This packet is the senior part of a series of worksheet packets available at both junior (grades 3-4) and senior (grades 5-6) levels that covers a variety of humane and environmental topics. Each packet includes 10 worksheets, all of which originally appeared in past issues of the annual teaching magazine "KIND (Kids in Nature's Defense) Teacher." Worksheets in this packet include the following: Bat Math, Fish Faces, Hooray for Hoppers, Know Your Predators, Mouthing Off, No MAYBEs with Rabies, Our Wild Neighbors, Searching for Endangered Animals, Track Math, and Wonderful Whales. Contains an answer key. (JRH)
Dear Educator:

Thank you for ordering the enclosed humane education worksheet packet. It is part of a series of teaching packets available at both junior (grades 3-4) and senior (grades 5-6) levels that cover a variety of humane and environmental topics. Each packet includes ten worksheets, all of which originally appeared in past issues of our annual teaching magazine KIND Teacher.

If you enjoy using these worksheets, you will want to know more about KIND Teacher and KIND News. KIND Teacher is an annual teaching magazine full of worksheets and ideas. It is a special gift to subscribers of KIND (Kids In Nature's Defense) News. KIND News is a colorful newspaper that arrives in your classroom in bundles of thirty-two copies (one for each student) each month from September to May. Each issue includes a teaching guide. A subscription to KIND News costs $20, begins in September, and includes KIND Teacher, a classroom poster, and KIND ID cards for students. Three reading levels are available: KIND News Primary (grades K-2), KIND News Jr (grades 3-4) and KIND News Sr (grades 5-6). Write to us at the above address to request a free sample.

If you are a humane education specialist at an animal shelter, you may find the enclosed worksheets most useful as part of a demonstration lesson in a workshop for teachers. Write to us and let us know if you would like information about giving humane education workshops for teachers or how you can make KIND News and KIND Teacher available to teachers in your area.

Thank you again for your interest in our materials. We wish you every success in bringing an important message about humane and environmental education to your community.

Sincerely,

Willow Ann Soltow
Director, Teacher Training & Resources
Bat Math

Bats are amazing animals. They may look scary, but they are nothing to be afraid of. They help us, not hurt us.

Directions: Work the problems to find the numbers that are missing from these sentences.

1. There are almost ____ species, or kinds, of bats. (5 + 5) x 100
   Nearly one-fourth of all mammal species are bats!
2. A bat’s wingspan (length of its wings from tip to tip) may be as little as ____ inches or as big as (2 + 1) x 2
   ____ feet. Some large bats are called flying foxes. (3 + 3) x 1
3. More than ____ species of bats eat insects. (30 + 35) x 10
4. Some bats fly ____ miles each night in search of (2 + 3) x 5
   food.
5. A bat’s heart can beat ____ times a minute. (25 + 25) x 20
6. Since pipistrelle bats weigh 1/4 ounce each, ____ (4 + 4) x 8
   of them would weigh only one pound (16 ounces).
7. Small bats learn to fly when they are only ____ (3 + 4) x 3
   days old.
8. Most bats live only four or five years, but some have lived to be ____ years old. (2 + 3) x 6
9. As many as ____ flying foxes may roost together (500 + 500) x 10
   in trees.
10. Some bats are endangered. There are only about ____ Rodrigues flying foxes alive today. (17 + 3) x 10

On the back of this sheet, draw two pictures. In the first picture, show yourself putting up a bat house. In the second picture, show the endangered bats living in the house.
Fish Faces

Animals have adapted to live in certain places. This means they have changed over millions of years so they can live in one place. The place an animal lives is its habitat. When an animal's habitat is destroyed, there is often no other place the animal can live. For all fish in a habitat to live, for instance, they must be able to share the food that is there. How do they do this? Each has adapted so that it eats different things.

Directions: Match up the fish mouths with the correct fish description below.

1. _____
2. _____
3. _____
4. _____

A. The parrotfish has strong teeth that form a parrotlike beak. With its powerful mouth, it bites off chunks of coral to get the food inside.

B. The goatfish's mouth is positioned at the very bottom of its head for feeding on the sandy ocean floor. Its whiskerlike barbels feel for food.

C. The barracuda is a fierce predator. It catches other fish in its long sharp jaws.

D. The mouth of the filefish is very small. Its mouth is so tiny that it must spend most of its time eating just to stay alive.

Today, many saltwater fish are dying. They are being captured so people can have saltwater aquariums. But for each fish that is captured, many others are killed. Dynamite and poison are used to capture them. This kills many of the fish, but a few are just stunned. These are captured.

On the back of this sheet, draw a poster. The poster should tell people why it is better to have a freshwater (not a saltwater) aquarium.
Hooray for Hoppers

Help! Frogs are disappearing around the world. There are fewer and fewer of them. No one knows why. Could it be a warning to us to clean up the Earth? We need to keep our Earth clean.

That would help frogs and people too! Unscramble the words in the sentences below to learn more about these amazing hoppers. Write the correct letters in the blanks.

1. There are more than 3,000 kinds of frogs in the __ __ __ __.
   drolw

2. All frogs are great hoppers, but one kind can hop forty times its own __ __ __ __.
   gnelht.

3. As a tadpole, a frog breathes with gills just as __ __ __ do.
   shif

4. The coloring of many frogs helps them to __ __ __ from their enemies.
   ehid

5. When a tadpole grows up, its __ __ __ disappear and it breathes with lungs.
   sligl

6. Frogs get the __ __ __ they need through their skin.
   ratew

7. Toads are a __ __ __ of frog.
   dink

8. The Goliath frog of West Africa is the largest frog and may __ __ __ up to seven pounds.
   whegi

9. Frogs have see-through eyelids that __ __ __ __ their eyes but let them see underwater.
   torpcet

10. Frogs need to stay in __ __ __ __ where it is wet, or they can dry out and die.
    calpes

Students are sometimes asked to dissect frogs. (When you dissect something you cut it apart to learn more about it.) The frogs are collected from the wild. Many come from the U.S. or Mexico. More and more students are saying that they do not need to dissect. They can learn the same things from books, computer programs, and plastic frog models.

On the back of this sheet, tell what you would say if your best friend asked you to help catch a frog for a school science fair project.
Know Your Predators

What do these animals have in common? They are all predators. Predators eat other animals in order to live. Use the words from the Word Box to answer the crossword clues. Cross off each word as you use it.

Word Box

frog  barracuda  snake  robin  anemone

eagle  tiger  bat  raccoon  owl

wolf  spider  orca  shrew  ladybug

Across

2. This small, furry, mouselike predator injects victims with venom.
4. This flying mammal eats mosquitoes.
6. This reptile predator often helps farmers by eating mice.
10. This fish is a fierce ocean predator.
13. This bird is a symbol of the United States.
14. This bird flies at night and mostly eats mice and other rodents.
15. This predator is related to the dogs we keep as pets.

Down

1. This large mammal lives in the ocean and eats mostly seals.
3. This insect predator eats tiny insects that feed on garden plants.
5. This large predator’s fur is striped.
7. This bird is known for a red breast and eats worms and insects.
8. This eight-legged predator is actually not an insect.
9. This amphibian eats many insects.
11. This predator often “washes” food before eating it.
12. This ocean predator cannot swim and waits for dinner to float by.
Mouthing Off

Follow these directions to make your own "mouthy" greeting card in the shape of a sea turtle.

To make your card:

1. Fold your paper (any size) in half like a card.

2. Now make one cut on your paper as shown here. (Cut on the folded side.) Your cut should be about 1 inch long.

3. Fold back the two cut corners as shown. Crease them really well.

4. Open your card just a little. Tuck the corners inside.

5. Open your card. The inside of your card now has a mouth! Look at the pattern below to help you draw a sea turtle around the mouth inside your card. Add a message like "Get well. Don't hide in your shell!" or "Sea you soon!" Send your card to someone who is sick or who needs to be cheered up.

GET WELL!

DON'T HIDE IN YOUR SHELL.
No MAYBEs with Rabies

Rabies is a dangerous disease. But we can keep ourselves and our pets safe. To find out how, count the number of words in each question below. If the question has an odd number of words, write no in the blank beside it. If the question has an even number of words, write yes in the blank. Answer only yes or no. No maybes with rabies!

1. Should you tell your parents right away if you are bitten by an animal? _____
2. Is it safe to pet a raccoon that acts very friendly? _____
3. Is it OK to keep a baby raccoon for a pet? _____
4. Should you get your dog or cat a rabies shot? _____
5. Should you keep your dog in a fenced yard or on a leash, so that he or she cannot meet wild animals? _____
6. Should you touch a wild animal that is sick or hurt? _____
7. Should you feed wild animals? _____
8. Is it safe to help an injured bat that you find lying on the ground? _____
9. Should you get a rabies shot for your cat who stays indoors? _____
10. Should you keep garbage cans closed up tightly so wild animals don’t come around? _____

Draw a picture to illustrate (tell about) one of the yes questions above. Use the back of this paper.
Our Wild Neighbors

Living in the city means adapting to buildings, streets, cars, and people. Many wild animals now live in our cities. They are able to find food, shelter, and safety there. We need to learn to live with our wild neighbors. Match each animal below with the description of how it has adapted to city life.

____ bat
1. You will find me wherever you find trees in a city—especially oak and nut trees. The hollows in these trees are good places to store acorns or make a warm nest for my babies.

____ spider
2. I am built just right for city life. I can creep quietly on all fours through dark, narrow spaces. I can eat almost every kind of food you can think of.

____ rat
3. Long ago, birds like me built their nests on cliffs. For the past 5,000 years or so, we have lived in cities around the world. Now we build our nests on skyscrapers. In some cities where there are a great many of us, people are asked not to feed us.

____ pigeon
4. A city bridge makes an excellent home for me. I like to live under a bridge because it stays dark and damp. A bridge can protect me from cold, wind, and rain all day while I sleep upside down beside others of my kind. I am a flying mammal.

____ squirrel
5. My kind of bird almost died out. DDT (a pesticide) made our eggs so weak, they broke. Today, our numbers are increasing.

____ peregrine falcon
6. My cousins and I spin our webs wherever there are insects to eat. You may find us indoors or outdoors. If you find me inside, you can put a glass over me, slip a piece of cardboard under the opening of the glass, and put me outside.

Pretend you are one of the animals named above. On the back of this paper, write a short story about one exciting day in your life. What sights and sounds do you live with in the city? What do you smell? What experiences do you have with people?
Searching for Endangered Animals

These endangered animals are hiding in the puzzle below. Can you find them?

babirusa  beaver  cheetah  condor
crocodile  elephant  gorilla  indri
jaguar  lemur  leopard  manatee
mandrill  ocelot  orangutan  panda
panther  pelican  rhinoceros  sea turtle
sifaka  tiger  vicuña  whale
whooping crane  wolf

Many of the endangered animals we hear about live far away. How can we help them? We can help by learning about them and telling others about the need to protect them.

Choose one of the animals from the word search puzzle. Find three fascinating facts about this animal to share with the rest of your class. Write them on the back.
Track Math

Who made these tracks? Multiply the numbers to complete the code. Then fill in the animals' names below.

<table>
<thead>
<tr>
<th>8</th>
<th>7</th>
<th>2</th>
<th>7</th>
<th>4</th>
<th>5</th>
<th>8</th>
<th>9</th>
<th>8</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>x8</td>
<td>x5</td>
<td>x9</td>
<td>x3</td>
<td>x8</td>
<td>x4</td>
<td>x3</td>
<td>x9</td>
<td>x2</td>
<td>x5</td>
</tr>
<tr>
<td>A=</td>
<td>B=</td>
<td>C=</td>
<td>D=</td>
<td>E=</td>
<td>F=</td>
<td>G=</td>
<td>H=</td>
<td>I=</td>
<td>J=</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>7</th>
<th>8</th>
<th>7</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>x4</td>
<td>x2</td>
<td>x5</td>
<td>x4</td>
<td>x3</td>
<td>x8</td>
<td>x6</td>
<td>x9</td>
<td>x6</td>
</tr>
<tr>
<td>N=</td>
<td>O=</td>
<td>P=</td>
<td>R=</td>
<td>S=</td>
<td>T=</td>
<td>U=</td>
<td>V=</td>
<td>W=</td>
</tr>
</tbody>
</table>

Animals go barefoot! Their paws can get hurt on litter such as cans, wire, and glass. Make a sign asking people to help animals by not littering.
This worksheet will help build students' appreciation for whales. Many whale species are endangered.

**Wonderful Whales**

Find these whale words in the puzzle.

- baleen
- breach
- fin
- mammal
- pilot
- spout
- beluga
- bull
- flukes
- minke
- right
- spyhopping
- blowhole
- calf
- gray
- narwhal
- sea
- submerge
- blubber
- cetaceans
- humpback
- ocean
- song
- whale
- blue
- cow
- krill
- orca
- splash
- calf
- gray
- narwhal
- sea
- submerge
- humpback
- ocean
- song
- whale

Now unscramble the words in these whale facts.

1. There are about 90 **snikd** of whales. _________
2. A baby whale may **angi** 200 pounds in one day. _________
3. Large whales can stay underwater for more than an **ruho**. _________
4. Gray whales travel 20,000 miles each **arey**. _________
5. A blue whale may weigh **remo** than 150 tons. _________
6. A humpback’s song can be **dareh** underwater for hundreds of miles. _________

We need to keep oceans clean for people and animals. Draw a picture of a happy whale in a clean ocean.
Wild Animals (senior level)

Bat Math

1. 1,000
2. 6,6
3. 650
4. 25

The bat is an amazing animal! You may want to remind students, however, that they should never touch a bat who is lying on the ground—just as they should never touch any wild animal. A bat who cannot fly may be sick and should not be handled.

1. 6,64
2. 7.21
3. 9,1000
4. 10,200

No MAYBEs with Rabies

1. yes, 2. no, 3. no, 4. yes, 5. yes, 6. no, 7. no, 8. no, 9. yes (even indoor cats get outside sometimes), 10. yes.

As a follow-up, share these rabies facts:
Rabies is caused by a virus. It is contracted only by mammals. Meat-eating animals, including raccoons, foxes, and bats, are most susceptible. Plant-eating animals, like squirrels and opossums, can get rabies, but that happens rarely.

No MAYBEs with Rabies

Share these prevention facts: To prevent the spread of rabies, people need to immunize their dogs and cats routinely. A person who has been bitten by an animal who may have rabies must have an immediate post-exposure injection. These shots are given in the arm, and a person may need five or six shots over a period of time. You cannot tell if an animal has rabies just by looking at it. You should never pet a wild animal. If the animal has rabies and you have a cut on your hand, the animal's saliva can get into the cut and you can get rabies. Some students may believe that trapping and hunting help stop the spread of rabies. Point out that studies by wildlife experts show that trapping and hunting animals does not stop or even slow down the spread of rabies. Remind students to stay away from stray pets and wild animals, to never make a pet of a wild animal, and to tell parents or care givers right away if they are ever bitten.

Our Wild Neighbors

bat: 4
spider: 6
rat: 2
pigeon: 3
squirrel: 1
peregrine falcon: 5

Mouthing Off

Have students make their cards. You may want to use the activity to draw attention to some of the ways people can help protect endangered sea turtles such as not littering at beaches, respecting signs put up to protect the nesting sites of sea turtles at beaches, and not releasing helium balloons at celebrations.

Wonderful Whales

1. kinds
2. gain
3. hour
4. year
5. more
6. heard

As a follow-up, share aloud portions of In the Company of Whales: From the Diary of a Whale Watcher by Alexandra Morton (Orca Book Publishers, Box 3028, 1574 Gulf Road, Point Roberts, WA 98281.) This insightful book contains many beautiful photographs and moving insights about whales.
I. DOCUMENT IDENTIFICATION:

Title: KIND Worksheet Packet: Wild Animals (Senior)

Author(s): Willow Ann Sirch

Corporate Source: National Association for Humane and Environmental Education (NAHEE)

Publication Date: April 10, 1995

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

Check here for Level 1 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

Check here for Level 2 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) non-exclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: Lorelei R. Blake

Printed Name/Position/Title: Lorelei R. Blake/Administrative Asst.

Organization/Address: NAHEE
P.O. Box 362
East Haddam, CT 06423-0362

Telephone: (860) 434-8666
FAX: (860) 434-9579
E-Mail Address:

Date: July 30, 1996
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC/CSMEE
1929 Kenny Road
Columbus, OH 43210-1080

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2d Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

6/96)