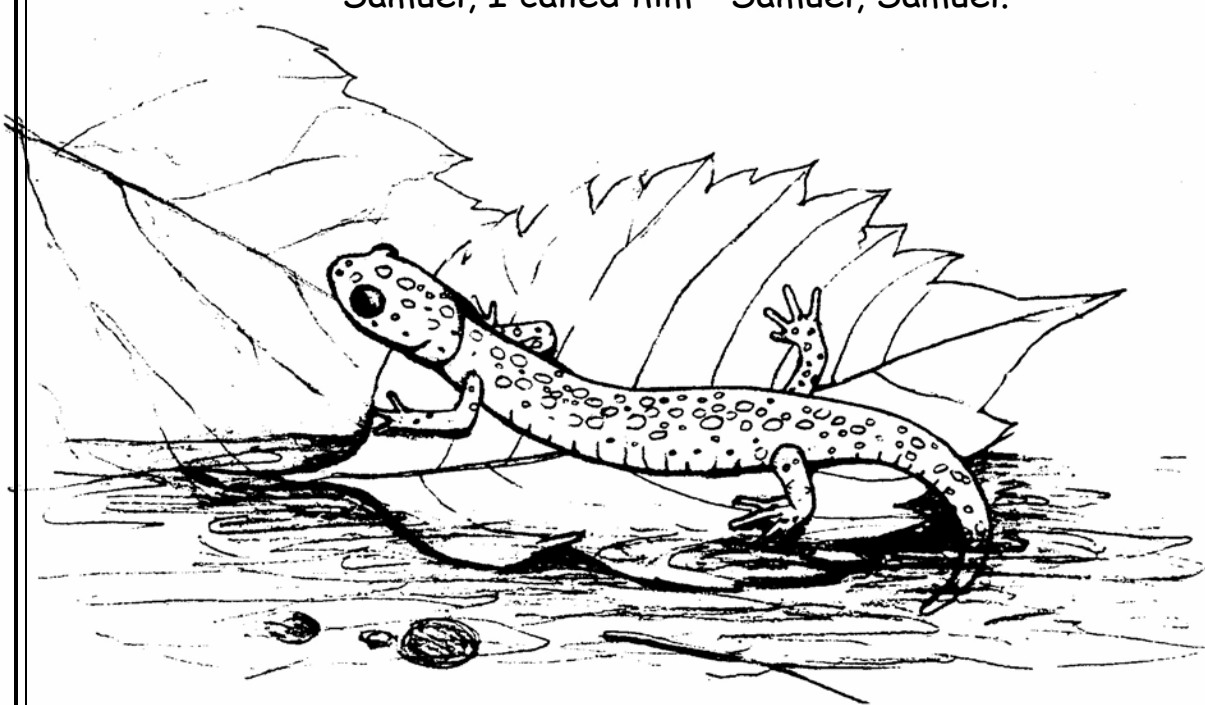
MST Standard 4 – Science – Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

1. Living things are both similar to and different from each other and nonliving things.

Samuel

I found this salamander
near the pond in the woods.
Samuel, I called him. Samuel, Samuel,
Right away I loved him.
He loved me too, I think.
Samuel, I called him. Samuel, Samuel,
I took him home in a coffee can,
and at night
he slept in my bed.
In the morning
I took him to school.
He died very quietly during spelling.
Sometimes I think
I should have left him
near the pond in the woods.
Samuel, I called him - Samuel, Samuel.





Name _____

Date _____

I'm So Sad!

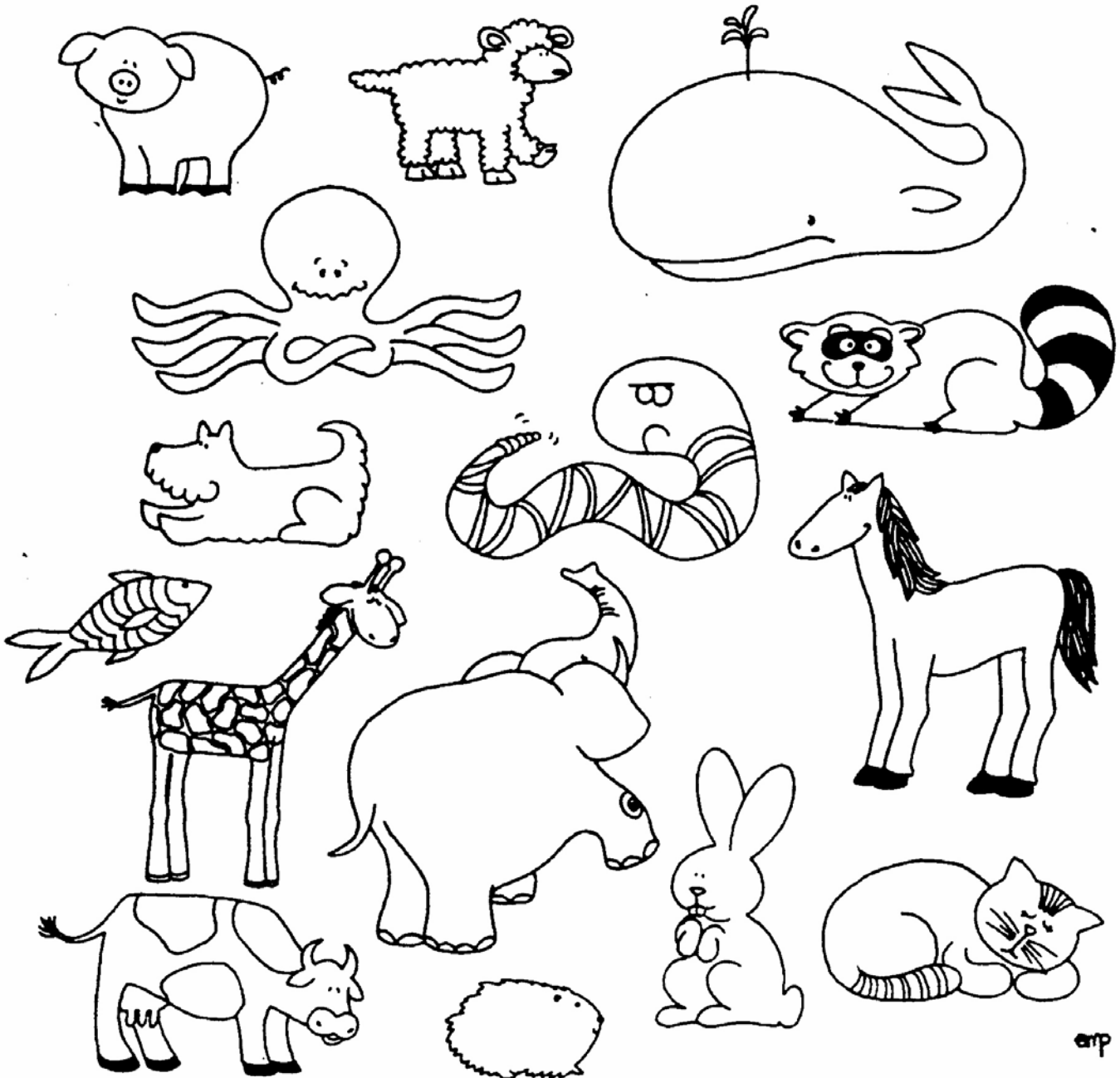
Please draw me a new home where I will be happy. Tell why you think I would be happier in my new home.

Name _____

Date _____

Which Animals Do Not Make Good Household Companions?

Wild animals **NEVER** make good pets! Use a crayon to circle the animals that would **NEVER** make good pets.



emp

Insect Rescue

Promoting Humane Attitudes Towards Animals Through Children's Literature

Grades: K - 2

Objectives:

Affective:

- Students will develop empathy while putting themselves in someone else's circumstances.

Academic:

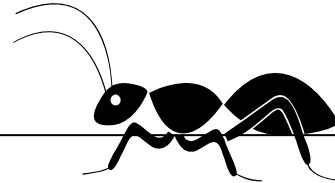
- Students will comprehend the story and its messages about peer pressure, empathy, and compassion for all living beings.
- Students will demonstrate an understanding of a Venn diagram to compare and contrast ants and humans.
- Students will follow directions to assemble insect rescue kits.

Materials:

Hey, Little Ant, chart paper, Venn diagram cards, materials for insect rescue kit (clear plastic cups, index cards, and zip lock plastic bags, white label stickers, colorful insect stickers), toy insect

Motivation:

Read aloud: *Hey, Little Ant*



Hey, Little Ant by Phillip and Hanna Hoose

Just as a boy is about to squish a little ant, the ant talks back! This book is a wonderful dialogue between the boy and the ant. The ending is open-ended, providing a forum for discussion for children and adults alike.

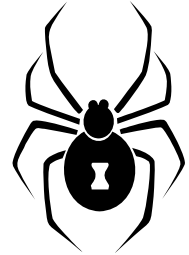
Procedure:

- 1) Ask students: "If you were the boy what would you do?"
- 2) Have students predict how the story will end.
- 3) Ask students if they learned anything new about ants and write responses on chart paper.
- 4) Ask additional questions to elicit empathic responses. Some questions may include:
 - Did your feelings about ants change after listening to the story? Why?
 - Would you rescue ants? Why?
 - Should you respect ants? Why?
- 5) Tell students that since we learned about ants from the book, we are going to compare how the ant and boy were alike and different.
- 6) Draw a Venn diagram on chart paper with "ant" on one side and "boy" on the other side. Then put "ant & boy" in the middle where the Venn diagram intersects.

- 7) Taking turns, have students pick a Venn diagram card and determine if it applies to the ant or the boy or both. Then have the student tape it in the appropriate place.
- 8) Have students brainstorm additional items for the Venn diagram.

Summary:


- 1) Demonstrate how to rescue insects using the insect rescue kit and the toy insect (see instructions for “Insect Rescue Service”).
- 2) Have students create their own “rescue kit” in class to bring home. Supply students with a clear plastic cup, an index card, and a zip lock plastic bag to store it in. If you have a label sticker, you can have the students Write “Bug Rescue Kit” or similar title and decorate it. To personalize their kit, students can decorate their cups with insect stickers or decorate the index card. Have students write instructions in their own words for saving an insect on an index card to include in the kit.



Follow-Up Activities:

- Have students illustrate their endings for the story.
- When students are rescuing an insect (or other invertebrate) have them take a moment to observe and draw a quick sketch of the creature. After they relocate the insect they can use books and/or the Internet to identify the insect.
- Have students create Venn Diagrams to compare and contrast two or more of the rescued creatures.
- Keep monthly records of the different types of invertebrates rescued. Tally and graph the data to see which invertebrates are found most often in the classroom. (This is a great opportunity to integrate technology! Primary grades can graph the data using *The Graph Club* or similar software.) Students can then interpret the data in the graphs or write questions for other students to answer based on the graph.
- Read aloud a book about insects or empathy.

Literature Connections



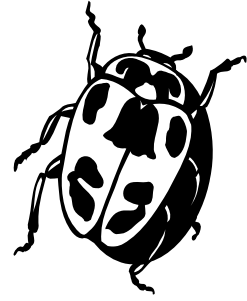
- ★ *The Lady and the Spider* by Faith McNulty
- ★ *Insects Are My Life* by Megan McDonald
- ★ *The Ant Bully* by John Nickle
- ★ *On Beyond Bugs* by Dr. Seuss
- ★ *Night Letters* by Normand Chartier
- ★ *My Father's Hands* by Joanne Ryder

New York State Standards Addressed:

ELA Standard 3 - *Language for Critical Analysis and Evaluation* – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.



ELA Standard 4 - *Language for Social Interaction* – Students will read, write, listen, and speak for social interaction.

Listening and Speaking

Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

MST Standard 4 – *Science* – Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

Living things are both similar to and different from each other and nonliving things.



family



home



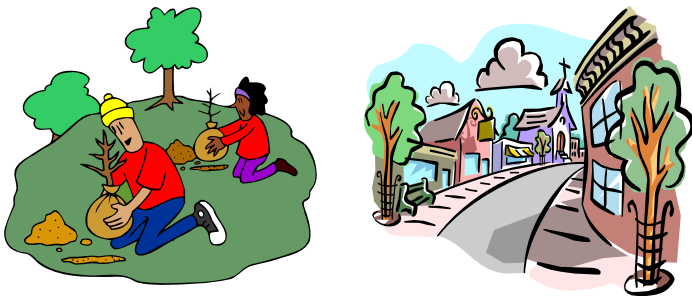
food



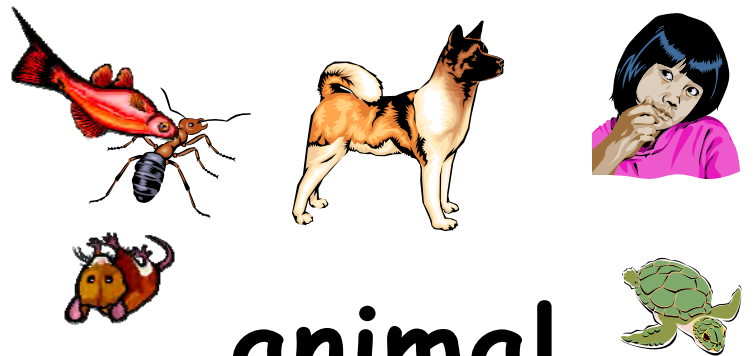
work

big

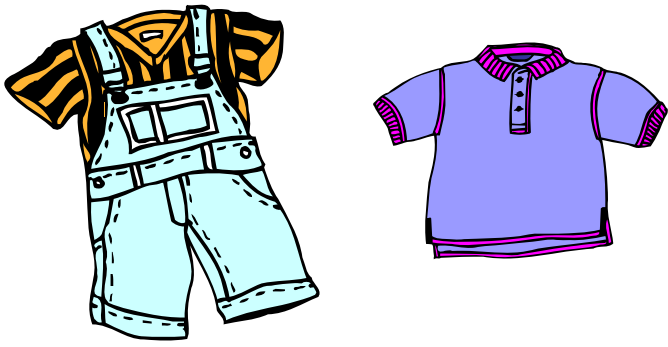
small



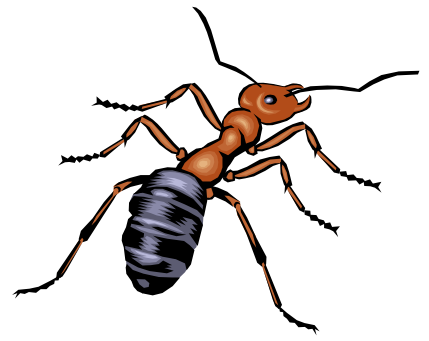
community



animal



clothes



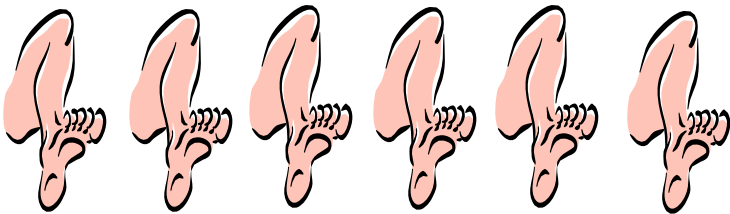
insect



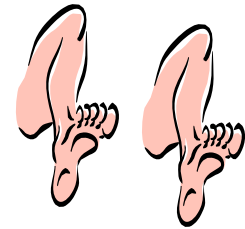
human



feelings



6 legs



2 legs

MONKEYS AND APES

Grades: 2 - 4

Objectives:

Affective:

- Students will be able to identify monkeys and apes and state their similarities and differences to humans.
- Students will be able to identify the family and social structures, behavioral characteristics and physical needs of these animals.
- Students will be able to discuss the ethical issues raised by human use of monkeys and apes.

Academic:

- Students will listen and read to acquire information and understanding.
- Students will analyze and evaluate experiences, ideas, information, and issues using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

Materials: Pictures or library books depicting monkeys and apes in the wild and in captivity. (See books for children listing.)

Background Information for Teachers:

The monkeys that live in Central and South America are called New World monkeys. Their nostrils are very far apart. Many of these monkeys have long tails. New World monkeys are small and weigh about 15 pounds. They live in trees. A spider monkey is an example of a New World monkey.

Monkeys who live in Africa and Asia are called Old World Monkeys. These monkeys have nostrils that are very close together. Some have tails and some do not. Baboons are an example of Old World monkeys. They are bigger and stronger than New World monkeys.

Apes do not have tails. Chimpanzees, orangutans and gorillas are called the great apes. They are larger than monkeys. A male gorilla might weigh as much as 450 pounds. A gibbon is called a lesser ape and weighs about 30 pounds.

Monkeys, apes and humans all belong to what humans have designated as the highest order of mammals named primates. There are over 180 species of mammals that are considered primates. Primates have forward-looking eyes and strong, gripping fingers. Compared to their body size, they have relatively large brains and are considered highly intelligent.

It may be especially interesting to watch and study monkeys and apes since they are like humans in many ways. We can often find a variety of species in our local zoos. Older students might discuss whether the zoo is an optimum environment for these animals and debate the pros and cons of zoo life. Information found on the websites of animal industries versus that found on the websites of humane organizations will help students understand the vastly different opinions concerning the use of monkeys and apes in circuses, medical research and as "bushmeat." This unit is designed to help students learn more about these animals who, like humans, are members of the primate family.

Motivation: Ask your students to name the monkeys and apes they know. Have they seen these monkeys and apes in books, on television or in the zoo?

Procedure:

Mini-Lesson:

- 1) Read or have the students read the book *Monkeys and Apes* (or another library book about monkeys and apes) with the class.
- 2) Develop one or more experience charts with the class summarizing the information in this book. Include information about the physical characteristics of apes and monkeys, what they eat, where they live, their family or social groupings and how they communicate.

Small-Group Activity:

- 1) Have the students borrow library books about monkeys and apes from the school or public library to read to themselves and to the class. Have them write book reports and make drawings of monkeys and apes to share with the class.
- 2) Have students classify information about monkeys and apes using library books. Which have nostrils far apart? Which have nostrils close together? Which are smaller in body size? Which are larger? Which have longer tails? Which have no tails? Which have opposable thumbs?

Summary:

- 1) Develop a bulletin board to display these reports.
- 2) Compare and contrast monkeys, apes and humans. Use the "Venn Diagram" and the "Semantic Feature Analysis" charts on the following pages. You may also want to construct charts which are composed of pictures of Old World monkeys, New World monkeys and apes.

Follow-up Activities:

- Read books with students about people who have worked to help apes and monkeys. Include *My Life With The Chimpanzees* by Jane Goodall and *Among the Orangutans- The Birute Galdikas Story* as well as books about Dian Fossey. Discuss the photographs in these books with the students and read selected passages or paraphrase the text in words younger students can understand. Be sure to show them photographs of Louis Leaky. He is the man for whom

Jane Goodall, Birute Galdikas and Dian Fossey worked when they began studying apes. Discuss the fact that these individuals thought it was important to respect and protect apes. Older students can read additional books about people and organizations that have worked and continue to work to protect monkeys and apes.

- Have older students research the laws which have been passed to ban the hunting of endangered monkeys and apes, and the development of national parks to preserve what is left of their habitat.
- * Students can also write to organizations working to help improve the lives of monkeys and apes through legislation and through retirement homes for animals who have been used in research.



gorilla

Ideas for Science Fair Projects:

- Develop a big-book or class book about monkeys and apes. Describe the New World and Old World monkeys and the apes. Include drawings or photographs.
- Develop a report about one species of non-human primates. Describe the physical characteristics of this species as well as ways in which members of this species communicate, defend themselves, find food and live in social groups in the wild.
- Develop a report about one species of non-human primates. Describe their life in the wild compared to their life in captivity. Discuss the pros and cons of human use of these animals.

Resource Organizations:

- Animalearn, 801 Old York Road, Suite # 204, Jenkintown, PA. 19046-1685, (215) 887-0816
- Earthwatch, 680 Mount Auburn Street, PO Box 403N, Watertown, MA. 617) 926-8200
- Friends of Washoe, Chimpanzee and Human Communication Institute, Central Washington University, 400 East 8th Avenue, Ellensburg, WA. 98926-7573, (509) 963-2244
- Jane Goodall Institute, PO Box 599, Ridgefield, CT. 06877, (203) 431-2099
- Gorilla Foundation, PO Box 620-530, Woodside, CA. 94062
- International Primate Protection League, PO Box 766, Summerville, SC 29484, (803) 871-2280
- L. S. B. Leakey Foundation, 77 Jack London Square, Suite M, Oakland, CA

94607- 3750, (510) 834-3636

- National Geographic Society, 17th and M Street, N.W., Washington, DC, 20036, (202) 857-7000
- New England Anti-Vivisection Society, 333 Washington Street, Suite 850, Boston, MA 02108-5100, (617) 523—6020
- Orangutan Fountain International, 822 South Wellesley Avenue, Los Angeles, CA, 90049, (310) 207-1655
- Rainforest Action Network, 450 Sansome, Suite 700, San Francisco, CA. 94111.

Literature for Teachers:

- Birnbaum, Bette, *Jane Goodall and the Wild Chimpanzees*, Steck-Vaugh, 1992
- Galdikas, Birute, *Orangutan Odyssey*, Harry N. Abrams Publishing, 1999
- Gallardo, Evelyn, *Among the Orangutans - The Birute Galdikas Story*, Byron Preiss Visual Publications, 1993
- Goodall, Jane, *The Chimpanzee Family Book*, Picture Book Studio, 1989
- Lumley, Kathryn, *Monkeys and Apes*, Children Press, Grolier Publishers, 1982
- Milton, Joyce, *Gorillas, Gentle Giants of the Forest*, Random House, 1997
- Montgomery, Sy, *Walking With the Great Apes: Jane Goodall, Dian Fossey, Birute Galdikas*, Mariner Books, 1992
- Redmond, Ian, *Eyewitness Book - Gorilla*, Dorling Kindersley Limited, 1995

Books for Students:

- Elwood, Ann, *Chimpanzees (Zoobooks Series)*, Zoobook Publishing/Wildlife Education, Ltd., 2001, ages 9-12
- Gallardo, Evelyn, *Among the Orangutans: The Birute Galdikas Story (The Great Naturalists)*, Chronicle Books, 1993, ages 9-12
- Goodall, Jane, *My Life with the Chimpanzees*, Aladdin Library, 1996, 160 ages 9 – 12
- Fossey, Dian, *Gorillas in the Mist*, Mariner Books, 2000, ages 9 – 12
- Green, Carl R., *The Gorilla (Endangered and Threatened Animals)*, Myreportlinks.Com Publishing, 2004, ages 9 - 12
- Lumley, Kathleen W., *Monkeys and Apes (New True Book)*, Children's Press, 1982, ages 4-8

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation:

Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 4 – Science:

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

7. Human decisions and activities have had a profound impact on the physical and living environment.

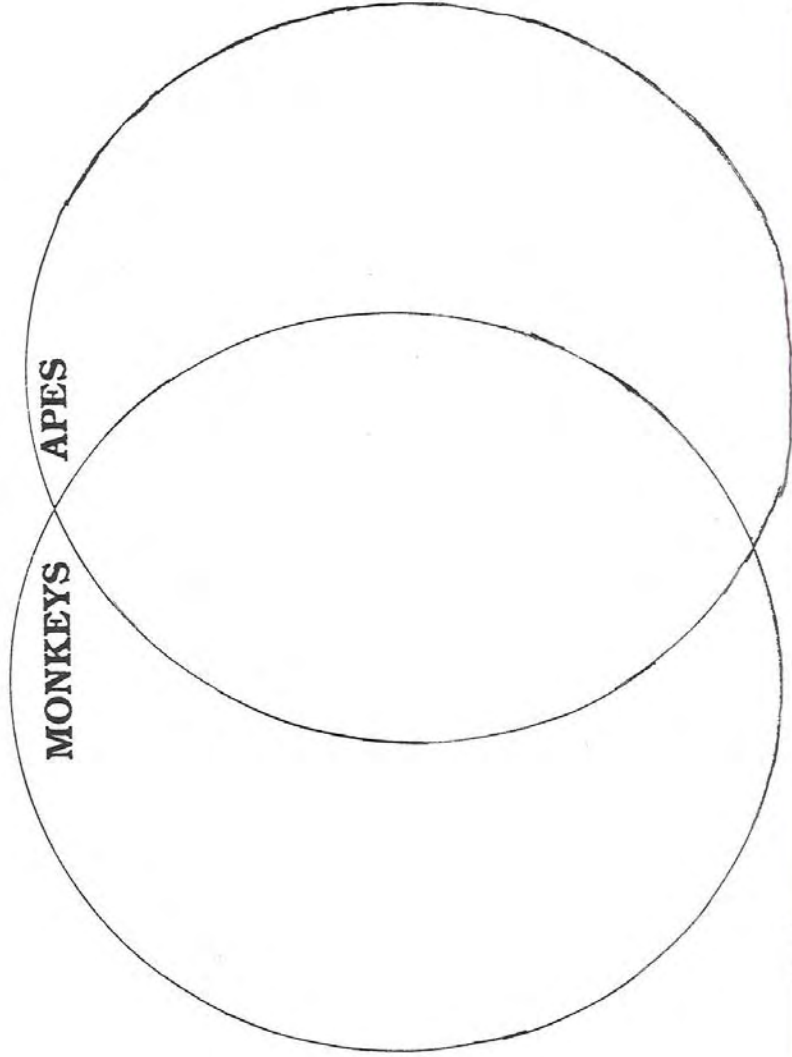


lemur

COMPARE AND CONTRAST

Two ways you can graphically organize a lesson in which you compare and contrast information are venn diagrams and semantic feature analysis charts . If you are comparing two or three items you could use a venn diagram (using two circles if you are comparing two items and three circles if you are comparing three). You can set up the venn diagram prior to instruction and let your students know that they will be organizing the information as they learn it. Or, you may choose to create the venn diagram after instruction as a way of recording the information for future reference. In the areas of overlap you record information that is common to the groups. In the areas that do not overlap, you record information that is specific to each group. A semantic feature analysis chart, on the other hand, allows you to compare and contrast many different categories and subcategories of information. An added feature is that you can add new categories easily as you learn about them. Examples of both graphic organizers appear below using examples from a teaching unit on primate study.

VENN DIAGRAM



SEMANTIC FEATURE ANALYSIS
MONKEYS, APES, HUMANS

Put a plus in those boxes that apply to the animal (including humans). Put a minus in those boxes that do not apply. Then analyze to see where the animals share features (compare) and where they do not (contrast). The categories can be expanded by adding as many rows and columns as you need.

	Eats Plants	Eats Animals	Habitat: Live in	Habitat: Live in	Parenting: Care for	Use Tools	Use Opposing	Tail
			Con- structed Shelters	Trees	Young		Digit (Thumb)	
MONKEYS								
APES								
HUMANS								

Why Are They Endangered?

Grades: 3-5

Many classes include a unit on endangered animals. Very often students are asked to do a research report on a specific endangered animal. This activity is designed to complement and can be used as a “kick off” for such a study. This activity asks students to think about the reasons **WHY** animals become endangered. More importantly, it asks students to think about what changes they can make in their lives to help these species.

Objective:

Affective:

- Students will develop a sense of responsibility for the earth and its other inhabitants.

Academic:

- Students will be able to identify reasons why animals become endangered.
- Students will be able to identify what changes they can make in their own lives to help endangered species.

Materials: “endangered reasons” cards (cut out), chalkboard, poster board and markers or computer with *PrintShop*, *Publisher*, or similar software, chart paper, “Let’s Think About It! – Endangered Animals” student sheet

Motivation:



Distribute one card to each student or pair of students.

Go around the room having students read their cards.

Pose the question: *What do you think these cards are?*

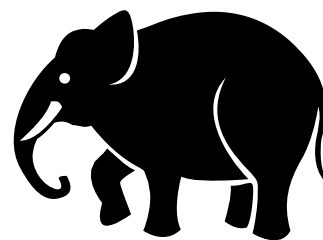
Allow students a few minutes to walk around and share their cards with each other before eliciting responses.

Answer: *Reasons why animals become endangered.*

Procedure:

Mini-Lesson:

- 1) Write “Caused by Humans” on one side of the chalkboard (or hang a sign on one side of the room). On the other side of the chalkboard or room, write “Not Caused By Humans.”
- 2) Ask students to think about the reason printed on their card and decide whether it is caused by humans or not.



- 3) Let each student take a turn reading his/her reason aloud, explaining what it means, and giving an example if they can think of one – let the rest of the class help as needed. *The student should then tell if humans **are** or **are not the cause** and go stand by the corresponding sign.
- 4) Record student responses on chart paper.

Small-Group Activity:

When all students have taken their turn, put students into small groups to discuss and respond in writing to questions on “Let’s Think About It! – Endangered Animals” student sheet.



Summary:

Discuss the activity as a whole class.

Questions for Discussion:

- *How did the activity make you feel?*
- *Did you learn anything new about endangered animals?*
- Discuss question #4 and #5 on the “Let’s Think About It! – Endangered Animals” student sheet. This will help students to relate the information learned in this activity to their everyday lives.

Note to Teacher: If students need direction in answering question #5, here is a suggestion. Since humans threaten endangered animals by our choices of what we eat (i.e., sea animals caught in commercial fishing drift nets) and use (i.e. logging for excessive amounts of virgin paper), what changes could you make as an individual to help these animals?



Follow-up Activities:

- Have students choose one of the changes people can make to help endangered animals and create a poster or sign to educate others about what they can do to help endangered or threatened animals. (This can be an opportunity to integrate technology. Students can create signs on the computer in programs such as *PrintShop* or *Microsoft Publisher*.)
- Join an online project!

Endangered Species www.schoolworld.asn.au/species/species.html


Students select an endangered or threatened mammal, reptile, insect, or plant about which they conduct research and submit a report for sharing with learners, worldwide through the SchoolWorld Web site. All grades, ages, groups – Ongoing, may join at any time.

The Endangered Animals of the World

www.tenan.vuurwerk.nl/

This project is designed to help students gain skills in researching, collaborating and telecommunicating while learning about

Literature Connections



★ *And Then There Was One - The Mysteries of Extinction*
by Margery Facklam

★ *Will We Miss Them?*
by Alexander Wright

★ *Gone Forever! An Alphabet of Extinct Animals*
by Sandra & William Markle

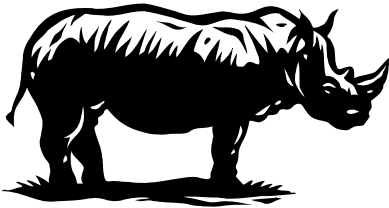
(See appendix for annotated bibliography.)

endangered animals, and sharing that information with the world.

- Read Aloud books that can help you explore the issues of endangered animals and extinction with your students.

Additional Resources:

Federal List of Endangered and Threatened Wildlife and Plants



U.S. Fish & Wildlife Service web site
endangered.fws.gov/wildlife.html#Species

Endangered! Exploring a World at Risk - companion site to an American Museum of Natural History exhibition covering endangered animals and habitats, causes, and more.
www.amnh.org/nationalcenter/Endangered/index.html

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding – Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 4 - Language for Social Interaction – Students will read, write, listen, and speak for social interaction.

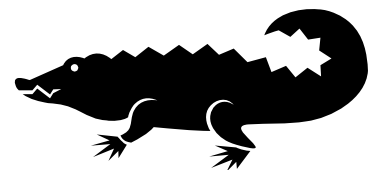
Listening and Speaking

Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

MST Standard 4 – Science – Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

Living things are both similar to and different from each other and nonliving things.





Why Are They Endangered?

Cut out cards for use with the “*Why are They Endangered?*” activity.

**Overcollecting
by people**

Predators

**Clearing of
forests**

Overkilling

Pesticides

Overgrazing

**Skins used for
boots and shoes**

**Skins used
for belts**

**Skins used
for fur coats**

**Ivory used
for carvings**

dam building

declining frequency
of wildfires

Oil used for
cosmetics

Used for food

Used for
medicine

Killed as pests

Oil spills

Fishing nets

Used for
jewelry

Chemicals
in water

Name: _____

Date: _____

Teacher: _____

Group: _____

LET'S THINK ABOUT IT! ENDANGERED ANIMALS



Discuss the following questions with your group. Write the answers below.

1) How did this activity make you feel? Why?

2) Are you surprised about how many of the reasons why animals are endangered are caused by humans? Why?

3) Do you think it is important to know why animals become endangered?

Yes _____ No _____

Explain why you think this.

4) Can you think of changes people can make to help endangered animals? Explain.

5) Can you think of changes YOU can make in your own life that can help endangered animals? Explain.



Threats to Endangered Animals

This list was compiled from the information at *Endangered! Exploring a World at Risk*, the companion site to an American Museum of Natural History exhibition, covering endangered animals and habitats, causes, and more. Visit the site at: www.amnh.org/nationalcenter/Endangered/index.html

Leatherback Sea Turtle

Threats: Loss of habitat, killed as pests

Leatherback Sea Turtle

Threats: Coastal habitat loss, commercial fishing (caught in drift nets), egg poaching

Ora (Komodo Island Monitor or Komodo Dragon)

Threats : Hunting, poisoning, reduction of prey species, human encroachment

Indian Python

Threats: habitat loss through land cleared for farming, illegal hunting for skin

Galapagos Giant Tortoise

Threats: Hunting, poisoning, reduction of prey species, human encroachment

American Crocodile

Threats: habitat destruction, illegal hunting for hide

Goliath Frog

Threats: habitat loss through deforestation, dam building, private collectors

Cheetah

Threats: habitat modification, loss of prey species, poaching

Whooping Crane

Threats: habitat loss through land conversion, dredging, dam construction

American Peregrine Falcon

Threats: Chemical pollution, habitat encroachment

Bald Eagle

Threats: Loss of habitat, killed as pests

California Condor

Threats: habitat alteration, urbanization, poisoning, shooting, colliding into power lines, pesticides, unknown factors

Black Rhinoceros

Threats: Excessive hunting for horn and other parts, habitat loss

African Wild Dog

Threats: Introduced disease, poisoning, loss of habitat

Mountain Gorilla

Threats: poaching, habitat destruction

Okapi

Threats: habitat destruction, accidental trapping

Serengeti East African Plains Ungulates

Threats: Loss of habitat owing to human settlement and agricultural expansion, competition for food and water from domestic animals, hunting and poaching, disease

Dama Gazelle

Threats: habitat alteration, agricultural expansion, competition from domestic stock, excessive hunting

Kagu

Threats: habitat loss, introduced predators

Manus Island Tree Snail

Threats: habitat loss by logging, collecting for jewelry

Endangered and Extinct Birds Hawaii

Threats: Competition and predation from introduced species, habitat modification, disease

Endangered and Extinct Birds New Zealand

Threats: Introduced competitors and predators

Bengal Tiger

Threats: poaching, habitat loss, prey reduction

Asian Elephants

Threats: Urbanization, agriculture

Northern Spotted Owl

Threats: habitat loss from logging, low population size

Karner Blue Butterfly

Threats: Urbanization, herbicides, declining frequency of wildfires

American Burying Beetle

Threats: Overall habitat destruction, possibly DDT and other pesticides.

Delhi Sands Fly

Threats: Conversion of habitat to agricultural, residential, and commercial use

Gila Monster

Threats: habitat loss resulting from urban development and road building

Queen Conch

Threats: overexploitation for food and ornamentals

Steller's Sea Lion

Threats: Rapidly declining numbers -- cause uncertain

Woodland Caribou (Osborn's Caribou)

Threats: Loss of habitat, interruption of migratory routes, over hunting

Gray Wolf

Threats: Hunting, poisoning, persecution, loss of habitat

Pronghorn

Threats: Illegal hunting, habitat destruction, livestock fences that hinder access to natural ranges

American Bison (Buffalo)

Threats: Low genetic diversity owing to 19th-century massive population reductions

Bird Observation Experiment

Grades: 3 - 5

Objectives:

Affective:

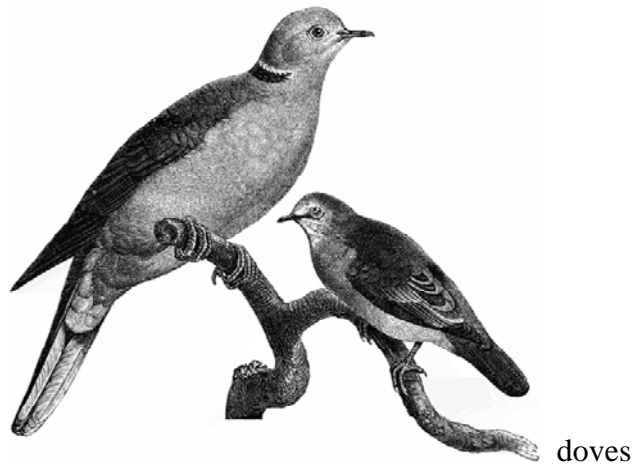
- Students will be able to describe the species of birds in their community.
- Students will be able to identify the particular foods that are necessary to attract these birds.

Academic:

- Students will conduct research using the Internet and library books.
- Students will gain scientific investigatory skills.

Motivation:

Ask students they have bird feeders at the homes. Ask them if they can name or identify (from photos presented to the class) any indigenous bird species. Ask them what they think these birds eat.



Materials: Here is a list of the types of feed that attract various kinds of birds:

- sunflower seeds
- suet
- bread
- nyjer (thistle) seeds
- diced, dried fruits and raisins
- cracked corn
- wild bird seed
- lettuce
- peanut butter
- acorns
- chicken scratch
- nut fragments

Procedure:

Experiment

- 1) Using two, standard bird feeders, place one several feet from the other in a location that can be easily observed without disturbing the birds that flock to the feeders.
- 2) Select two varieties of feed that are appropriate for different birds. (You can learn the diets of specific birds by consulting the reference sources above.)
- 3) Place one of the two feeds in one of the feeders, and the other feed in the other.
- 4) After some time (e.g., two weeks), switch the positions of the feeders to insure that the birds are going to the food, not to the location.

Data Collection

- 1) Students can observe that kinds of birds that are attracted to each feeder and learn some of the habits of those birds. In a log book, compile information on which types of birds are attracted to what type of food. The types of birds that appear will reflect the species native to your part of the state.
- 2) Have more than one student count how many birds appear at a given feeder during the same time. On the board, show the different numbers. Ask the students why they think there may be differences in the numbers. Ask them what they can do to rectify the differences; introduce the concept of averaging.
- 3) You may also want to take photographs of the birds you see or record their sounds as an additional step in the project.
- 4) Compare the difference in sounds that are made by various birds species.

Summary:

- Students can create journals about the creation and running of the experiment, including drawing pictures of the birds, and describing their interactions.
- They may also submit their data to different organizations (see the resources below).
- Student can create graphs depicting which birds appear at what times (during the same day and/or various days). Even though students can collect, graph, and present the data in groups, a teacher will likely have to help the students during each of these steps.

Literature for Teachers:

- Audubon, John James, The Birds of North America. New York: American Heritage Publishing Company, Inc.
- Bull, John, Farrand, John, & Hogan, Lori (1994). National Audubon Society Field Guide to North American Birds: Eastern Region. New York: Knopf.

- Stan Tekiela (2000). Birds Of New York Field Guide. Cambridge, MN: Adventure Publications
- Weber, William J. (1978). Wild Orphan Babies: Caring for Them, Setting Them Free. New York: Holf, Rinehart & Winston.

Websites:

- <http://www.math.sunysb.edu/~tony/birds> Bird songs (and drawings) for many New York State birds. Some birds (e.g., the great horned owl) also have interesting quotes about their sounds.
- <http://www.fnysbc.org> Federation of New York State Bird Clubs
Has a lot of information including conservation issues, field trip ideas, a list of birding societies across the state, checklist of birds frequent to different areas, and a *Checklist of the Birds of New York State*.
- <http://birds.cornell.edu> Information, both fun and scholarly about many aspects of birds and their worlds (especially when their world is ours!).
- <http://ny.audubon.org> New York Audubon Society
Many resources, including links to local Audubon societies, an education site that has--among other things--information about Audubon Adventures (<http://ny.audubon.org/adventures.htm>) and songs about birds for children (<http://ny.audubon.org/education/songs.htm>)
- <http://birds.cornell.edu/PFW> Project Feeder Watch
During the winter, student can use the data they collect during this activity to help advance science and conservation efforts!
- <http://www.ebird.org/> eBird
“Record any bird you see...then explore where the birds are!”
- <http://www.dec.state.ny.us/website/dfwmr/wildlife/bba>
Breeding Bird Atlas Project: A more ambitious endeavor than Project Feeder Watch, dedicated teachers and students can further help scientists understand and map New York State birds.
- <http://www.pbs.org/lifeofbirds/songs> Bird Songs
An interesting article on bird songs.
- <http://www.birdfeeding.org/kids.html> For information on the basics of bird feeding, including making bird feeders out of milk containers, plastic bottles and cans.

New York State Standards Addressed:

MST Standard 4 - Elementary Science

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

5. Organisms maintain a dynamic equilibrium that sustains life

Observing Animal Behavior
Stephen Zawistowski, Ph.D., CAAB
ASPCA

- Make sure the animals will be active – behaving!
 - Bird feeders (project feeder watch)
 - Dog runs
 - Fish tanks
 - Pigeons (project pigeon watch)
 - Squirrels

- Prepare
 - Visit the site or check out the idea
 - Can you do it?
 - Provide descriptive information – Use behavior, not intentions, moods, etc.
 - Dog behavior
 - Fish – chase, nip, fin positions, feeding, etc.
 - Be aware of and plan to deal with elimination and sexual behaviors
 - Can you identify individuals?
 - Practice
 - Video
 - Photos
 - Watch one another

- Methods – not mutually exclusive
 - Focal sample (one individual) – complete log of an individual’s behavior
 - Scan/Instantaneous sample – count of what individuals are doing at set intervals
 - Focus sample – log instances of a particular behavior

- Equipment/materials
 - Paper/pencil
 - Binoculars
 - Stopwatches, clocks, etc.
 - Camera, tape recorder

- Recording – frequency, duration, transitions
 - Manual – Checklists
 - Audio – tape recording
 - Photography
 - Video – allows review back in the classroom

- Presentation and interpretations
 - Evaluate context of behaviors and now is the time to infer intentions, etc.

Bird Watching As An Alternative to Chick Hatching

Grades: 3 - 6

Objectives:

Affective:

- Students will observe and identify birds in the community.
- Students will be able to explain why some people are opposed to chick hatching while other people endorse it.

Academic:

- Students will be able to identify some species of birds as well as their characteristics, behaviors and needs.
- Students will make observations and record data in an observational journal.

Materials:

- *Crinkleroot's Guide to Knowing the Birds* or other grade appropriate books for children that name birds and describe their anatomy and behaviors, Chart Paper or overhead and transparency

Motivation:

Find out what your class already knows about the subject of birds and have them begin to formulate some questions that will guide their study of birds.

Use K.W.L. which asks children to think of what they know about a subject (brainstorming), what they would like to find out about the subject (questioning) and what they learned about the subject as the unit progresses (summary).



The K.W.L. activities are usually done as a chart. An example follows. Create the chart on large sheets of paper or on an overhead transparency, because you will want to save it and come back to add to the chart as the children acquire more information on the topic.

Birds		
K	W	L
<p><i>What do you know about birds?</i></p>	<p><i>What do you want to find out about birds?</i></p> <p><i>Let's create some questions to guide us.</i></p>	<p><i>What have you learned about birds?</i></p> <p><i>(Fill in column as unit progresses and at completion of unit.)</i></p>

Procedure:

Mini-Lesson:

- 1) Read and discuss with the class the book *Crinkleroot's Guide to Knowing the Birds* or other grade appropriate books for children that name birds and describe their anatomy and behaviors. This may take several days.
 - As you read the book, have students complete the chart.
 - Discuss identifying features of the birds shown. For example, which bird is almost completely red? Blue and black? Which birds swim in the water?
 - Be sure to include chickens, roosters and turkeys in your listing. Write or call resource organizations for their photos of chickens in trees because they are not included in most books.

- 2) Look out of the classroom window or take a neighborhood walk to look for neighborhood birds.
 - Try to locate birds from a respectful distance.
 - Have students photograph or sketch these local birds. Place their pictures in sequence on a poster or an observational notebook.
 - Have children draw pictures of birds sitting on their nests.
 - Assemble a bird collage using back issues of magazines on this topic.
 - Ask students to name the birds they know.
 - Ask students how they know they are seeing a bird? Try to elicit the facts that bird have feathers and lay eggs.
 - If possible, have a representative of the local Audubon Society, or other group knowledgeable about birds, talk to the class.
 - Show a video or slides about birds.




- Get pictures from a chicken sanctuary to show to the class.

Small-Group Activities:

Your bird unit will rely on your students' observational skills, so an observational journal is very helpful. Individual or small groups of children can maintain some kind of a journal. An observational journal includes illustrations as well as words; it includes questions as well as statements. Students can make their own notebooks for this purpose. Younger children enjoy making their own bird-shaped notebook which they can trace from your template.

In recording information in an observational journal, children learn to collect observational data and begin to make comparisons over time. Students should make entries in their observational journals on a regular basis, at least twice a week for a month. If you are also asking children to make seasonal comparisons, you can decide as a class when to do follow-up observations and enter those dates on your class reminder calendar so you won't forget to do so. Be certain that children include information about the characteristics (color, size, feathers), behaviors (fly, swim, nesting) and needs (food, water, shelter, companionship).

An example of an observational journal page is shown above, but create a format that suits the interests and abilities of your students.

<p>Bird Observation Date:</p> <p>My Illustration: </p> <p>What I See:</p>
--

As you begin to hone students' observation and questioning skills, you also need to begin to provide input. This input can be interdisciplinary, spanning a number of subject areas. In your communication arts program, begin reading books about birds to your class and provide books on the topic in your guided and independent reading. Look for books with good technical information and a humane theme.

Summary:

- 1) Students can share information in their observational journals with the class.
 - *What was the same and what was different about their observations?*
 - *Do they have any questions about their observations?*
- 2) As part of your summary activities, carry out activities which will help students understand why people have varying opinions about classroom chick-hatching.
 - *The book, A Home For Henny*, as well as literature from a company that sells chick eggs and incubators for classroom use would be helpful.
 - Explain to students that while *A Home For Henny* is fiction, that many of the individual incidents in the books are based on actual events which are representative of what chicks might experience in this type of setting.
 - Read and discuss *A Home For Henny*.



Questions for Discussion:

- *Where was Henny born?*
- *Why didn't all the eggs in the incubator hatch?*
- *What problem did some of the chicks have at the time of hatching?*
- *What happened to the chicks after the classroom project?*
- *Why did someone try to steal Henny?*
- *Why was Henny taken to a chicken sanctuary?*
- *What did Melanie observe the hens and roosters doing at the chicken sanctuary?*

Follow-up Activities:

Building one or more birdfeeders, placing them near the school and observing the birds that come to them is an exciting follow-up activity!

- Make bird feeders by smearing pinecones with peanut butter. Then roll them in a birdseed mix. Use cord around the top for a hanger.
- Clean large plastic jugs very well. Decorate the outside of the jug with non-toxic permanent markers. Suspend from a cord. Fill with mixed bird seed.
- Suspend plastic salad bowls or wooden salad bowls from cords. Fill them with birdseed.
- Fill orange or onion bags with suet and hang them using a cord.

** Be sure to remove the cords and remaining materials from the tree when this project is over.*

- *If you have started this project in the fall or winter, be sure to feed the birds until spring when they can more easily locate another food source.*

Literature Connections



★ *A Home for Henny*
by Karen Davis

★ *Urban Roosts: Where Birds Nest in the City*
by Barbara Bash

★ *It Could Be A Bird* by Allan Fowler

★ *This Way Home* by Lisa W. Peters

★ *Pigeons* by Schlein

★ *Egg: A Photographic Story of Hatching* by Robert Burton

★ *Crinkleroot's Guide to Knowing the Birds* by Jim Arnosky

★ *Feathers: Poems About Birds*
by Eileen Spinelli

(See appendix for annotated bibliography.)

Ideas for Science Fair Projects:

- a) Make a bird feeder and place it where it can be viewed by students. Make a daily log. Which birds come to feed? Chart the names of the birds as well as a count of the number

of each type of bird which comes to feed. Supplement with photos or drawings. If space allow, set up two feeders and place different food in each. Note what type of food attracts what bird(s).

- b) Have students make a class book about birds. Be sure to include information about large birds such as chickens, ducks and/or geese. Younger students can contribute to a big book which contains information about kinds of birds including the fact that all birds have feathers. Drawings and photographs can be used to enhance this book. Older students can contribute research and book reports about birds.
- c) Have students make a dioramas including clay figures of birds which they have sculpted themselves. Use photos, clay, straws, sticks or magazine pictures. Attach a report about the birds featured. Older students might make a video about birds.
- d) Students can conduct observational studies of birds. Which birds are seen in the school or community? Which birds are seen most frequently? What do they eat? Are different birds seen at different times or are the same birds seen all day? Are different birds seen in different seasons? Display the results on charts backed with cardboard or oaktag.
- e) For gifted six graders: At the beginning of this unit, have the students choose several primary questions which they want answered from their research on birds. Before they begin to gather their data, have them make predictions about what they think they will find out. Their prediction, or hypotheses, could be about the kinds of birds, number of birds or the most common bird in the local community. Have students collect data and record their observations. Design a chart to record data which answers their primary questions. Help children to analyze their records. Which of their predictions came true? Which did not? Did some new birds come to a feeding station after several weeks? Did a bird that fed at these stations for several weeks not come in the last weeks of observation? Have the students develop a written statement explaining what they found through their research. A culminating activity could be the construction of a display board which includes predictions, hypothesis, procedures, data and conclusions as well as drawings, pictures from magazines or photographs.

Note to Teacher:

This unit explores bird watching and the benefits and problems involved in classroom chick hatching projects. The underlying goal will be to involve young students in the exciting, highly motivating, and often awe-inspiring study of birds in their natural environments. It is hoped that students will come to appreciate the value of observing birds in their natural habitats as a means of gathering a wealth of facts about the natural living conditions of these animals. An additional goal will be to have teachers make informed decisions about whether or not to carry out chick-hatching programs in their classroom.

Every year, primary school teachers and their students place thousands of fertilized eggs in classroom incubators to be hatched within three to four weeks. These birds are not only deprived of a mother; many grow sick and deformed because their exacting needs are not met during

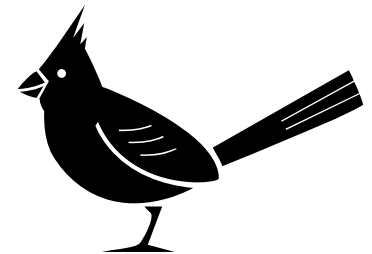
incubation and after hatching. Body organs stick to the sides of shells because they are not rotated properly. Eggs can hatch on weekends when no one is in school. The heat may be turned off for the weekend causing the embryos to become crippled or die in the shell. Commercial suppliers' eggs hatch an abnormally high number of deformed birds reflecting the limited gene pool from which they derive. Some teachers remove an egg from the incubator every other day and open it up to look at the embryo in various stages of development. This results in the death of the embryo.

When the project is over, these now unwanted birds may be left in boxes in the main office for many hours without food, water or adequate ventilation waiting to be collected for disposal. Students and even some teachers are misled to believe that the birds surviving at the end of the project are going to live out their lives happily on a farm. In reality, most of them are going to be killed immediately as working farms do not assimilate school project birds into their existing flocks. Some birds will be sold to live poultry markets and auctions, while others will be fed to captive zoo animals.

Teachers and students need to make informed decisions on whether or not to carry out chick-hatching experiments in their classrooms. Teachers might consider observations of birds in their natural environments as another possible science unit. Programs exist in which data collected by students becomes part of a national database which students can access on the computer or read about in published newsletters. Contact the Cornell Lab of Ornithology, an international bird study center, for information about their Project Pigeon Watch and Project FeederWatch programs which are designed to strengthen such skills as observation, identification, research, computation and writing. This holistic approach can be supplemented with books, videos and posters for a comprehensive and exciting educational experience.

Resources for Teachers:

- American Society for the Prevention of Cruelty to Animals, 424 East 92 Street, New York City 10128, 212-876-7700. www.aspca.org
- *Chick, Chick, Chick* video by Mick and Bob Brown, Society for Visual Education, 1974, 1-800-829-1900.
- Cornell Lab of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850-1999. Phone #: 1-607-254-2440, www.birds.cornell.edu
- Kids & Critters, 518 Lorraine Avenue, Santa Barbara, CA. 93110.
- National Audubon Society, 700 Broadway. New York, NY 10003, Phone #: 212-979-3183/3000 or your local Audubon chapter, www.audubon.org
- United Poultry Concerns, P.O. Box 59367, Potomac, MD. 20859, Phone #: 1-301-946-2406 has the *Replacing School Hatching Projects: Alternative Resources & How to Order Them* booklet, *A Home For Henny* book, *Chickens Can Fly* poster, books for adults as well. www.upc-online.org



Books for Students:

- Boring, Mel, *Birds, Nests, & Eggs*, NorthWord Press, 1998, 48 pages, ages 4 – 5

- Harrison, George and Kit, *Backyard Bird Watching for Kids: How to Attract, Feed, and Provide Homes for Birds*, Willow Creek Press, 1997, 72 pages, ages 8-12
- Weidensaul, Scott, *Birds: National Audubon Society First Field Guide*, Scholastic Publishing, 1998, 160 pages, ages 9-12
- Westberg Peters, Lisa *This Way Home*, Henry Holt Publishing, 1994. 32 pages, ages 4-8.

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation:

Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 4 – Science:

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

7. Human decisions and activities have had a profound impact on the physical and living environment.

MST Standard 7 – Interdisciplinary Problem Solving:



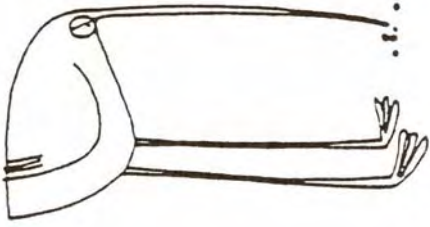
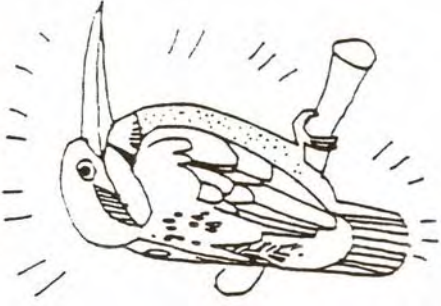

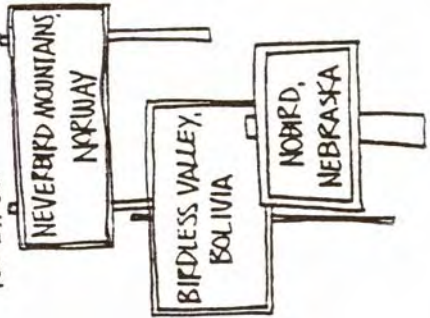
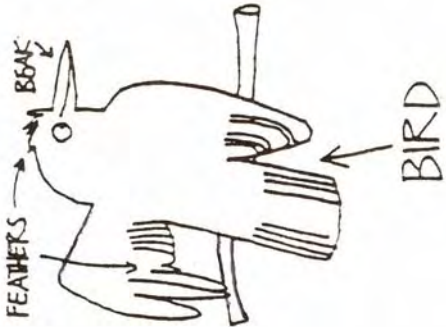

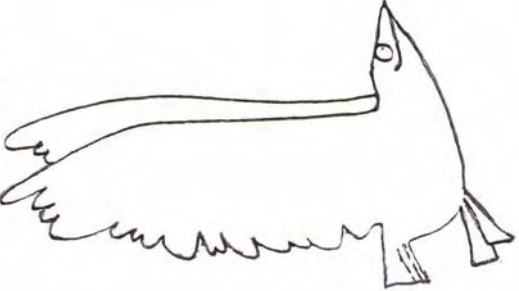

Students will apply the knowledge and thinking of mathematics, science, and technology to address real-life problems and make informed decisions.

Connections

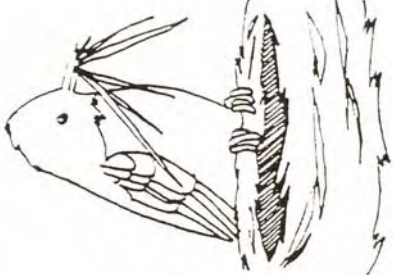
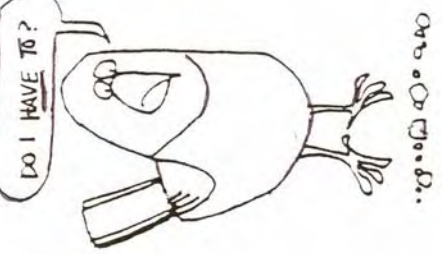



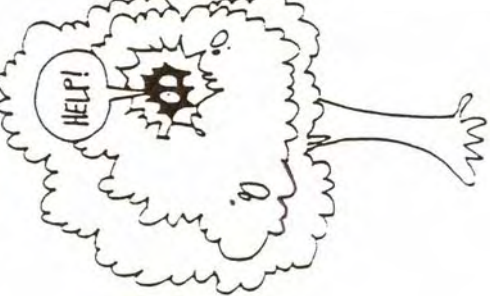
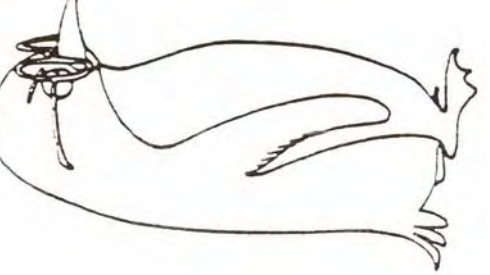

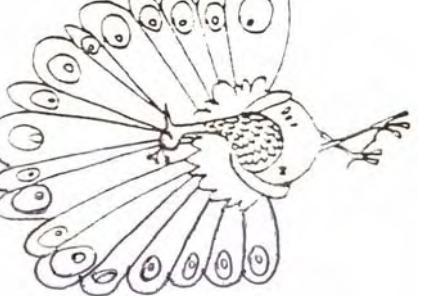
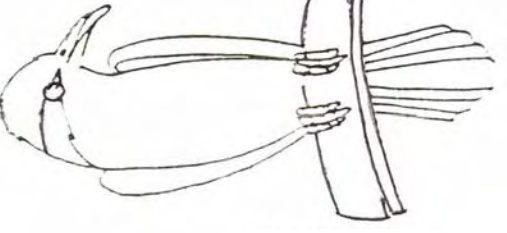
1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.

"BIRD BRAIN" True-False Game (Cards 1-10) Is each statement true or false? Explain your answer.

Reprinted with permission from Kids and Critters, 518 Lorraine Avenue, Santa Barbara, CA 93110.

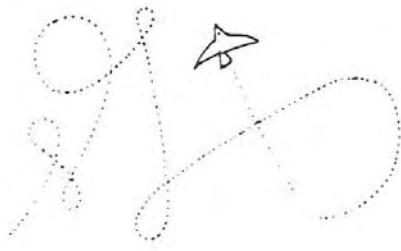
<p>5. SOME BIRDS CAN FLY BACKWARDS</p> 	<p>10. WILD BIRDS MAKE GOOD PETS</p> 
<p>4. IF YOU "EAT LIKE A BIRD", YOU DON'T EAT VERY MUCH.</p> 	<p>9. FEMALE BIRDS ARE USUALLY MORE BRIGHTLY COLORED THAN MALES</p> 
<p>3. SOME KINDS OF BIRDS DO NOT LAY EGGS.</p> 	<p>8. THERE ARE MANY PLACES IN THE WORLD WHERE THERE ARE NO BIRDS.</p> 
<p>2. IF AN ANIMAL HAS FEATHERS AND A BEAK, IT IS A BIRD.</p> 	<p>7. YOU CAN USUALLY TELL WHAT KIND OF FOOD A BIRD EATS BY LOOKING AT ITS BEAK.</p> 
<p>1. ALL BIRDS CAN FLY.</p> 	<p>6. BIRD BONES ARE HOLLOW</p> 

"BIRD BRAIN" True-False Game (Cards 11-20) Is each statement true or false? Explain your answer.
 Reprinted with permission from Kids and Critters, 518 Lorraine Avenue, Santa Barbara, CA 93110.

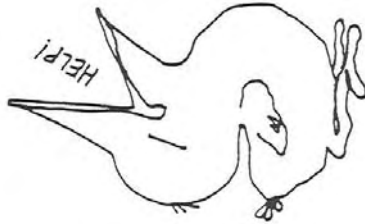
<p>15. ALL BIRDS BUILD NESTS FROM STICKS AND GRASS.</p> 	<p>20. SEED-EATING BIRDS HAVE TO EAT SAND OR GRAVEL.</p> 
<p>14. BIRDS' FEET ARE DESIGNED TO HELP THEM MOVE, EAT, AND DEFEND THEMSELVES.</p> 	<p>19. MOST BIRDS ARE PESTS, AND NOT HELPFUL TO MAN.</p> 
<p>13. AN OWL CAN LOOK FROM SIDE TO SIDE WITHOUT MOVING ITS HEAD.</p> 	<p>18. THE MOST HUNTED ANIMAL IN THE U.S. IS A BIRD.</p> 
<p>12. BIRDS HAVE POOR EYESIGHT.</p> 	<p>17. THE PELICAN USES ITS BIG BEAK FOR STORING FOOD.</p> 
<p>11. ALL BIRDS HAVE FEATHERS.</p> 	<p>16. BIRDS HAVE TONGUES.</p> 

BIRD BRAIN' True-False Game (Cards 21-30) Is each statement true or false? Explain your answer. Reprinted with permission from Kids and Critters, 518 Lorraine Avenue, Santa Barbara, CA 93110.

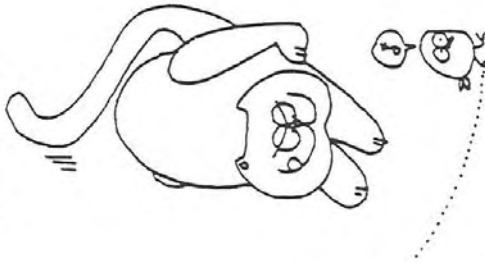
21 MOST BIRDS ARE VERY ACTIVE AND USE UP A LOT OF ENERGY.



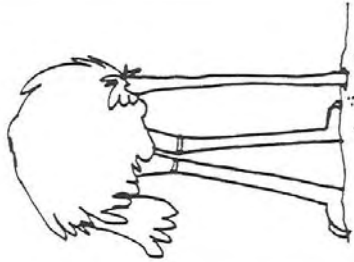
22. ALL BIRDS ARE HELP-LESS AT BIRTH AND NEED THEIR PARENTS TO FEED THEM.



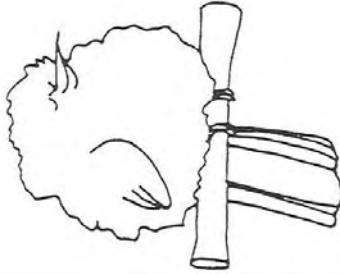
23. CATS ARE BIRDS' WORST ENEMIES.



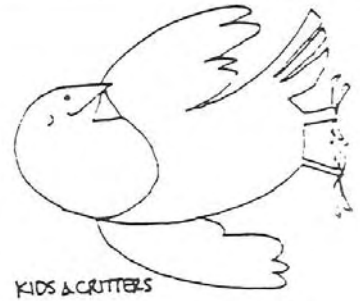
24. OSTRICHES "HIDE" BY BURYING THEIR HEADS IN THE SAND.



25. BIRDS CAN ADJUST THEIR FEATHERS TO MAKE THEMSELVES WARMER OR COOLER.



26. WHEN A BIRD CLEANS ITS FEATHERS WITH ITS BEAK, IT IS "MOLTING."

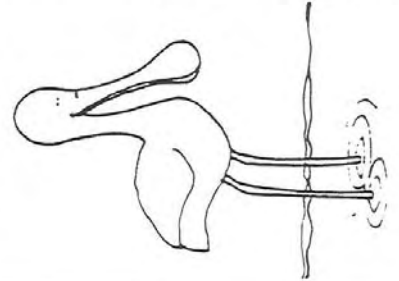


KIDS & CRITTERS

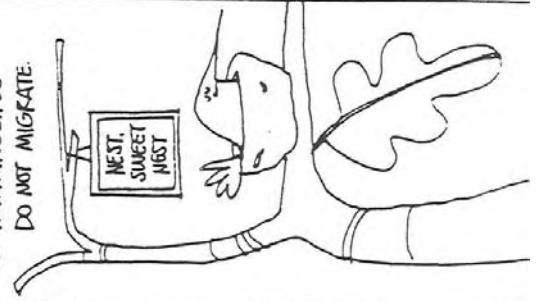
27. IF YOU SEE A BABY BIRD ON THE GROUND, YOU SHOULD PICK IT UP RIGHT AWAY AND TAKE IT INSIDE.



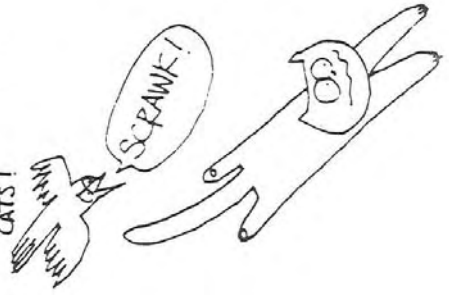
28. BIRDS USE THEIR BEAKS AS TOOLS TO DO THINGS WITH.



29. HUMMINGBIRDS DO NOT MIGRATE.



30. SOME BIRDS CHASE CATS!



Animals in Entertainment

Grades: 3 - 6

Objectives:

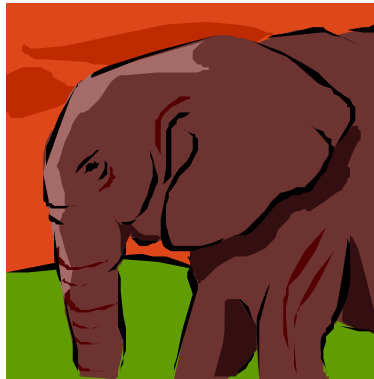
Affective:

- Students will be able to describe how elephants live in the wild and how they live in captivity. Students will be able to describe a variety of points of view about the use of elephants in entertainment.

Academic:

- Students will read and comprehend a non-fiction story.
- Students will conduct research using the Internet and library books.

Materials: Pictures or library books depicting elephants in the wild and in captivity.
See “literature for children” listing.



Motivation:

Ask students, “What animals have you seen perform in the circus?”

Procedure:

Mini-Lesson:

- 1) Have students name animals used in the circus and discuss what these animals are expected to do in order to entertain people. Be certain to include elephants. Chart student responses on the left side of a T-chart (see Addendum #2).

- 2) Discuss: What do students know about how elephants live in the wild?
- 3) Have students take turns in oral reading of the accompanying story (see Addendum #1) entitled, "Elephants in the Wild and in Captivity." Have students read segments to answer each of the listed questions.
- 4) Complete the right side of the T-chart.

Small-Group Activity:

- 1) Have groups of students conduct research concerning how people who run circuses think elephants in their care are treated.
- 2) Have other groups of students conduct research concerning how animal advocates think elephants in circuses are treated.
- 3) Visit circus websites including www.ringling.com/animals/elephant, www.circuses.com/complaint, www.circuses.com/ringling/ele2.html

Summary:

- 1) Have groups of students report back to the class concerning their research.
- 2) Have students discuss the differences in (a) what people who use elephants in the circus and (b) those who are animal advocates have to say about how elephants in the circus are treated. List their findings on a chart.
- 3) Have students discuss their opinions -- and the underlying reasons for these opinions -- as to whether or not they feel elephants should be used to entertain people in the circus.

Follow-up Activities:

Social Studies and Geography

Students can use maps to chart the range of elephants. Where did large populations once live? Where do most elephants in the wild live today? What kind of land regions and features are conducive to elephant survival? For additional information, log onto <http://school.discovery.com/specials/aek/graphpopulations.html>.

Communication Arts

Read non-fiction books related to elephants. Read, talk and write about the zoological family Elephantidae and the larger group of 160 related species with a proboscis or trunk. Have students write group or individual reports describing the elephants' trunk, tusks, teeth, eating habits, how elephants help a sick or injured member of their family, elephant mourning of the dead, elephant babies and efforts to save the elephant. See www.geocities.com/Rain Forest/Jungle/3951/eleph.html.

Write to humane groups for information about legislation designed to improve the care of elephants in captivity. Contrast this with information provided by circuses.

Have small groups of students conduct research on how bears, lions and tigers live in the wild. What kind of family life (social structure) do they have? What do they eat? How do they travel? How do they communicate with each other? What are the benefits and problems associated with living in the wild versus living in a circus? Create compare and contrast charts such as Venn diagrams.

How do domesticated animals who are used in the circus (e.g., dogs, horses) live? How might they live if they were not used in the circus? What are student opinions towards having these animals perform in a circus?

Math

Create a time line on which you graph the ever-decreasing number of elephants through recorded history. Have students make predictions about elephant population growth based on literature obtained from groups that are involved in trying to save the elephant as well as groups that think additional legal killing is necessary.

Art

Elephant study lends itself to a wealth of art possibilities. Stick puppets can be made using elephant clip art. Dioramas can incorporate clay figures of elephants in different environments. Masks of elephants can be used as part of a classroom dramatization or bulletin board display. When making masks, encourage students to make the details of each ear slightly different from that designed by other students. Elephant ears are as individual as human fingerprints. The patterns of the veins in the ears and the shapes of the ear edges are distinctive. Two elephant experts, Iain Douglas and Cynthia Moss, have photographed hundreds of elephants and can identify individuals by their ears. See www.mashatu.tv/eleident.html.

Science Research

Obtain literature from encyclopedias, books, the Internet, animal-welfare, animal-rights, elephant protection societies as well as zoos and circuses. Visit the website <http://www.umkc.edu/imc/elephant.html>. Compare and contrast the information gathered as to the treatment of elephants in captivity including:

- What are the physical, behavioral and social needs of elephants? Describe their activities, habitat and family groupings in the wild versus in captivity. How are their needs met in captivity?
- Describe the ways in which elephants communicate in the wild.
- What problems might elephants living in the wild encounter?
- Describe the deaths and injuries of elephant keepers and trainers as well as precipitating factors. Describe stereotypic behaviors of elephants in captivity.
- Describe the methods used at circuses for "training" and caring for elephants.

- Visit a circus or traveling zoo. Evaluate it in terms of meeting the physical, behavioral and social needs of elephants. Document your evaluation with an observational journal, photographs and video.

Special Education and English and a Second Language:

- Employ Total Physical Response (TPR) in describing elephant behaviors. That is, the teacher and students should act out behaviors such as ear flapping.
- Vocabulary words: mammals, herbivores, tusks, calves, species, roaming, enclosures, extinct. Use these words in varied contexts.

References and Literature for Teachers:

- Derby, Pat & Stewart, Ed, *Everything You Should Know About Elephants*, Performing Animal Welfare Society, 1996
- Laub, Thomas & Shannon, Pamela & Smythe, Victoria, *The Live Elephant Book: A Teacher's Guide to Fun and Learning With Elephants*, Live Elephant Inc., 1993
- Masson, Jeffrey, *When Elephants Weep*, Doubleday Dell Publishing Group, 1995
- Moss, Cynthia, *Elephant Memories: Thirteen Years in the Life of an Elephant Family*, University of Chicago Press, 2000 (for adults)
- Payne, Katy, *Silent Thunder: In the Presence of Elephants*, Penguin USA, 1999 (for adults)

Resource Organizations:

- Center For The Study of Elephants, PO Box 4444, Carson, California 90479
- Elephant Alliance, 6265 Cardeno Drive, La Jolla, CA 92037, phone # 619-454-4959, www.elephantalliance.org
- People for the Ethical Treatment of Animals, 501 Front Street, Norfolk, VA 23510, phone # 757-622-7382, www.peta.org
- Performing Animal Welfare Society, PO Box 849, Galt, CA 95632, phone # 209-745-2606, www.pawsweb.org
- Ringling Brothers Barnum and Bailey Circus, www.ringling.com
- Wildlife Conservation Society, Bronx, New York 10460, phone # 718-220-6876, <http://wcs.org>

Literature for Students:

- Denis-Hout, Christine, *The Elephant*, Charlesbridge Publishing, 1992

- Goodall, Jane *Elephant Family*, Madison Marketing Limited, 1991
- Moss, Cynthia, *Little Big Ears; The Story of Ely*, Simon & Schuster, 1997
- Pringle, Laurence, *Elephant Woman: Cynthia Moss Explores the World of Elephants*, Atheneum Press, 1997
- Redmond, Ian, *Eyewitness Books: Elephant*, Alfred Knopf Publishing, 1993
- Steward, Melissa, *Elephants* (True Books: Animals), Children's Press, 2002
- Taylor, Barbara, *Elephants* (The Nature Watch Series), Lorenz Books, 1999
- Travers, Will, *The Elephant Truck*, Millbrook Publishing, 1995

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation:

Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 4 – Science:

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

7. Human decisions and activities have had a profound impact on the physical and living environment.

MST Standard 7 – Interdisciplinary Problem Solving:

Students will apply the knowledge and thinking of mathematics, science, and technology to address real-life problems and make informed decisions.

Connections

1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.

**Addendum #1:
Elephants in the Wild and in Captivity**

Elephants are the largest land animals on earth. They are mammals and herbivores. The two species of elephants are the African elephants and the Asian elephants. Each of these species is different in appearance. African elephants are larger and have larger ears. Both males and females have tusks. The Asian elephant is smaller and has smaller ears. Male Asian elephants have tusks, but female Asian elephants do not. African elephants can weigh up to 16,500 pounds and their Asian cousins can weigh up to 11,000 pounds.

A typical family unit consists of the oldest female, other elephants of her generation, their young adult daughters and all their young offspring. There are usually ten to twenty members in a group. The oldest female in the group leads the family. She decides where the family will eat, drink and rest. A baby elephant, or calf, spends much of her/his time walking and drinking her mothers' milk. The calf must learn not to trip over her trunk and how to use it. Male elephants leave their family unit about the time of maturity which is between 10 - 15 years. Elephants live to be about 65 years of age.

In the wild, elephants walk many miles each day. They eat between 200 to 500 pounds of greenery and drink about 50 gallons of water daily per adult.

Elephants are loyal. Members of a family will work together to lift a sick elephant and attempt to support it. They have been seen carrying off bones and tusks of their dead and burying them.

Elephants communicate using a variety of sounds as well as body language. After elephants have spread out for feeding, they often come together, greeting each other by raising their heads, lifting and spreading their ears and making loud sounds while flapping their ears. Elephants rest in a tightly knit group touching and leaning on one another. The mother elephant makes soft humming sounds to her calf. In times of distress, the baby will let out a loud cry which will bring immediate attention and assistance. Elephant sounds range from high pitched squeaks to deep rumbles. Some sounds that elephants make are too low in frequency for humans to hear.

At one time, over thirty species of elephants existed. Twenty-eight species are now extinct leaving only two: the African elephant and its smaller Asian cousins. Populations of both species have been severely reduced because of hunting -- mainly for their ivory tusks -- and because forests have been cut down in their natural habitats to make room for growing human populations.

An elephant's skin is very sensitive. Elephants in the wild use leaves as well as mud to cool the body and retain the skin's moisture. In the wild, they also bathe frequently in mud and water. Elephants are very susceptible to sunburn and can often be seen in the wild seeking shelter under trees and in thickets during the daytime hours. Mud bathing and dusting help to cover the skin and protect it from the harmful rays of the sun. Dust bathing also helps protect the skin from insect bites.

Elephants who live in circuses, zoos, carnivals, and various sorts of traveling shows experience very different lifestyles than their wild cousins. While keepers and trainers say that circus elephants have good, healthy lives, some animal advocates say that circus elephants often live in small enclosures, are chained and harshly disciplined.

A circus website, for example, states that their animal care professionals “believe that a positive, healthy environment is the only acceptable and successful method of working with animals. The animals are fed, watered, groomed and cleaned daily. Trainers teach animals routines that showcase their physical abilities and beauty, as well as their distinctive behaviors.” They say that, “their training methods are based on food rewards and words of praise” and that “verbal or physical abuse and the withholding of food or water are strictly prohibited.”

An animal advocacy website, on the other hand, states that that elephant trainers often “use sharp, metal bullhooks and whips to punish elephants and make them perform physically strenuous tricks.”

A circus website states that their “animal enclosures are specially designed to meet the unique needs of each individual species. The enclosures provide room for ample freedom of movement and appropriate social interaction with other animals, proper ventilation, and protection from the elements.”

In contrast, an animal advocacy website states that, “Elephants in the wild spend much of their time foraging, roaming and bathing.” Elephants in circuses “are packed tightly into hot, reeking boxcars and shackled by four legs for long journeys across the country. Between shows, the elephants remain shackled or confined to tiny pens.”

In Defense of Animals, an animal-protection organization, states that, “Children do not learn how animals live and behave in their habitats while watching them perform unnatural, confusing tricks on command in an arena. Students do not learn that elephants walk 20 miles per day, care for their children for life, and even bury their dead.”

Some humane organizations and individuals are working to ensure that animals in circuses receive better treatment. Other humane organizations are working so that elephants and other animals such as bears, lions and tigers are not allowed in circuses but allowed to live their natural lives with their families in the wild. Some cities and towns in the United States, such as Boulder, Colorado and Stamford, Connecticut and Hollywood, Florida and Greenburgh public property), New York, currently do not allow performances by circuses that have animals acts. For a complete list see www.circuses.com.

Have children read the previous selection to the point at which they are able to answer each question in turn:

1. Name and describe two species of elephants that exist today.
2. What does a typical family unit look like in the wild?
3. What evidence do we have that elephants are loyal to their family groups?
4. Why have elephant populations in the wild gotten smaller?
5. How do elephants in the wild protect their skin?
6. What do people who use elephants as circus performers say about their treatment?
7. What do animal advocates say about the treatment of animals in the circus?
8. What do think about using elephants in the circus and why?
9. What are humane organizations working for?

Addendum # 2: Elephant T-Chart

BEFORE UNIT:	I	
	I	AT THE END OF THE UNIT:
	I	
What Do You Know About Elephants in the Wild?	I	What Have You Learned About Elephants in the Wild?
	I	
	I	
	I	
	I	

A Whale's Stomach

REDUCE & RE-USE

To Improve Marine Habitats



Grades: 4-6

Objectives:

Affective:

- Students will demonstrate an understanding of the concept of “cause & effect.”
- Students will learn the connection between our daily actions and wildlife.
- Students will learn how to REDUCE and RE-USE in their own lives

Academic:

- Students will read to acquire information and understanding.
- Students will understand and apply scientific concepts pertaining to the physical setting and living environment.
- Students will understand that human decisions and activities have had a profound impact on the physical and living environment.

Materials:

- Whale's stomach bag: 1 whole plastic one gallon jug and the remnants of another, 1 trawl net float,
- 35 feet of nylon rope, 1 large garbage bag, 1 large blob (5+ lbs) of partially processed rubber, 10 small plastic items.
- Other materials: plastic cups, plates, utensils, soda bottle, additional plastic containers, chart paper, student sheet; (optional) *Dolphins & Orcas* or *Death of a Whale* videos

New Vocabulary:

biodegrade - to break down into smaller parts by the action of living things

Motivation:

- 1) Present the above listed Whale's stomach bag items by dumping them out on the floor or a table where they can be seen by all students.
- 2) Ask students what they think these items all have in common?
- 3) Reveal to the students that a similar collection of items was found in the stomach of a whale who washed up on Wrightsville Beach, NC on December 11, 1992 (see details below).

Procedure:

Mini-Lesson:

- 1) Have students estimate, give a fraction or a percentage to identify what quantity of the contents of the stomach was made from plastic. (the majority of items that were found in the stomach were made of plastic). Record on chart paper.
- 2) Inform students that plastic is one of the top pieces of debris found during coastal cleanups.
- 3) Discuss what plastic is made from (petroleum), how it is not biodegradable (does not decompose), so when these items are not disposed of properly they can be harmful to wildlife.

Small-Group Activity:

- 1) Put students into groups of 5 and handout student sheet.
- 2) Have each group discuss and respond in writing to questions on student sheet.

Summary:

- 1) Have each group report their responses to the whole class.
- 2) Remind students that most of the items found in the whale's stomach were plastic.

REDUCE

- 3) Display plastic cups, plates, and utensils. Ask them if they have ever used any of these items at home or school (i.e., parties).
- 4) Ask students if they always need to use these disposable plastic items. Ask them what they could use instead of these plastic items (i.e., glass cup, ceramic plate). Ask them which is better for the environment?
- 5) Explain to students that one way we can help prevent plastics from getting into the ocean (by accident or on purpose) and hurting wildlife is by not using plastic when we can use something else that is not disposable. We can make choices.

RE-USE

- 6) Ask students what they usually do with these items when they are done using them (Response: throw them away).
- 7) Ask students what else they could do with these plastic items (when it is necessary for them to use plastic items) besides throwing them away (Possibilities are: to wash and re-use again or be creative and use them to make crafts, storage, etc).
- 8) Explain to students that another way we can help prevent plastics from getting into the ocean (by accident or on purpose) and hurting wildlife is by not throwing plastic away, but finding other uses for it.
- 9) Show them the other plastic items and ask them to think of ways to re-use them (i.e., plastic soda bottle can be made into a bird feeder).
- 10) Optional: Show video *Dolphins & Orcas* that includes stunning cinematography of dolphins and whales in their natural habitat. Point out to students that these are the kinds of animals they will be helping by "reducing and reusing" in their own lives. Available from the Talbot Collection at www.talbotcollection.com or 310-732-4217.

Follow-Up Activities:

- 1) Have students save and bring in plastic items from home to make something new out of them (i.e. birdfeeder out of soda bottle)
- 2) Have students make a presentation about what they learned to other classes.
- 3) Have students create a poster or sign to educate others about the connection between our daily actions and wildlife.

Background Information Regarding This Whale:

- She was a 28-foot female Sperm Whale.
- She was found alive in the surf by a walker at 6:30 AM.
- She died at approximately 7:45 AM.
- The Marine Mammal Stranding Team arrived at 8:00 AM.
- The whale appeared emaciated.
- Based on her size and weight, the whale was estimated to be 3-4 years old, and was probably weaned 1 year earlier.
- Veterinarians did a limited necropsy to look at the contents of her stomach.
- A few squid beaks were also in her stomach, indicating that she was doing some successful feeding.
- Veterinarians estimated that none but the smallest pieces of plastic could have passed through the whale's intestinal tract and that the garbage was a large contributing factor, if not the entire reason the whale died.
- It is assumed that whales either mistake the plastic for food, or, perhaps more likely, go after squid that are hiding in and around the garbage, and accidentally swallow the plastic as well.
- Finding plastic in whales is uncommon, but this is not an isolated incident. Most whales who die do so off shore and are not found by people.

Resources:

- Video: *Death of a Whale* – Only recommended for grades 6 and up. Shows actual footage of this sad event including the removal of debris from the whale's stomach and interviews with the marine biologists. Available from Environmental Media at www.envmedia.com or 800-368-3382.
- The Riverhead Foundation for Marine Research and Preservation <http://www.riverheadfoundation.org/>: information on marine mammal stranding/rescue
- The Ocean Conservancy <http://www.oceanconservancy.org/dynamic/home/home.htm>
- Plastics in Our Oceans <http://www.whoi.edu/science/B/people/kamaral/plasticsarticle.html>

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding – Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

2. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 4 - Language for Social Interaction – Students will read, write, listen, and speak for social interaction.

Listening and Speaking

1. Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

MST Standard 4 – Science – Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

1. Plants and animals depend on each other and their physical environment.
2. Human decisions and activities have had a profound impact on the physical and living environment.

MST Standard 7 – Interdisciplinary Problem Solving – Students will apply the knowledge and thinking of mathematics, science, and technology to address real-life problems and make informed decisions.

Connections

1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.



A Whale's Stomach Activity Sheet



Name _____ Date _____

Teacher _____ Group _____

Discuss the following questions with your group. Write the answers below.

1) How do these things get into the ocean in the first place? Explain.

Do you think this happens by accident or on purpose?

2) How might a person who dumps garbage in the ocean feel about the ocean?

3) Do you think it is possible that the people who threw away these items DO care about animals and the environment?

Yes ____ No ____ Explain why you think this.

4) Do we always know what our actions will do to animals and the environment?

Yes ____ No ____ Explain why you think this.

What is the best thing a person can do to make sure that garbage does not end up in the ocean?

*Adapted from Living Earth Learning Project (a program of the New England Anti-Vivisection Society).

Name _____ Date _____

True Price

Product:



1) How does this product (if the package is empty, imagine it still has the product inside) and its packaging affect the following:

The Environment -

Other Species -

Human Health (including your own) -

Other Cultures -

2) Is this product a "Want" or a "Need"?

3) Did this product exist 100 years ago?
If not, what did we use instead?

4) What is an alternative to this product?

*Adapted from Living Earth Learning Project (a program of the New England Anti-Vivisection Society).

Amazing Canada Geese



Grades: 4 - 6

Objectives:

Affective:

- Students will read and comprehend a non-fiction reading selection about Canada Geese.
- Students will learn about the social structure and behavior of Canada Geese.
- Students will learn about the dangers that Canada Geese face and what they can do to help protect them.

Academic:

- Students will read and comprehend a non-fiction story.

Materials: “The Amazing V” article and questions, lined paper for writing, books or photos about Canada Geese.

Note: Additional multiple-choice question sheet is attached. This can be used as practice for the New York State 4th Grade English Language Arts Exam.

Motivation:

Ask students if they have ever seen Canada geese.
Show photos of Canada geese (i.e. V-formation)

Procedure:

Mini-Lesson:

- 1) Distribute “The Amazing V” article and have students read aloud.
- 2) Create a chart to summarize key points from the story (include behavior, food consumption, dangers they face from people and animals)

Small-Group Activity:

- 1) Write questions on chart paper.
- 2) Divide class into six groups and assign one question to each group.
- 3) Students will write and discuss answers to questions in their group.

Summary:

Each group will present their answers to whole class.

Follow-Up Activities:

- Students can do follow-up research on Canada geese via library and web research and write reports on the information they gather.
- Students living near Canada geese habitats can observe and record their behavior and present findings to the class.
- Students can create posters to educate others about how to help Canada geese.
- Students can write to their legislators offering solutions for the Canada geese - human conflicts (see www.canadageese.org for ideas).

Resources:

- www.canadageese.org : lots of information, stories and many pictures of Canada geese on this website
- *Fly Away Home* video (1996). The soaring adventure of a 13-year old girl and her estranged father who learn what family is all about when they adopt an orphaned flock of geese and teach them to fly! A heartwarming story for all ages!
- Books for Students (K-3 reading level but higher-level story messages):
Rossiter, Nan Parson, *The Way Home*, Dutton Children's Books, 1999
Best, Cari, *Goose's Story*, Farrar, Straus and Giroux Publishing, 2002

New York State Standards Addressed:

ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

ELA Standard 4 - Language for Social Interaction – Students will read, write, listen, and speak for social interaction.

Listening and Speaking

1. Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

MST Standard 4 – Science – Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

1. Living things are both similar to and different from each other and nonliving things.

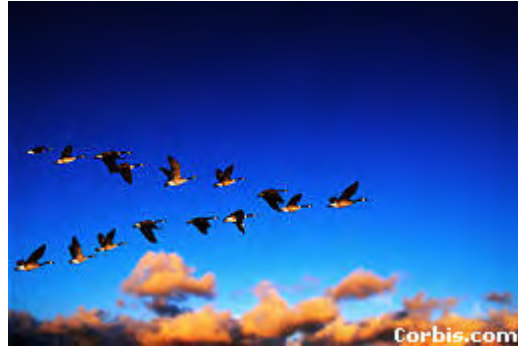
Addendum #1:

The Amazing “V”

**By Anne Muller
President, Wildlife Watch**

Yes, the proper name is “Canada geese” not “Canadian geese.” In addition to the joy we feel when we see a V-formation of Canada geese in flight, there is so much to be learned from the way Canada geese behave. If they were human, they would be looked up to as model citizens.

You might assume that the bird who leads the “V” is in place, but that’s not so. When the lead bird needs to rest, he or she will drop back and another bird will take the lead. You can imagine a goose refusing to give up that position! It wouldn’t be good for the bird or for the followers! As each goose flaps his or her wings it gives a boost to the whole flock. By flying in a V-formation, the whole flock has more flying power than if each bird flew alone.



always in that position. Can position? It As each birds that gets greater

When Canada geese land, they choose areas that have grain or grass; they need both to survive. They fly 250 miles a day, usually at night, during their migration flights. So you can understand why they have to store as much energy as possible to prepare for their flight. Eating is the way they get their energy. Geese must eat a lot of grains and grasses to build up the energy they need for flying. That is why, when you see Canada geese in parks or lawns, they are always eating.

water and

The Canada geese that we see in New York have most likely come from either the Ungava Peninsula or the Hudson Bay areas in northern Canada. These areas get very cold in the winter, so the geese cannot stay there all year long. They can only be there when the weather is warm and that’s not for too long. After they spend the winter here in New York and other states that have a warmer climate, they migrate back home to the north to nest and raise their young.

Some birds have been injured by hunters or have other disabilities so they cannot make the long trip north. These geese have no choice but to stay and raise their young here. Other these geese are the offspring of birds that were bred (made to produce offspring) by hunters for hunting so they don’t know how to fly back home to the north. Now there may be too many geese in the same areas that people want to use. Sometimes this has led people to kill geese in order to try and control the population of geese.



Some have observed that when a goose gets sick, wounded or shot down, a few other geese will drop out of the V-formation to follow the bird down. They help and protect the injured bird. They stay with the goose until he or she dies or is able to fly again. Then, they take off with another V-formation or catch up with their own flock.

Canada goose eggs hatch during the spring and summer and the goslings (baby geese) are raised until they fly. Their parents

train them to leave the area before the harsh winter sets in. Geese migrate south starting around mid-August through the end of September. They migrate north around mid- March through April. Imagine how much energy geese need to store for their long trips! Even geese who do not do a full migration need to store energy. Can you imagine flying (without a plane) even 60 miles away? Think of how tired and hungry you would be!

A mother goose will lay about five eggs and she will sit on the eggs to keep them warm until they start to hatch. No matter how cold or hot it is, she will stay with those eggs. One goose, who was caught in a late snowstorm, was seen sitting on her nest even though she was up to her beak in snow!

When the goslings hatch they have to be near water and a food source. That is why lawns with ponds are so appealing and necessary to the survival of geese. When those lawns (which are their food!) are sprayed with toxic chemicals – the geese swallow polluted food!

Many animals prey upon geese, but these animals have no other way to survive. Snapping turtles, raccoons and skunks will attack and eat eggs and goslings. Coyotes will attack and eat adult geese. This is how nature keeps the population down. Sometimes you will see a mom with many goslings, but she has most likely adopted the goslings of other moms who have been killed by cars, hunters, natural predators, or vandals.



Also, if geese are flying overhead looking for a good place to land, the geese below welcome them with loud honks! Hunters take advantage of geese who are looking for a safe place to land in order to rest and eat. They will put out decoys to fool geese into thinking that it's safe because other geese are there already.

You can help protect geese by paying attention to any signs that say "PLEASE DO NOT FEED WILDLIFE". Feeding geese in certain places will only attract more geese to areas that people want to use such as picnic areas and playgrounds. However, in bad weather conditions, a goose who is unable to fly may have trouble finding food. If possible, ask a park manager if you should feed the goose. You can also learn about successful ways to control the population of geese without killing them and write letters to the newspaper and town officials about it.

I encourage you to learn even more about the amazing Canada geese. Then teach others how we can share our world with these beautiful creatures.

Addendum #2:

Name: _____

Date: _____

Canada Geese

Directions: Read *The Amazing V*, an article about Canada Geese. Circle the best answer for each question.



How does flying in a V-formation benefit a flock of geese?

- A) tired birds are able to remain as the leader
- B) part of the flock gets a greater flying power
- C) hunters can see them from the ground easier
- D) the whole flock gets a greater flying power

Why do Canada geese eat as much as they do?

- A) because it is cold outside
- B) to build up the energy they need for flying
- C) they like to eat
- D) to supply food to their young

What dangers do the Canada geese face from people?

- A) hunting, population control, car accidents, vandalism
- B) hunting, overfeeding, natural predators, vandalism
- C) hunting, geese eating their own eggs, natural predators, vandalism
- D) hunting, natural predators, car accidents, vandalism

What are some facts that show how “amazing” the Canada geese are?

- A) eating more than they need and helping sick or wounded geese
- B) helping sick or wounded geese and abandoning their eggs
- C) flying in V-formation and helping sick or wounded geese
- D) flying in V-formation and traveling thousands of miles per day during migration flights

What happens when a goose in the V-formation gets sick or wounded?

- A) the rest of the flock flies away and leaves the sick or wounded goose alone
- B) one goose flies with the sick or wounded bird on their back

- C) the whole flock follows the sick or wounded bird down to help and protect them
- D) a few geese follow the sick or wounded bird down to help and protect them

What can you do to help Canada geese?

- A) tell others about ways to control the population of geese without killing
- B) feed geese in picnic areas
- C) chase geese on the playground
- D) remove eggs from their nest



Animal Rights

Grades: 5 – 6

Objectives:

Affective:

Students will be able to argue the pros and cons of various issues surrounding animals rights.

Academic:

- Students will listen and read to acquire information and understanding.
- Students will listen and read to analyze and evaluate information using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

Materials:

Pictures of animals used for food (e.g., chickens, ducks, cows, lambs), pictures of various meats (e.g., fin fish, shell fish, chicken, duck, steak, hamburgers, lamb chops), articles of clothing or accessories made from animal hide or fur, accompanying sheets: “Research Report” and “Where Do You Stand?”

Motivation:

Ask students for a show of hands to respond to these questions: “Who would kill a rat?” “Who would kill a dog?” “Who would kill a deer?” “Who would kill a fish?” “Who would kill a spider?” “Who would kill a roach?”

Procedure:

Mini-Lesson:

- 1) Discuss with students their feelings about killing a rat, a dog, a deer, etc.
- 2) Briefly discuss with students how these animals are killed (e.g., hunting, trapping – steel jaw traps. During sports – such as dog-fighting). Discuss the reasons why these animals are killed (e.g., for food, to make fur coats, factory farming).
- 3) Show pictures and discuss which foods the students eat come from animals. Show some examples of articles of clothing or accessories made from animal skins/furs.



Small-Group Activity:

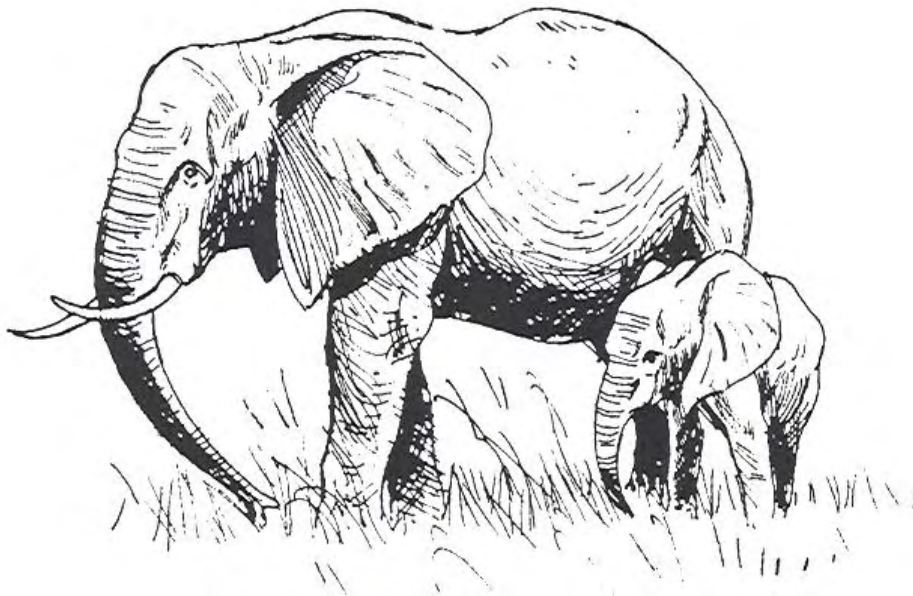
- 1) Have groups of students research some of the following issues: animal experimentation, bullfights, dog fighting, factory farming, fishing, making fur coats, horseracing, hunting, pet-overpopulation, animal-slaughter for meat, rodeos, sports hunting, trapping, whaling, wild animals as pets.
- 2) Have groups of students report back to the class to explain each issue. List the pros and cons. Note some statistics if possible. What is your personal opinion and why?

Summary:

After all reports have been given, review the pros and cons of the various animal-rights issues.

Follow-up Activities:

- Have students complete the accompanying sheet. “Where Do You Stand?” Tally the results with the students.
- Invite guest speakers representing organizations with opposing viewpoints



New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding:

Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation:

Students will read, write, listen, and speak for critical analysis and evaluation.

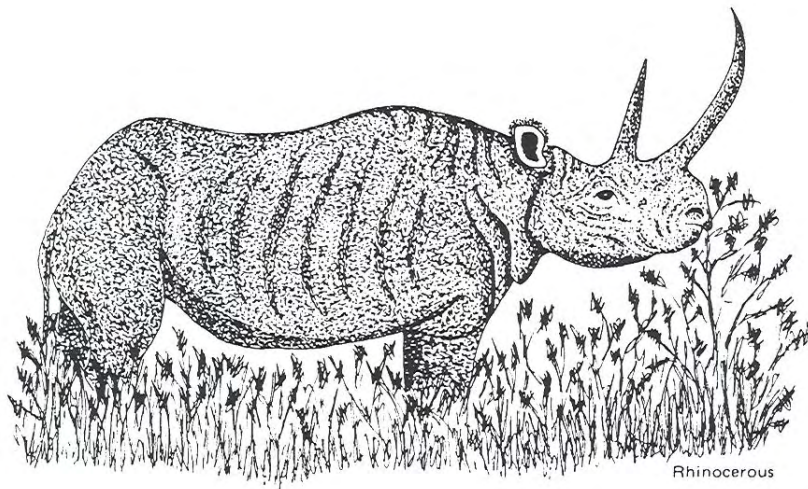
Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 4 – Science - Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

7. Human decisions and activities have had a profound impact on the physical and living environment.

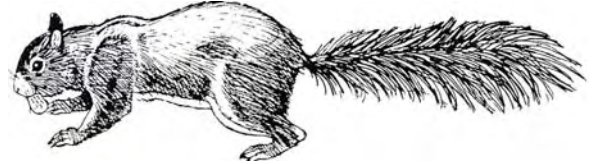


Addendum #1:

Where Do You Stand?

Student Activity Sheet (Grade 6)

This is not a test with right and wrong answers, but a questionnaire designed to help you think about various animal-related issues and decide where you stand on each one. Check all applicable boxes.



1) Do you think that the following animals should be kept as pets?

Wolf/Lion

Raccoon/Squirrel

Turtle/Snake

2) Would you buy a coat made from

The pelts of wild animals? (leopard, bobcat)

The pelts of ranch-raised animals? (mink, fox)

The leather or pelts of animals raised and killed for meat? (rabbit, cow)

3) Do you/would you

Kill animals for sport?

Collect and kill insects for study or for a hobby?

Trap animals for their fur?

Fish?

4) Should the following animals be trained to perform in circuses?

Lions, tigers, bears, chimpanzees

Elephants

Dogs, horses

5) Do you eat

Beef, pork, lamb, poultry?

Eggs and dairy products?

Fish?

6) Would you eat meat if you had to kill the animals you ate?

Yes No

7) Would you boycott

Japanese products to protest Japan's excessive whaling?

Tuna to protest the killing of dolphins by tuna fishermen?

8) Should these animals be exterminated/eliminated in areas where people live?

Mountain lions, bears, wolves

Nonpoisonous snakes

Coyotes, skunks, weasels

Mice, rats, gophers

Poisonous snakes, spiders, scorpions

Nonpoisonous insects

9) Animals should be kept in zoos

to preserve them from extinction, when their native habitat has been / is being destroyed.

for scientific study; for education.

for our entertainment and enjoyment.

never.

10) If you owned an acre of land that was part of the limited habitat (i.e.: the animal could not survive elsewhere) of an animal in one of the groups below, would you relinquish the use of your land for use as a sanctuary for that animal?

If the animal were a mammal (deer, fox, rabbit, mouse)

If it were a bird (eagle, robin, blackbird, hummingbird)

If it were a reptile or amphibian (snake, toad, turtle, lizard)

If it were a fish (trout, minnow, perch, catfish)

If it were an insect or crustacean (beetle, butterfly, crab, spider)

"Where Do You Stand" was developed by Beverly Armstrong of "Kids & Critters"

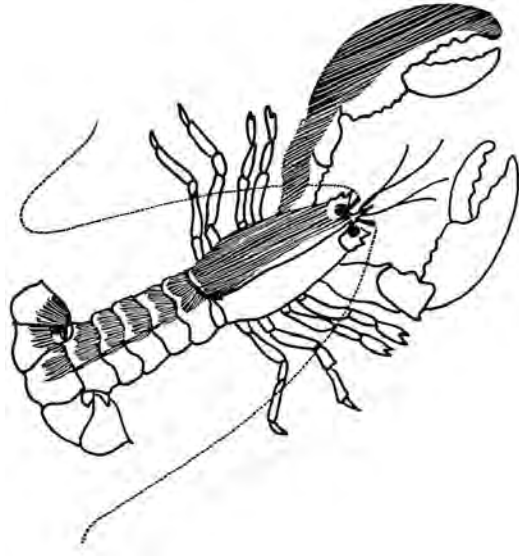
Addendum #2:

Research Report

Pick a topic dealing with a specific “animal rights” issue. Using your school or public library or the Internet, research your topic and answer the suggested questions below. Some suggested topics are:

- animal experimentation
- bullfights
- circuses
- factory farming
- fishing
- fur coats
- horse racing
- overpopulation of companion animals
- rodeos
- slaughtering animals for meat
- sport or trophy hunting
- trapping (steel-jaw trap)
- whaling
- wild animals as companions
- zoos

- 1) What is your chosen topic or issue?
- 2) List the pros and cons.
- 3) Note some statistics.
- 4) What is your personal opinion and why?
- 5) What can you do to help?



FARMED ANIMAL ISSUES

The lessons that follow are designed to help teachers provide accurate information about farmed animals as developmentally appropriate. Teaching students about farmed animals is one of the basics of the elementary school experience. We all learned as children that cows produce milk and say “moo” and that pigs wallow in the mud. All of these animals we refer to as farmed animals also have unique personalities. Among farmed animals, we find mothers who love, and those who form friendships, mourn, get angry or show a variety of other emotions. We need to acknowledge this as we educate children about these amazing animals. Additionally, the New York State mandate to teach about the humane treatment of animals extends to farmed animals as well.

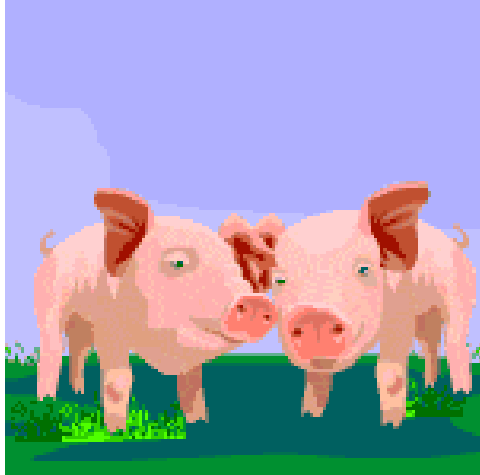
In order to teach about the humane treatment of farm animals, educators must first recognize the state of treatment for the majority of farm animals today. Since small family farms are few, the majority of farm animals are raised on premises owned by large corporations. These places are also known as intensive confinement operations or “factory farms.” This type of confinement, which usually equates to caging these animals in tight spaces, raises a host of welfare issues for the animals.



Many basic natural instincts that animals exhibit when given the opportunity, such as dust bathing for chickens and wallowing in mud for pigs, are not afforded to intensively confined animals. Additionally, there are procedures that are done to farm animals on a routine basis that would be illegal if done to a cat or dog in New York State. For example, pigs are castrated and have their tails docked without anesthesia. Baby chicks have part of their beaks seared off with a hot blade. These procedures are done in order to prevent mutilation to other animals (that would cost the company money) when animals become frustrated, due to the intensive confinement, and attack their mates.

Another issue that may arise when discussing farmed animals is their use as food. Humans have different attitudes about using animals for food. For example, as more people learn about the health benefits of eating less saturated fat, less cholesterol and more vegetables, fruits, nuts, grains, legumes and soy products, other types of diets such as the vegetarian¹ or vegan² diet are gaining popularity in American society.

Additionally, many young people are becoming aware of the unnatural realities of factory farming, and the impact it has on animals and the environment. This may induce them to eliminate or reduce the consumption of animal products in their diet. Since misunderstandings about vegetarian and vegan diets abound, it is important for teachers to understand that this can be a healthy choice for students if they are supported in their learning of new food groups.



Many resource materials on farmed animals that are available to teachers distance children from the fact that cows, pigs and chickens are living, feeling beings. This is inconsistent with any effort to foster empathy in children, which is an important element in the elementary classroom. The lessons and resource lists that follow can help you develop a unit on farmed animals that provides accurate information about them while gently reinforcing a child's compassion for animals.

At the primary level, the reality of how farmed animals are raised may be difficult for students to grasp without feeling deep despair. At this age, emphasis should be placed on demonstrating how farm animals, like all animals, have basic needs and unique qualities.

Topics to be studied by grades pre-kindergarten to three students might be infused into:

- Language Arts – Learn vocabulary to identify farmed animals and their basic needs. Differentiate between living and non-living things.
- Social Studies – Recognize that animals, like humans, have mother-infant bonds. Identify which products come from living animals.
- Science – Identify similarities between human and farmed animal needs. Observe farm animals on local farms. Recognize that human action effects farmed animals.
- Math – Compare sizes of farm animals in order to understand differences in physical space required by each animal.

Older students can examine the different attitudes that exist about using animals for food – such as the reasons why people choose to become vegetarians. The ethical, environmental and health reasons can be explored. Topics to be discussed by grades four to six students might include the following:

- Culture - How do you feel about eating cats, dogs, insects, chimpanzees? Discuss the cultural issues inherent in this topic. (For example, eating dogs and cats is quite common in some countries, though it might seem horrible to us. A person from India, where cows are considered sacred, might find it appalling that most Americans eat cows.)
- Laws - Is it legal to go home and press a piece of hot metal into your dog's flesh with no painkillers? Should it be legal? Can you think of an animal for whom this practice is not only perfectly legal, but practiced routinely every day? The answer is cows, who are "branded" for identification purposes.

Additional information can be found at:

- www.farmsanctuary.org
- www.hfa.org
- www.hsus.org
- www.nahee.org
- www.animalplace.org
- www.farmusa.org
- http://www.envirolink.org/upc
- www.vrg.org
- www.healthylunches.org



¹ Vegetarians do not eat any type of meat, poultry or fish. However, lacto-ovo vegetarians will eat eggs and dairy products

² Vegans do not eat any type of meat, poultry or fish, eggs or dairy products.

Your Food

Grades: K - 2

Objectives:

Academic:

- Students will create a tally chart and graph data collected.
- Students will be able to identify the origin of many foods.

Affective:

- Students will demonstrate an understanding of the difference between animals and plants.

Materials:

Containers/packages (washed) of the foods students eat at home (i.e., milk container, egg carton, package from deli slices), pictures of farm animals (i.e., cows, pigs, chickens) and food plants (i.e. wheat, vegetables), Your Food Tally Sheet, Your Food Graph.

Preparation:

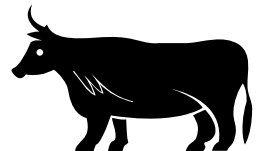
Send a letter home to parents a few days before the lesson to have students bring in 2-3 containers/packages (washed) of foods they eat at home. See *Parent Letter*.

Motivation: Ask students what foods they ate for dinner last night.

Procedure:

Mini-Lesson:

- 1) Have students name the foods they ate for dinner the night before. Discuss where these foods came from (plant or animal).
- 2) Make a T-chart on the board. Ask for volunteers to share one of the containers they brought in, tell what it is and whether it comes from an animal or plant. Allow for several students to share. As students share, demonstrate how to keep a tally on the board.
- 3) Begin a class discussion by asking students: What is the difference between plants and animals? (i.e., animals have feelings, plants have roots) Show pictures of animals and plants to elicit responses.



Small-Group Activity:

- 1) Put students in groups of 4-5 with their containers/packages.
- 2) Have students fill out Your Food Tally Sheet with their group. Each student should fill out his/her own worksheet.

Summary:

Discuss the listings on Your Food Tally Sheet as whole class. Ask students if they learned anything new about the foods they eat.

Follow-up Activities:

- Visit a sanctuary for farm animals or a conventional farm. Make sure the students ask the farm owners how the animals got there, how they live, and how the animals will spend the rest of their lives.
- Watch the video “Babe” or “Chicken Run”
- Read Aloud: *Hope*, *Goosie’s Story*, *A Home for Henny*, *Sausage Patty*


Additional Resources:

- Farm Sanctuary, P.O. Box 150, Watkins Glen, NY 14981
www.farmsanctuary.org
- Animal Place, P.O. Box 5910 Vacaville, CA, 95696,
www.animalplace.org

References and Literature for Teachers:

- *Cultivating Compassion- A Humane Education Project of Farm Sanctuary: Teachers’ Guide.* 2001
- *Healthy Eating for Children* by Physicians Committee for Responsible Medicine
- *The Food Revolution* by John Robbins
- *Food for Life: How the New Four Food Groups Can Save Your Life* by Neal Barnard, M.D.

Literature Connections



- ★ *Hope* by Randy Houk
- ★ *Saving Emily* by Nicholas Read
- ★ *Goosie’s Story* by Louise van der Merwe
- ★ *A Home for Henny* by Karen Davis
- ★ *Sausage Patty* by Diane Allevato

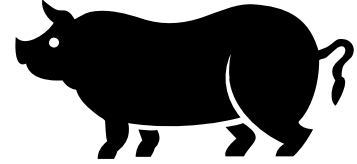
(See appendix for annotated bibliography.)

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding – Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.



Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

ELA Standard 4 - Language for Social Interaction – Students will read, write, listen, and speak for social interaction.

Listening and Speaking

Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

MST Standard 7 – Interdisciplinary Problem Solving – Students will apply the knowledge and thinking of mathematics, science, and technology to address real-life problems and make informed decisions.

Connections

1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.

Name: _____ Date: _____

Group: _____

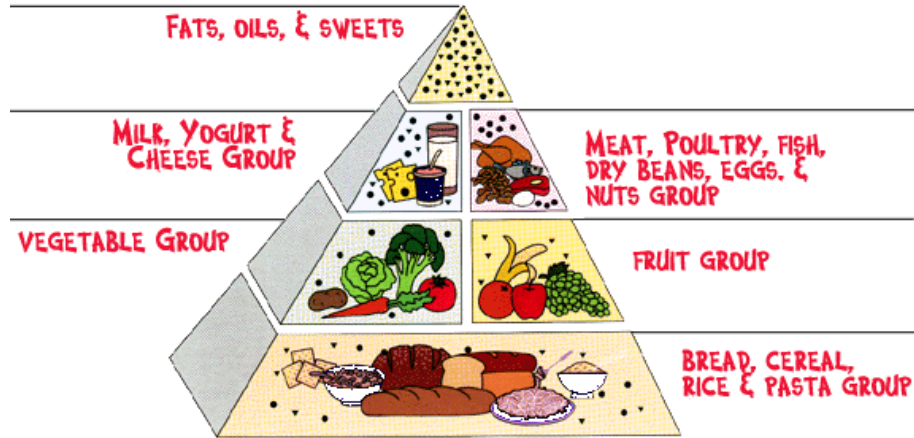
Your Food Tally Sheet

From an Animal	From a Plant

Your Food

USDA Food Pyramid

6 Food Groups



Where does the food come from?

Food	Animal	Plant
Fats, Oils & Sweets		
Milk, Yogurt & Cheese		
Meat		
Poultry		
Fish		
Eggs		
Beans & Nuts		
Vegetables		
Fruits		
Bread, Cereal, Rice & Pasta		

3) What is the difference between Animals and Plants?

Exploring Good Food Habits

Grades: 2-3

Objective I:

Academic:

- Students will become familiar with the food pyramid chart.
- Students will learn which foods go with which part of the pyramid.

Affective:

- Students will listen and read to acquire information and understanding.

The chart on this page is the U.S. Department of Agriculture's (USDA) 2005 Food Pyramid. For more information log onto www.mypyramid.gov/professionals/index.html or www.mypyramid.gov/index.html.

USDA Food Pyramid



Food Groups:

- 1) Orange = Grains
- 2) Green = Vegetables
- 3) Red = Fruits
- 4) Yellow = Oils
- 5) Blue = Milk
- 6) Purple = Meat and Beans

Materials: USDA 2005 Food Pyramid Chart

Motivation: Ask students which foods they enjoy eating. Is each food named a grain, vegetable, fruit, milk, meat or bean, or oil?

Procedure:

Mini-Lesson:

- 1) Display copy of the USDA Food Pyramid.
- 2) What are the categories of foods?
- 3) Name foods that belong in each category.
- 4) Using several pieces of poster board or oak tag, on separate sheets, write the names of the different categories of foods: 1) Grains = breads, cereals, pastas; 2)Vegetables; 3) Fruits; 4) Milk or Soy Milk; 5) Meat and Beans = dry beans, eggs, meat, poultry, fish; 6) Fats and Oils.

Small-Group Activity:

- 1) Divide class into six groups.
- 2) Assign each group one food-category. Have students find and cut out three or more pictures of food from magazines and newspapers that represent that category.

Summary:

- 1) Each group, in turn, will name the foods they selected and paste or tape them to the correct poster board or oak tag chart. Talk about the fact that some foods may be high in oil or fat such as fried foods, cheeses, eggs and nuts.

Objective II:

Academic:

- Students will be able to choose foods using Food Pyramid guidelines

Affective:

- Students will listen and read to analyze and evaluate information.

Procedure:

Mini-Lesson:

- 1) Write the servings recommended under each food category. Adjust recommended servings for the age of your students as recommended by USDA guidelines. The following are recommendations for a 1,200 calorie diet. See *My Food Pyramid Intake Patterns* at www.mypyramid.gov/professionals/index.html.

2) Discuss recommended servings with students. Have them name foods that they might eat for breakfast, lunch, dinner and a snack to meet requirements.

- breads, cereals, pastas (4 X 1 oz. servings)
- vegetables (3 servings, 1 ½ cups)
- fruits (2 servings, 1 cup)
- dairy group (2 servings, 2 cups)
- dry beans, eggs, nuts, meat, poultry, fish (3 servings. 3 oz.)
- fats and oils (use sparingly, 4 teaspoons maximum)



Small-Group Activity:

- 1) Divide class into groups.
- 2) Have each group work together to design a breakfast, lunch, dinner and snack that meets the recommended guidelines.
- 3) Circulate among groups to see what each group has chosen. Help them meet recommended guidelines.

Summary:

- 1) Have members of one or more groups present their list to the class.
- 2) Which foods should you eat most?
- 3) Which foods should you eat least?

Objective III:

Academic:

- Students will begin to understand how food choices are made.
- Students will be able to name a variety of healthy and not as healthy foods.

Affective:

- Students will apply the knowledge and thinking of mathematics and science to address real-life problems and make informed decisions.

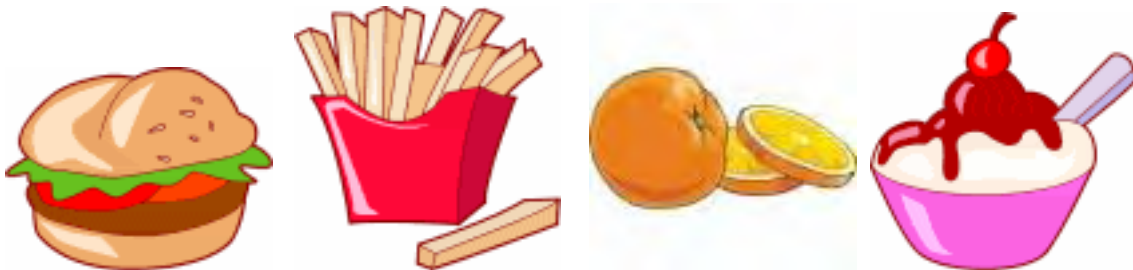
Procedure:

Mini-Lesson:

- 1) Ask the students why they choose to eat the foods they do. Do they choose a food because it is healthy? Or because their friends eat that food?
- 2) Ask students which foods they eat that their parents eat.
- 3) Do they eat any foods that do not taste good to them? If so, why?
- 4) Do they choose foods because they are healthy? If not, why do they choose the foods they eat?
- 5) Discuss the health value of eating some whole grains and green vegetables each day.

Small-Group Activity:

- 1) Have groups of students observe which food schoolmates eat the most at breakfast during one week in the school cafeteria.
- 2) Which foods do their schoolmates eat the most during lunch during one week in the school cafeteria.



Summary:

Discuss which foods were eaten the most in the school cafeteria. Why do they think that their schoolmates choose those foods? Are there healthier choices than those their schoolmates chose? If so, what are they?

References for Teachers:

- "I Love Animals and Broccoli Activity Book", The Vegetarian Resource Group, P.O. Box 1463, Baltimore, MD 21203

- "Simply Vegan" with a complete nutrition section by Reed Mangels, Ph.D., R.D., The Vegetarian Resource Group, P.O. Box 1463, Baltimore, MD 21203 www.vrg.org
- Citizens for Healthy Options in Children's Education (CHOICE) www.choiceusa.net
- The American Heart Association. Contact the local chapter in the telephone book.
- "Creative Food Experiences for Children", from Center for Science in the Public Interest, 1875 Connecticut Avenue, N.W. Washington, DC 20009-5728
- "Mathematics and Global Survival" by Richard Schwartz (Contact Richard Schwartz, #H7, Mathematics Department, C.U.N.Y., Sunnyside Campus, Staten Island NY 10301)

New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding – Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 7 – Interdisciplinary Problem Solving – Students will apply the knowledge and thinking of mathematics, science, and technology to address real-life problems and make informed decisions.

Connections

1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.

Barnyard Gossip

Grades: 3 – 6

Objectives:

Affective:

- Students will demonstrate respect and appreciation for farm animals.

Academic:

- Students will distinguish between fact and opinion.
- Students will examine prior knowledge of farm animals and compare this to new factual information presented.

Materials:

- Pictures of cow, pig, chicken; Set of “Fact” cards for each animal; Set of “Story” cards for each animal. Contact Farm Sanctuary (see Additional Resources) for a Cultivating Compassion Kit for your grade level for these materials.
- Barnyard Gossip student activity sheet.



New Vocabulary:

- Gossip – chatty talk that can be true or false
- Reputation – the way someone is thought of by others
- Stereotype – thinking that everyone of a group is just like every other one
- Fact – a piece of information that is true
- Opinion – A belief that is based on what a person thinks rather than on what is proved to be true (it may be necessary to help students distinguish between fact and opinion)

Motivation:

Introduce new vocabulary – gossip, reputation, stereotype, fact, opinion. Give examples. Ask if any of the students have ever been the subject of gossip, or know someone with a bad reputation that they found to be wrong once they got to know that person. Ask: Is this fair to the person?

Procedure:

Mini-Lesson:

- 1) Discuss how gossip helps create reputations that often lead to stereotypes.

- 2) Tell them that they will be taking a look at what they've heard about farm animals and comparing it to facts about farm animals (provide definition of a fact).
- 3) On separate sheets of chart paper write: 1) I heard that chickens..., 2) I heard that pigs..., 3) I heard that cows...
- 4) Display pictures of each animal
- 5) Elicit 4-5 pieces of "gossip" (things they have heard) about each animal from students (i.e., pigs are dirty, chickens are afraid, cows are dumb) and write them on appropriate sheet of chart paper (referred to in procedure #3).

Note to Teacher: Some misinformation portrays animals as living in much better circumstances than they actually do (i.e., "I heard that pigs are happy on farms"). This would be a good time to talk about how animals live in factory farms and show pictures if appropriate. Books listed in the follow-up activities can help you explore this issue with students.

Small-Group Activity:

- 1) Divide class into 3 groups: Friends of Cows, Friends of Pigs, Friends of Chickens
- 2) Pass out Barnyard Gossip student sheet.
- 3) Select a student to be the Reporter for each group
- 4) Give each group their respective sheet of chart paper (with "gossip"), "Fact" and "Story" cards, and the picture of their animal
- 5) Have students read their "Fact" and "Story" cards to each other in their groups
- 6) After all "Fact" and "Story" cards are read, have students evaluate the gossip about their animal by answering the questions on the Barnyard Gossip student sheet.


Summary:

- 1) Have each group report what they have learned about their animal to the rest of the class.
- 2) Have any student with a personal story about a cow, pig, or chicken tell their story briefly after each group finishes reporting.

Follow-up Activities:

- Visit a sanctuary for farm animals or a conventional farm. Before the visit, brainstorm a list of questions to ask the farmer including, but not limited to how the animals got there, how they live, and how the animals will spend the rest of their lives.
- Watch the video "Babe" or "Chicken Run"
- Read Aloud books that can help you explore the issue of factory farms with your students.

Literature Connections



★ *Hope* by Randy Houk

★ *Saving Emily*
by Nicholas Read

★ *Goosie's Story*
by Louise van der Merwe

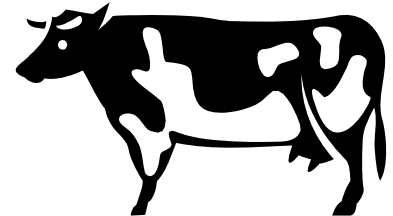
★ *A Home for Henny* by Karen Davis

★ *Sausage Patty* by Diane Allevato

Additional Resources:

References and Literature for Teachers:

- *Cultivating Compassion- A Humane Education Project of Farm Sanctuary: Teachers' Guide*
- *Peaceful Kingdom: Random Acts of Kindness by Animals* by Stephanie Laland
- *Animal Angels: Amazing Acts of Love and Compassion* by Stephanie Laland



New York State Standards Addressed:

ELA Standard 1 – Language for Information and Understanding – Students will read, write, listen, and speak for information and understanding.

Listening and Reading

1. Listening and reading to acquire information and understanding involves collecting data, facts, and ideas; discovering relationships, concepts, and generalizations; and using knowledge from oral, written, and electronic sources.

Speaking and Writing

1. Speaking and writing to acquire and transmit information requires asking probing and clarifying questions, interpreting information in one's own words, applying information from one context to another, and presenting the information and interpretation clearly, concisely, and comprehensibly.

ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

ELA Standard 4 - Language for Social Interaction – Students will read, write, listen, and speak for social interaction.

Listening and Speaking

1. Oral Communication in formal and informal settings require the ability to talk with people of different ages, genders, and cultures, to adapt presentations to different audiences, and to reflect on how talk varies in different situations.

Lesson adapted from CULTIVATING COMPASSION by Farm Sanctuary with permission.

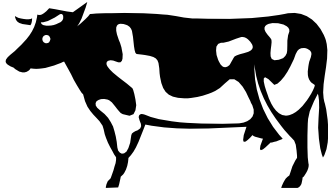
Addendum #1:

Name: _____ Date: _____

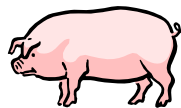
Barnyard Gossip Activity Sheet

Circle the animal for your group.

Cow



Pig



Chicken



1) Is the gossip true? Explain your answer.

2) Is the gossip a good or bad thing for this animal? Explain your answer.

3) How could we help this animal be more appreciated? (Answer in complete sentences on the lines below.)

Studying Human Nutrition

Grade: 6

Objective:

Affective:

- Students will understand that there are three major ways (methods) of conducting scientific research on human health. These are:
 - 1) studies of large populations (epidemiological) studies
 - 2) studies on a small number of people (case or clinical studies)
 - 3) studies using non-humans as the subjects (experimental)

Academic:

- Students will read, write, listen, and speak for critical analysis and evaluation.
- Students will document epidemiological, case study and experimental research.

Motivation:

Have students bring in articles from newspapers or magazines about health studies over the course of a one-or-two-week period. The media is full of studies about the newest drug, influence of certain foods, health problems from pollution, etc.



Procedure:

Mini-Lesson:

- 1) Explain to the students the different ways of doing research. Give examples (see addendum #1) and help students identify what kind of study each example represents.
- 2) Set-up three charts on the blackboard, one for each type of research.
- 3) Have several students read their article to the class.
- 4) Have students in the classroom tell which type of research each article is describing and how they know that: population, case or clinical study, or experimental research on non-human subjects.
- 5) Tape article to chart for that kind of research.

Small-Group Activity:

- 1) Divide the students into groups.
- 2) Have students read their articles to the group.
- 3) The group will decide what kind of research each article describes and tape it to the appropriate chart.
- 4) Do any of the articles refer to more than one type of research?

Summary:

Scientists do different types of research to learn about human health. These fall into the categories of:

- 1) population studies of large groups of people such as an ethnic group or an entire country
- 2) case studies of a small number of people
- 3) research on non-human subjects

Follow-Up Activities:

- The American Heart Association, the American Cancer Society, the National Cancer Institute and other health agencies have recommended that Americans eat more fruits and vegetables and less fatty foods. Interview the director (or other head) of your school lunchroom. Is your school cafeteria serving more fruits and vegetables and less fatty foods? When healthy foods are served in school, survey how well they are eaten.
- Survey why your classmates eat the way they do. Put together a questionnaire asking what foods students eat and why. Compare girls versus boys. Compare older and younger students at your school. Are there differences?
- Can you affect people's eating habits? Survey the eating patterns of students in your classroom. Then try different strategies to see if you can effect student eating habits. Have a group of students obtain information from the American Heart Association to share with the class. Bring in a speaker from this or another

- health group. Show a video on eating healthy foods. Survey the eating habits of the students one week after all presentations have been made. Compare to see if education had any effect on eating habits.
- Do research to find out if you can see relationships between eating patterns and disease. Use library books and Internet websites. What food choices are recommended for people with diabetes? Heart conditions? Other diseases? How do food choices affect people's health?

References for Teachers:

- New York Coalition for Healthy Schools www.healthylunches.org
- *Vegetarianism in a Nutshell* www.vrg.org/nutshell/nutshell.htm
- Vegetarian Resource Group www.vrg.org
- Citizens for Healthy Options in Children's Education (CHOICE) www.choiceusa.net
- American Dietetic Association www.eatright.org/Public
- Center for Science in the Public Interest www.cspinet.org
- Dole Nutrition Information www.dole5aday.com
- New Century Nutrition www.newcenturynutrition.com
- Leafy Greens Council www.leafy-greens.org
- Children's Pyramid <http://www.mypyramid.gov/kids/index.html>

New York State Standards Addressed:

ELA Standard 3 - Language for Critical Analysis and Evaluation – Students will read, write, listen, and speak for critical analysis and evaluation.

Listening and Reading

1. Listening and reading to analyze and evaluate experiences, ideas, information, and issues requires using evaluative criteria from a variety of perspectives and recognizing the difference in evaluations based on different sets of criteria.

MST Standard 4 – Science – Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

The Living Environment

1. Living things are both similar to and different from each other and nonliving things.

Addendum # 1:

Students should tell which type of research has been used in each case, i.e. population study (PS), clinical study (CS), or research on non-human subjects (NHS)

1. During World War I, Denmark was blockaded by the allies. The death rate from disease fell when almost the whole country was placed on a vegetarian diet. (PS)
2. During World War II, when restrictions on meat consumption were imposed on Norway because of the German occupation, death rates from heart disease and diabetes fell. (PS)
3. Autopsy studies on soldiers killed during the Korean War revealed "hardening of the arteries" among Americans, but not among the Koreans who ate a diet less centered on meat. (PS)
4. A scientist from Cornell University in New York studied 6,500 men and women living in China. The scientist noted that very few Chinese are overweight, as compared to people in the United States. (PS)
5. A 1973 study in Boston compared a small group of meat eaters to a group of vegetarians. The meat eaters had higher blood cholesterol. (CS)
6. Scientist at the United States Department of Agriculture gave one group of people vitamin C tablets and another group ate large portions of vegetables containing the same amount of vitamin C. The scientists wanted to know if vitamin C from one source was better than that from another source. (CS)
7. Scientists had one group of children eat a typical American diet. Another group followed a special diet which had no food additives. The scientists saw no difference in behavior between the children in each group. (CS)
8. Scientists wanted to know how much vitamin C is in broccoli. To find out they put the broccoli in a test tube with chemicals to see the reactions. (NHS)
9. Scientists wanted to know if the calcium in limestone is the same as that in broccoli. They put the broccoli in a beaker with chemicals to see the reaction. (NHS)
10. Some scientists believe that humans need 400 milligrams of calcium while others believe they need 1,200 milligrams of calcium a day. The scientists used a computer program to construct the two diets containing either 400 or 1,200 milligrams of calcium and compared the two diets for the amount of fat, iron and other nutrients. (NHS)

11. Scientists observed what chimpanzees eat in the wild. They set up a hidden video camera in the jungle. (NHS)

Careers Working With Animals

There are many and varied career opportunities available for those interested in working with animals. The following is a list of resources you may use in your efforts to find additional information about careers that are interesting to you in an animal related field. Your local bookstore and library should have further resources such as a list of colleges that have courses in animal fields.

Books:

Shorto, Russell. 1992. Careers for Animal Lovers. Choices: The Millbrook Press: Brookfield, Connecticut.

Hurwitz, Jane. 1997. The World of Work: Choosing a Career in Animal Care. The Rosen Publishing Group, Inc.: New York, New York.

Miller, Louise. 1991. Careers for Animal Lovers & Other Zoological Types. VGM Career Horizons, a division NTC Publishing: Lincoln, Illinois.

Barber, Kim. 1996. Career Success with Pets. Howell Book House, A Simon & Schuster/Macmillan Company: New York, New York.

Sirch, Willow Ann. 2000. Careers with Animals, The Humane Society of the United States. Fulcrum Publishing: Golden, Colorado.

Goodman, Susan. 2000. Animal Rescue: The Best Job There Is. Simon & Schuster: New York, NY

Fitzsimmons, Paula. 2002. 105 Careers for Animal Lovers. PJ Publications: Madison, WI

Reeves, Diane Lindsey and Huebeck, Nancy. 2000. Career Ideas for Kids Who Like Animals and Nature. Checkmark Books, New York, NY

Pasternack, Ceel and Thornburg, Linda. 1999. Cool Careers for Girls with Animals. Impact Publications, Manassas Park, VA

Goodman, Susan E. 2000. Animals Rescue: The Best Job There is. Simon and Schuster, New York, NY

Occupational Outlook Handbook <http://stats.bls.gov/ocohome.htm>

This website offers a detailed description of the nature of these animal related careers, the work involved, the training and educational requirements needed, the earnings, the working conditions, and the outlook for the future of the career.

Some Web Sites for Some Careers with Animals

Veterinarian

<http://www.avma.org/careforanimals/animatedjourneys/aboutvets/becomingvet.asp>

Veterinary Technician

<http://www.avma.org/careforanimals/animatedjourneys/aboutvets/survey.asp>

Wildlife Rehabilitator

<http://www.owra.org/becoming.htm>

<http://www.nwrawildlife.org>

Animal Attendant/Kennel Worker, Groomer

<http://www.bls.gov/oco/ocos168.htm>

Animal Behaviorist/Animal Trainer

http://www.animalbehaviorcollege.com/gooddawg/abu/page_careeropps.htm

Humane Educator

<http://aphe.vview.org>

Therapist

<http://www.deltasociety.org>

<http://www.thegooddogfoundation.org>

Lobbyist/Lawyer

http://www.wetfeet.com/asp/careerprofiles_overview.asp?careerpk=21

<http://www.bls.gov/oco/ocos053.htm>

<http://www.princetonreview.com/cte/profiles/dayInLife.asp?careerID=88>

Humane Law Enforcement/Animal Control Officer

http://www.aspca.org/animalprecinct_officer

<http://www.aspca.org/hle>

Zoologist/Marine Biologist

<http://www.bls.gov/oco/ocos047.htm>

http://www.animaland.org/framesets/career_frameset.asp

<http://www-marine.stanford.edu/HMSweb/careers.html>

Publications

http://www.wetfeet.com/asp/careerprofiles_overview.asp?careerpk=12

<http://www.bls.gov/oco/ocos020.htm>

Photographer and Visual Artist

http://www.wetfeet.com/asp/careerprofiles_outlook.asp?careerpk=43

http://www.animaland.org/framesets/career_frameset.asp

RESOURCE ORGANIZATIONS

American Anti-Vivisection Society (Animalearn)

801 Old York Road #204

Jenkintown, PA 19046

215-887-0816

www.aavs.org

www.animalearn.org

American Fund for Alternatives to Animal Research (AFAAR)

175 West 12th Street, Suite 16g

New York, NY 10011

American Museum of Natural History

Central Park West and 79th St

New York, NY 10024

212-769-5100

www.amnh.org

American Society for the Prevention of Cruelty to Animals (ASPCA)

424 East 92nd St

New York, NY 10128

212-876-7700

www.aspca.org and www.animaland.org

Animal Place

3448 Laguna Creek Trail

Vacaville, CA 95688

phone: 707-449-4814

www.animalplace.org

Animal Protection Institute

1122 S. Street

Sacramento, CA 95814

916-447-3085

www.api4animals.org

Animal Welfare Institute

PO Box 3650

Washington, DC 20027

202-337-2332

www.awionline.org

Audubon Society

700 Broadway
New York, NY 10003

www.audubon.org

**Chimpanzee and Human
Communication Institute**

Central Washington University
400 East 8th Avenue
Ellensburg, Wa 98926-7573

www.cwu.edu/~cwuchi

Cornell Lab of Ornithology

159 Sapsucker Woods Road
Ithaca, NY 14850

www.ornith.cornell.edu

Doris Day Animal Foundation

227 Massachusetts Ave NE, Suite 100
Washington, DC 20002
2020-546-1761 ext 31

www.ddaf.org

E: The Environmental Magazine

28 Knight Street
Norwalk, CT 06815
phone: 208-854-5559

www.emagazine.com

EarthSave International

1509 Seabright Avenue, Suite B1
Santa Cruz, CA 95062
831-423-0293

www.earthsave.org

FARM (Farm Animal Reform Movement)

PO Box 30654
Bethesda, MD 20824
301-530-1737

www.farmusa.org

Farm Sanctuary

PO Box 845
New York, NY 10040
212-567-4556
www.farmsanctuary.org

Friends of Animals
777 Post Road Suite 205
Darien, CT 06820
203-656-1522
www.friendsofanimals.org

Humane Education Advocates Reaching Teachers
P.O. Box 738
Mamaroneck, NY 10543
212-744-2504

Humane Society of the United States
2100 L St. NW
Washington, DC 20037
202-452-1100
www.hsus.org

In Defense of Animals
131 Camino Alto, Suite E
Mill Valley, CA 94941
415-388-9641
www.idausa.org

International Institute of Humane Education
PO Box 260
Surry, ME 04684
207-667-1025
www.iihe.org

Jane Goodall Institute also Roots & Shoots
PO Box 599
Ridgefield, CT 06877
www.janegoodall.org

Kids and Critters
518 Lorraine Avenue
Santa Barbara, CA 93110

Medical Research Modernization Committee (MRMC)

3200 Morley Rd
Shaker Heights, OH 44122
www.mrmcmed.org

National Anti-Vivisection Society

53 West Jackson Blvd
Chicago, IL 60604
800-888-6287
www.navs.org

NAHEE (National Association for Humane and Environmental Education)

PO Box 362
East Haddam, CT 06423
860-434-8666
www.nahee.org, www.kindnews.org, www.humaneteen.org

New England Anti-Vivisection Society

(Living Earth Learning Project)
333 Washington Street Suite 850
Boston, MA 02108-5100
phone: 607-523-6020
www.neavs.org

New York Coalition for Healthy School Lunches

P. O. Box 925
Bellport, NY 11713
phone: 631-286-8720
www.healthylunches.org

New York State Department of Environmental Conservation

625 Broadway
Albany, NY 12233
518-402-8014
www.dec.state.ny.us

New York State Education Department

89 Washington Avenue
Albany, New York 12234
www.nysed.gov

New York State Humane Association

PO Box 3068
Kingston, NY 12402
www.nyshumane.org

Peninsula Humane Society

12 Airport Boulevard
San Mateo, CA 94401
phone: 650.340.7022

www.peninsulahumanesociety.org

People for the Ethical Treatment of Animals

501 Front St
Norfolk, VA 23510
757-622-7382

www.PETA-online.org

Performing Animal Welfare Society

PO Box 849
Galt, CA 95632
phone 209-745-2606

<http://envirolink.org/paws>

Psychologists for the Ethical Treatment of Animals

P.O. Box 1297
Washington Grove, MD 20880
Phone/Fax: 301-963-4751

www.psyeta.org

Physicians Committee for Responsible Medicine (PCRM)

PO Box 6322
Washington, DC 20015
phone: 202-686-2210

www.pcrm.org

Project PigeonWatch

Cornell Lab of Ornithology
P.O. Box 11
Ithaca NY 14851-0011

1-800-843-BIRD

<http://birds.cornell.edu/ppw/>

Roots and Shoots

The Jane Goodall Institute
8700 Georgia Avenue, Suite 500
Silver Spring, MD 20910
800-592-JANE

www.rootsandshoots.org

Sierra Club

85 Second Street
San Francisco, CA 94105-3441
phone: 415-977-5500
www.sierraclub.org

United Action for Animals
PO Box 635
Lenox Hill Station
New York, NY 10021
phone: 212-249-9178
www.ua4a.org

**United Federation of Teachers
Humane Education Committee**
52 Broadway
New York, NY 10004
212-410-3095
www.uft.org/member/today/committees/humane

United Poultry Concerns
PO Box 150
Machipongo, VA 23405-0150
phone/fax: (757) 678-7875
<http://www.envirolink.org/upc>

United States Department of Agriculture
Washington, D.C 20250
www.usda.gov

United States Department of the Interior
1849 C Street, NW
Washington, DC 20240
www.doi.gov

United States Food and Drug Administration
5600 Fishers Lane
Rockville MD 20857
1-888-INFO-FDA
www.fda.gov

Vegetarian Resource Group
PO Box 1463, Baltimore, MD 21203
phone:(410) 366-8343
www.vrg.org

Wave Hill Center for Environmental Studies

675 West 252 Street

Bronx, NY 10471

(718) 549-3200

www.wavehill.org

Wildlife Conservation Society (includes Bronx, Queens, Prospect Park and Central Park Zoos plus New York Aquarium)

2300 Southern Boulevard

Bronx, New York 10460

718-220-5100

www.wcs.org

Wildlife Watch

P.O. Box 562

New Paltz, NY 12561

phone: 845-256-1400

www.wildwatch.org

World Society for the Protection of Animals

34 Deloss St

Framingham, MA 01702

508-879-8350

www.wspa-usa.org

* Clip art used in the Companion Issues, Wildlife Issues and Farmed Animals Issues pages as well as in the Bibliography and Resource Organization pages has been taken from www.clipartinc.com.

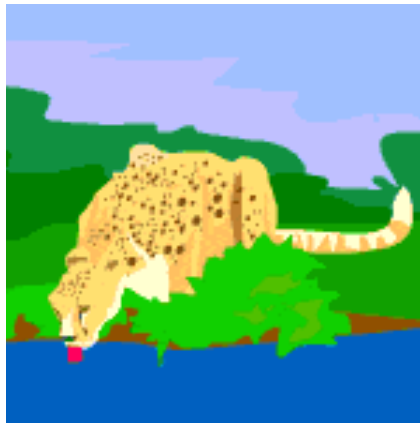


puma

Books for Children and Adults

The following organizations offer a listing of books for students and resource materials for teachers including updated annual book awards:

- **American Society for the Prevention of Cruelty to Animals (ASPCA) Children's Bibliography**
www.asPCA.org/site/PageServer?pagename=al_bookaward
- **National Association for Humane and Environmental Education (NAHEE) Humane Education Research and Evaluation Documents** www.nahee.org/research_evaluation/documents.asp
- **National Association for Humane and Environmental Education (NAHEE) Best Books for Children**
www.nahee.org/awards/best_books.asp
- **World Animal Net: Humane Education Resources Available**
<http://worldanimal.net/hme-resources.html>



cheetah