Teacher's Guide
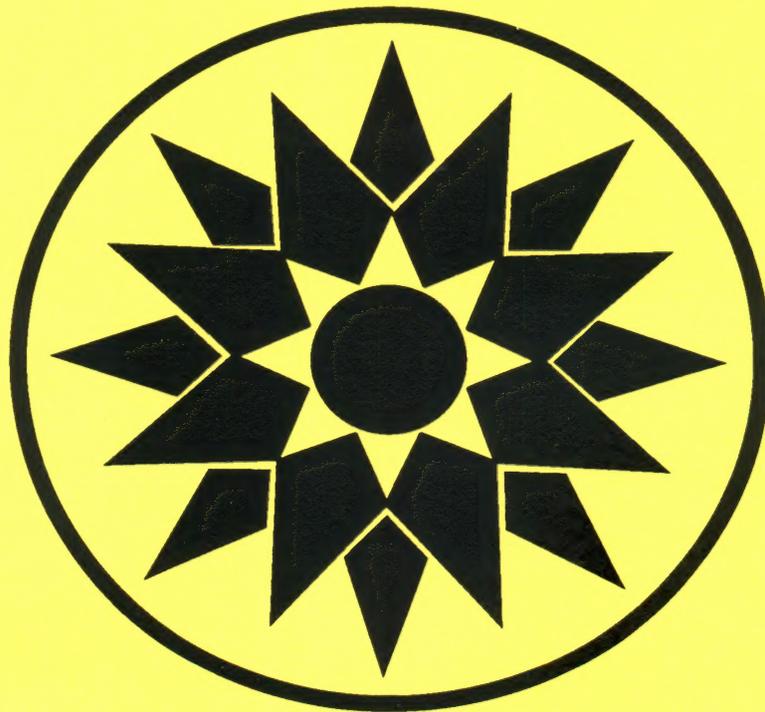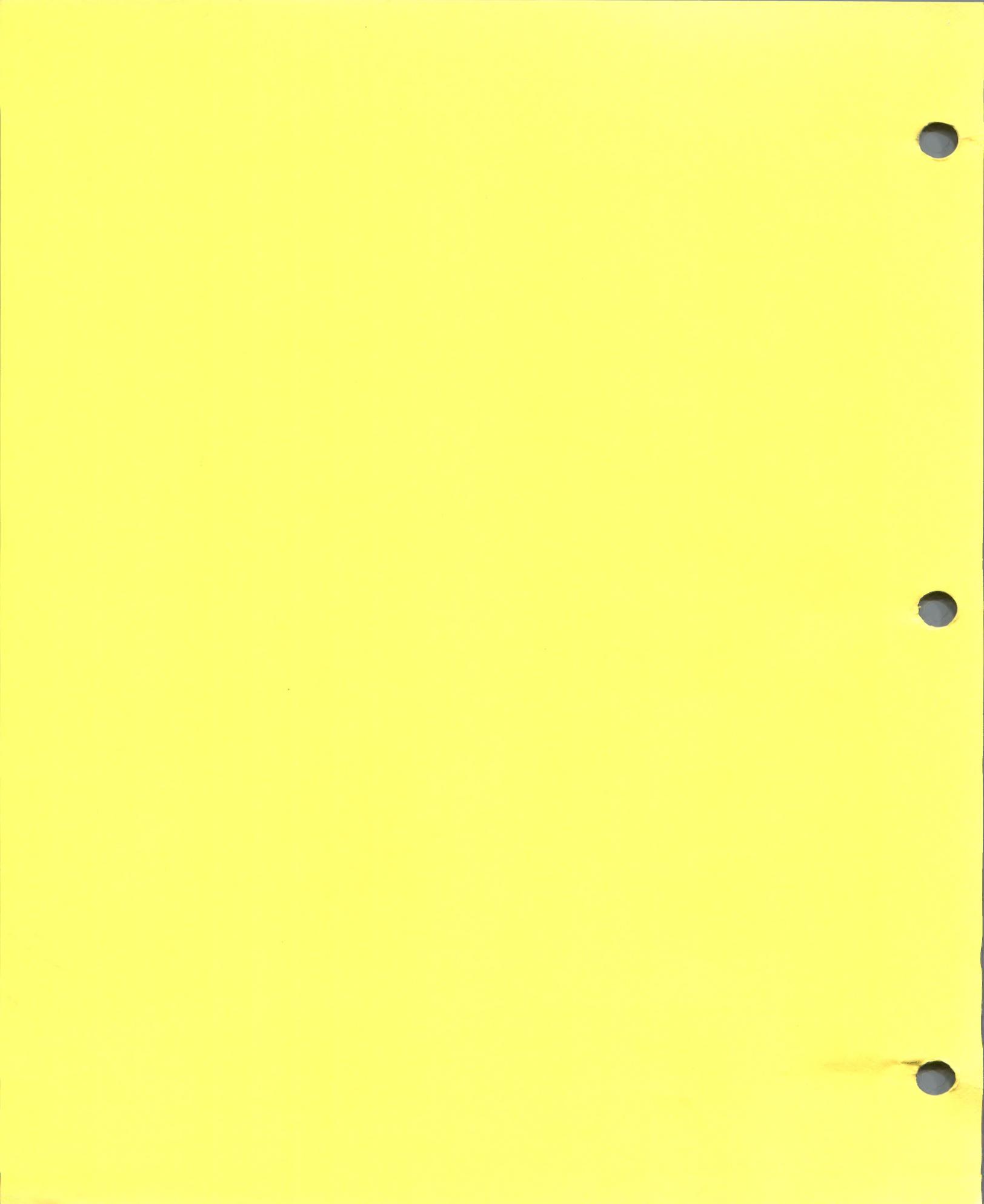
Learn About
Animals

Apple
(Supports Muppet Learning Keys)

SUNBURST
COMMUNICATIONS

PLEASE NOTE:

*The 3.5 version of LEARN ABOUT ANIMALS is on **one** disk. Please ignore all references in the Teacher's Guide to the Program Disk and the Student Disk. These refer to the 5.25 version of LEARN ABOUT ANIMALS only.*

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3. You may not copy the Program Disk or Student Disk. Backups are provided.

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Learn About Animals was developed for
Sunburst Communications, Inc. by
Learningways, Inc. of Cambridge, Massachusetts.

For information, or a free microcomputer courseware catalog, write:

Sunburst Communications, Inc.
101 Castleton Street
Pleasantville, NY 10570

Call toll-free (800) 628-8897
Or call collect (914) 747-3310

Learn About Animals
Table of Contents

OVERVIEW

Learn About Animals introduces kindergarten through second grade students to animal life with nine lively, animated on-screen animals. Animal homes, food, and babies are studied, along with a comparison of animal sizes and the ways they move. Students explore animal worlds, create real or imaginary animals, and make animal masks in this wonderfully interactive program.

The program is composed of eight activities. In the first activity, the students place animals in their homes, then watch as a fox curls up in its den or a mouse hides in a log. Then students match animals with the foods they eat and see a snake devour a newt and a bird tug at a worm. Next they find the parents of baby skunks, birds, rabbits, and other animals, and count the number of babies each animal has. Then students identify the word that matches the animal's way of moving as they watch a rabbit hop, a bird fly, or a snake crawl across the screen. Finally, they measure animals and compare their sizes, arranging them according to small, smaller, or smallest or large, larger, largest.

In other sections of the program, students work creatively to explore animal worlds and locate camouflaged animals, then write a story about their discoveries; they connect animal parts to make real or imaginary animals that animate, and choose an animal mask, print it, then color it to use in a dramatic play.

Learn About Animals has been designed to give students an enjoyable context in which to learn science, language, mathematics, and relational concepts. It contains activities to help students practice:

- classifying
- labeling and captioning
- comparing and contrasting sizes
- following directions
- developing memory skills
- matching
- counting
- developing an understanding of natural environments

The program is meant to be a starting point, a context for involvement. It provides a basis for engaging students in integrated, cooperative learning activities such as discussions, story-telling, plays, and art projects. Lesson plans with pre- and post-computer activities are provided for each section of the program.

In the early grades, children are eager to learn. They want to engage in activities that will stimulate their creativity. The computer and this program are valuable tools to accomplish this goal.

Learn About Animals is designed to be used with an Apple IIc, IIc Plus, or IIGS computer, or an Apple IIe computer with a minimum of 128K of memory and double high-resolution graphics. One disk drive is needed, and a printer and color monitor are strongly recommended. **Learn About** Animals supports the Muppet Learning Keys, mouse, KoalaPad, joystick, or regular Apple keyboard. The package includes a Program Disk and a double-sided Student Disk, backup disks, and a Teacher's Guide.

If you need assistance in operating your computer, check the last part of this guide. You can also call Sunburst Communications at (800) 628-8897.

PROGRAM DESCRIPTION

The Parts of the Program

Learn About Animals contains a Program Disk and a double-sided Student Disk with eight activities. It is recommended that students complete Side 1 of the Student Disk before working on Side 2. Side 1 gives information about animal homes, food, babies, movements, and size. Side 2 allows students to explore animal worlds, to create real or imaginary animals, and to print animal masks.

The eight major sections on the Student Disk are:

SIDE 1

HOMES - Students "catch" each animal, put it in its home, and label it with its name.

FOOD - Students match each animal with its food and put food labels in the correct places.

BABIES - Students match parents and babies, then count the number of babies.

MOVE - Students match each animal with its characteristic movement.

SIZE - Students compare the sizes of some of the animals. They also practice measuring some of the animals.

SIDE 2

WORLDS - Students are given two scenes in which they can "play" with the animals they have studied and explore their worlds. The scenes can be added to, and text created by the students can be written directly on the scene and printed. Additional, blank screens are provided on which students can create entirely new scenes or stories.

CREATE - Students design and build their own real or imaginary animals from animated body parts. Animals can then be printed out, colored, and described orally or in writing.

MASKS - Three animal masks are provided: a fox, a snake, and a rabbit. The masks can be printed, then colored, by students. They can then be used in a play or other dramatic activity. If a printer is not available, the masks appear on pages 45-47 of this guide and can be reproduced.

Getting Started

Insert the Program Disk into the disk drive of the computer. (If you need help to start the program, follow the directions in the back of this guide.) You will be asked if you are using the Muppet Learning Keys. Answer yes or no by pressing "Y" or "N" on the Apple keyboard.
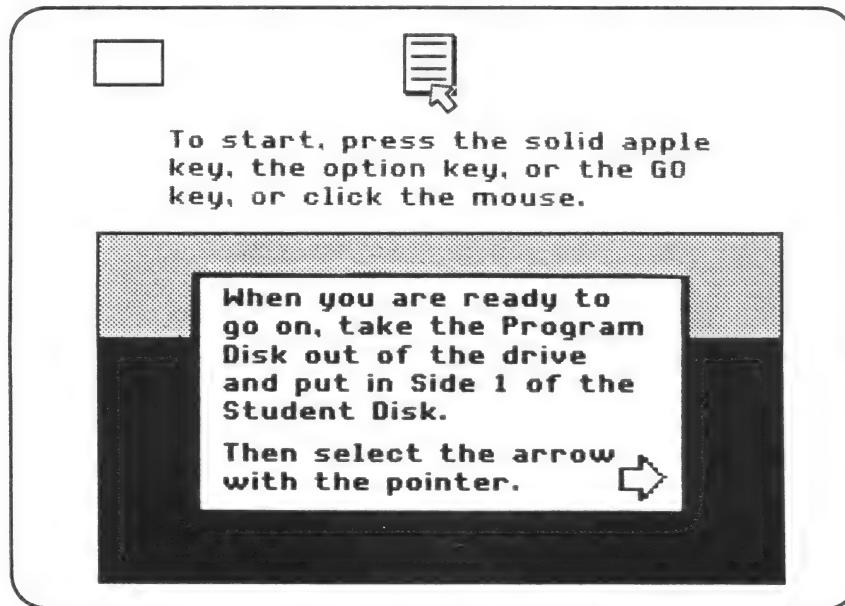
After the title page, you will see a screen with directions on it. In the top middle of this screen is a box with a small, white arrow, called a pointer, resting on it. (See the picture.) This box contains information for using the mouse, the keyboard, the Muppet Learning Keys, the joystick, or the KoalaPad with **Learn About** Animals. Each input device has its own method that is used throughout the program.

- With the mouse, move the pointer to the desired item. To select, click the mouse button. Click again to drop the item.
- On the Apple keyboard, hold down the Open Apple (⌂) key and move the pointer with the ARROW keys. Then select with the Solid Apple (🍎) or OPTION key. Select again with the Solid Apple (🍎) or OPTION key to drop the item.
- On the Muppet Learning Keys, press the ARROW keys to move the pointer to the desired item. Press in the middle of the ARROW keys to set the speed of the arrow, making it go faster or slower. The speed remains set until the middle of the arrow is pressed again. To select, press the GO key. Press the GO key again to drop the item.
- With the joystick, direct the pointer movement with the movement of the joystick. To select, press the "fire" button. If the joystick has two buttons, try each button to determine which is active. Press the "fire" button again to drop the item.
- With the KoalaPad, direct the pointer movement with a finger across the Koala Pad. Select by pressing one of the two "fire" buttons. Press the "fire" button again to drop the item.

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In the upper left of the directions screen is the MENU BOX. Select this box and follow the instructions on page 9 to permanently save your printer setup on the Program Disk.

Next, take the Program Disk out of the drive. Put Side 1 of the Student Disk in the drive, then select the arrow with the pointer to go to the Menu of **Learn About Animals**.

Using the Menu

The Menu on the Student Disk has labels and pictures of the eight units (HOMES, FOOD, BABIES, etc.) in the program. Five units are on Side 1 of the disk; three are on Side 2. (White labels indicate the units which can be accessed from the current side of the disk. Grey labels indicate the units which can be accessed from the other side of the disk.) The pointer appears on the screen. Use it to move to and select the box near the top of the screen. The box tells how to make a selection on the Menu.
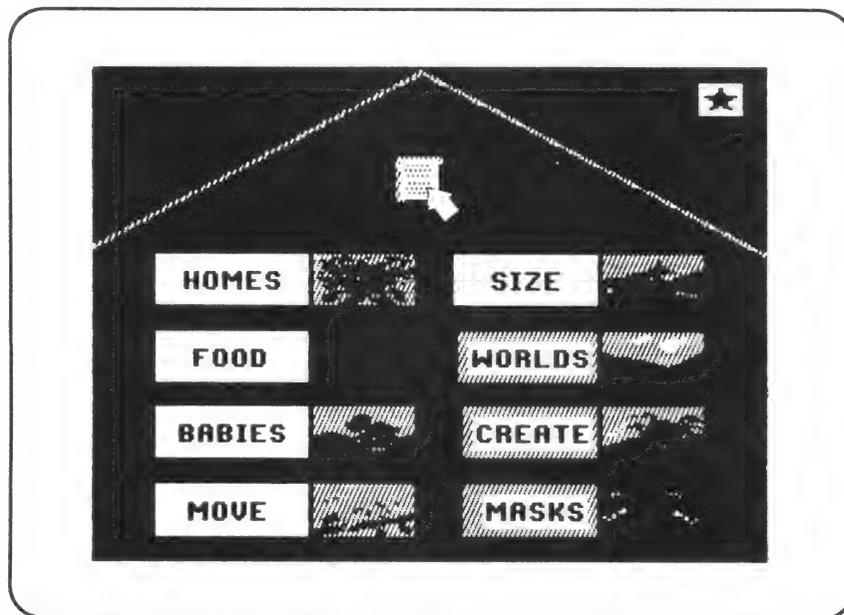
Choose the animal HOMES unit on the Menu by moving the pointer to the **picture** of the bird's nest and selecting it.

NOTE: When changing scenes or units, the pointer will reappear at the same place on the screen in the next scene, as in the previous scene. For example, if the student selects an animal from the left side of the screen, the pointer will then reappear in the same place on the next scene.

Each of the scenes in the units on Side 1 of the Student Disk contain: two ARROWS (←
→), an INFORMATION icon (an icon is a symbol), a STAR icon, and a HOME icon.

big   bigger   biggest
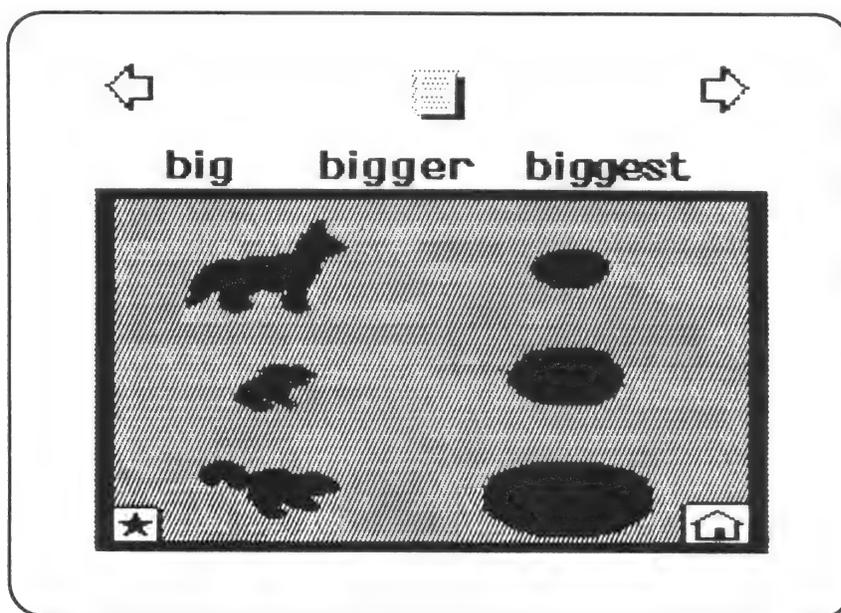
◁⎯ The LEFT ARROW icon takes the student to the preceding scene in the same
⎯▷ unit. The RIGHT ARROW icon takes the student to the following scene within
the same unit. There are between two and four scenes for each unit.

The INFORMATION icon provides the student with information pertaining to
the scene.

The STAR icon replays the current scene.

The HOME icon returns the student to the Menu.

Student Disk Side 2

Most of the scenes in the units on Side 2 contain two more icons: a MENU BOX and a
PAPER/PENCIL icon.

Using the Menu Box

On Side 2 of the Student Disk, a MENU BOX appears in the far upper left corner of the
screen. When the MENU BOX is selected, the student gets the MENU BAR which contains
a red "X" and 6 icons. Pressing the ESCAPE key on a regular keyboard, or the ZAP key
on the Muppet Learning Keys are quick ways to access the MENU BAR. When the MENU
BAR is open, press the TAB key on a regular keyboard, or the HELP key on the Muppet
Learning Keys to move the pointer to the desired icon, then select it. To close the MENU
BAR, select the red "X" or select anywhere else on the screen except in the MENU BAR.

The MENU BAR contains 6 options. From left to right, they are CHARACTERS, OBJECTS, BACKGROUNDS, WORDS, DISK OPTIONS, and PRINT OPTIONS.

The Menu Bar
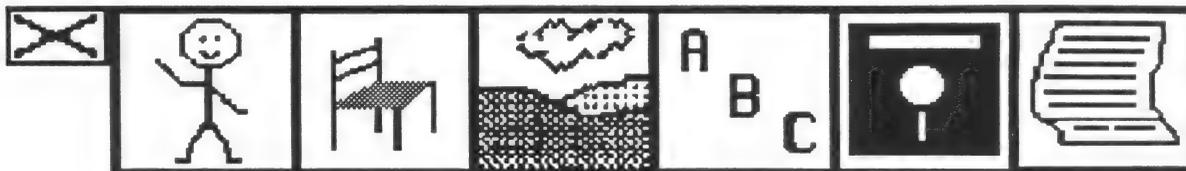
CHARACTERS are animated pictures that can be added to scenes. Select the CHARACTERS menu to open it. Then select either arrow to scroll all of the CHARACTERS. To add a CHARACTER to your scene, point to it and select it, move it into your scene, and select again to drop it. To get more animated CHARACTERS, repeat the sequence. You can have up to 19 CHARACTERS in your scene at one time. To delete a CHARACTER from your scene, select it, move it off the screen, and select again. Or, press the DELETE key (OOPS or ERASER key on Muppet Learning Keys) while the CHARACTER is selected. CHARACTERS can be duplicated by selecting the CHARACTER, pressing the SPACE BAR, and moving the "cloned" CHARACTER where you want it and dropping it. Copies of CHARACTERS are like snapshots and will not animate.

OBJECTS are inanimate things that can be added to your scene the same way that CHARACTERS are added. With the MENU BAR open, select the OBJECTS menu. Select either arrow to scroll through the available OBJECTS. Select one, and place it in your scene. Delete it by selecting it, moving it off the screen, and selecting again, or by selecting it and pressing the DELETE key (OOPS key or ERASER key on Muppet Learning Keys). **(NOTE:** Some OBJECTS found in the scenes are part of the background and cannot be selected, moved, or deleted.) OBJECTS can also be duplicated using the SPACE BAR.
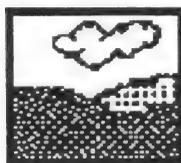
BACKGROUNDS provide new scenery or blank backdrops to scenes. BACKGROUNDS can be chosen like CHARACTERS and OBJECTS. Select the BACKGROUNDS icon from the MENU BAR, then use either arrow to scroll through the BACKGROUNDS. Choose one of them. BACKGROUNDS can be changed at any time.

WORDS are labels of things that appear in the scene. WORDS are selected and added to a scene in the same way as the CHARACTERS, OBJECTS, or BACKGROUNDS. WORDS are deleted from a scene by selecting the word and holding down the DELETE key (OOPS key or ERASER key on Muppet Learning Keys) until the word is fully deleted.

Words can also be edited by deleting the desired letters from right to left, then typing new letters (see Writing On Scenes, page 11).

DISK OPTIONS are tools for managing this program. Two options are visible when the DISK icon is selected: OPEN and SAVE. Two more options, SETUP and DISK UTILITIES, are invisible until CONTROL-T is pressed.
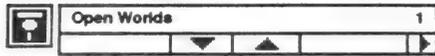
OPEN: To select a different unit, students ordinarily go to the Menu by selecting the HOME icon, and choosing a new unit. Fr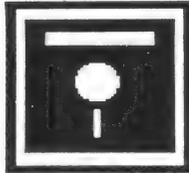om the DISK menu, there is a second method: the OPEN option. Select the DISK icon, then select OPEN. Use the arrows below the unit name to locate the unit you want. Use the arrows under the number to select the screen you want. Then place the pointer in the upper box; for example, "Open Worlds 1." A red outline appears. Select to open. The OPEN option is also used to view additional files saved by students on the Student Disk. Use the arrows to scroll through the names and numbers of the files. When you find the file you wish to open, place the pointer in the upper box, and select it.
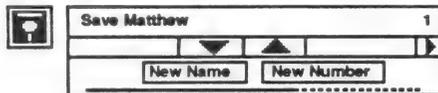
SAVE: To save a scene on Side 2 that you have made changes on, select the DISK icon, then select SAVE. Select New Name, then type in the name. Select New Number, then type the new number. Many teachers find it convenient to save files under students' names; for example, "Matthew 1." Select the upper box with the new name in it to save. Students who are new to working with a computer may need to be reminded that they will lose their work if they do not save it before turning off the computer.

A red "thermometer" line at the bottom of the SAVE box indicates how much room is left on the disk for saving files. As the red line approaches the right, the disk is almost full. If the disk is full, delete unwanted scenes. (See "Delete" on page 10.)

DISK OPTIONS has two more features that are invisible unless accessed by the teacher. They are SETUP and DISK UTILITIES. To activate them, select the DISK icon after the MENU BOX is chosen, then press CONTROL-T. They will appear listed below the other disk options. SETUP and DISK UTILITIES are called Teacher Utilities because they should not be used by students. They allow the teacher to choose a printer setup, lock scenes, unlock scenes, and delete scenes.

SETUP		
Print	▶	Current Page
Printer Type	▶	Imagewriter II
Card Type	▶	Serial
Printer Slot	▶	1
Student Disk	▶	Slot 6 Drive 1
Setup and Disk Utilities	▶	Off Menu
Save to Disk		
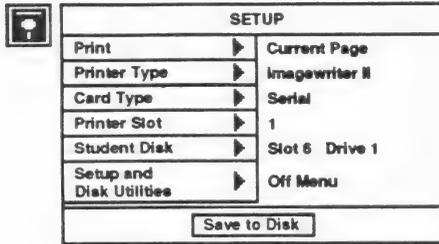
SETUP: The **Learn About Animals** program is set up to work with an Apple Imagewriter II printer and a Serial Printer Card. You may need or wish to change these settings to use the program on your system.

To change SETUP, select the MENU BOX icon from the upper left corner of the scene, then select the DISK icon with the pointer. Press CONTROL-T to access the Teacher Utilities. Choose SETUP. Use the pointer to select Print. Continue to select Print to scroll through its two options: Current Page or Entire Book. Then choose to print the Current Page (the page from which you select printing) or print the Entire Book (all of the files saved with different numbers under the same name.) Next, select the correct Printer Type, Card Type, Printer Slot, and Disk Drive for your system. If you are using a IIc computer, select Serial Card from the Printer Card options. (This sets up the printer port of your computer.) If your printer type does not appear, try several of the options offered.

If you would like to have the Teacher Utilities visible all the time in the DISK OPTIONS menu, select SETUP AND DISK UTILITIES and change the Off Menu to On Menu. This will give you and your students direct access to the SETUP and DISK UTILITIES options. We do not recommend that you make the Teacher Utilities accessible to students by selecting On Menu, because the students could unlock and delete scenes.

To save the settings you have changed, make sure your Program Disk is in the disk drive. Move the pointer to Save to Disk and select it. Doing so will make these changes available the next time you use the program. If you do not save the changes, they will not be available the next time you boot the program and it will be necessary to change the setup again. **NOTE:** Changes to Slot/Drive setup cannot be saved on the Program Disk. If you wish to use a different drive setup, you must change the setting each time. If you have made changes from the SETUP Menu from Side 2 of the Student Disk, you will need to insert the Program Disk, select Save to Disk, then reinsert Side 2 of the Student Disk to continue the program.

Lock Worlds		1
▼	▲	▶
Lock	UnLock	Delete

DISK UTILITIES allows the teacher to lock, unlock, or delete story scenes on a Student Disk. Press CONTROL-T after accessing the Disk icon and choose DISK UTILITIES, then select the name of the scene you want to work with by using the arrows under the name. Select the number of the scene you want to work with by using the arrow under the scene number.

Lock | Locking a scene protects it from being deleted or replaced by accident. To lock a scene, move the pointer to LOCK, and select it. Then select the name box. The asterisk (*) which appears to the left of the page number tells you that the scene is locked. Any scene you want to protect can be locked. Unlock scenes to save changes.

UnLock | By unlocking a scene it is possible to delete, replace, or resave it. To unlock a scene, move the pointer to UNLOCK and select it. Then select the name box. Only unlock the scenes that you or your students have created. Do not unlock the scenes that come locked on the program.

Delete | Deleting removes a scene **permanently** from the disk. Use DELETE to remove scenes that your students have made that you no longer want to keep. **Do not delete the scenes that come with the program.** To DELETE a scene, select the scene name and number, then select DELETE and the name box. You will be asked to verify that you want to delete that scene. Select "YES" to delete.

| PRINT |
| Large Color |
| Small Color |
| Black/White |

PRINT OPTIONS: Any scene on Side 2 of the Student Disk can be printed. Before printing, check the SETUP to make sure your printer card and printer selections are correct. (See SETUP on page 9.) To print a scene, select the PRINT icon from the MENU BAR. If you have an Imagewriter II printer, you will be given the options to select LARGE COLOR, SMALL COLOR, or BLACK/WHITE printing. A large color image (made with a color ribbon in your Imagewriter II printer) will cover about 1/2 of your printer paper. A small color image will cover about 1/8 of your printer paper. Other printers will print black and white images. A black and white image will appear as a full-page outline image of your scene.

Make sure your printer is on and properly connected before trying to print. Select the PRINT icon from the MENU BAR. You will see a message, "Ready to print page (or book)?" Select "Yes" if you are ready to print; "No" if you are not prepared to print.

Using the PAPER/PENCIL Icon

In WORLDS and CREATE, the PAPER/PENCIL icon is available. By choosing it, you access a colored blank scene with the following icons on it: MENU BOX, ARROW, HOME, INFORMATION, STAR, and a NUMBER BOX which indicates the number of the scene.

This blank scene is available for students to create entirely new scenes of their own choosing by pulling down CHARACTERS, OBJECTS, BACKGROUNDS, and WORDS from the MENU BOX and placing them into the scenes. New words and sentences can also be typed directly onto the screen. (See page 11 for information on "Writing On Scenes.") The new scenes can be saved and printed.

This screen is especially valuable for the teacher because customized worksheets can be created and printed for student use. Many ideas for using this scene are suggested in the Lesson Plans in the WORLDS and CREATE section of this guide.

Writing On Scenes

Students may add their own text to any scene in the program. This can be done with a regular keyboard or with the Muppet Learning Keys. Position the pointer where you would like your text to begin, and start to type. When you want to go to the next line, press the RETURN key on the regular keyboard, or the STOP key on the Muppet Learning Keys. The computer will "beep" if your typing reaches the end of the screen. You can put about 750 letters of text on the screen.

You can reposition any line of text around the screen by selecting it, moving it, and selecting again to drop it. You can edit a line of text by selecting it and deleting one letter at a time using the DELETE key, or the ERASER or OOPS key on the Muppet Learning Keys. You can then retype to replace the deleted letters. On Side 2 of the Student Disk, key vocabulary words are available in the WORDS menu and can be added to scenes.
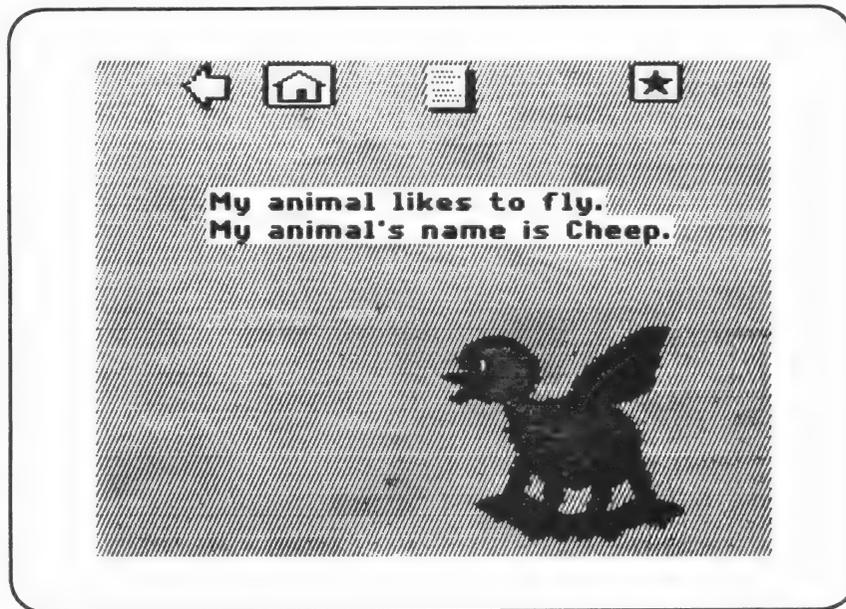
Ending an Activity

At any time, a student can stop working with a unit and return to the Menu.

- On the Apple keyboard, the student chooses the HOME icon and presses the Solid-Apple (◆) on the Apple IIe or IIc, or the OPTION key on the Apple IIGs.
- On the Muppet Learning Keys, the student points to the HOME icon and presses the GO key.
- With a mouse, the student points to, and clicks on the HOME icon.
- With the joystick or KoalaPad, the student selects the HOME icon with the "fire" button.

A student can also stop a work session at any point by removing the disk from the drive and turning off the computer.

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HOMES
Skills and Objectives
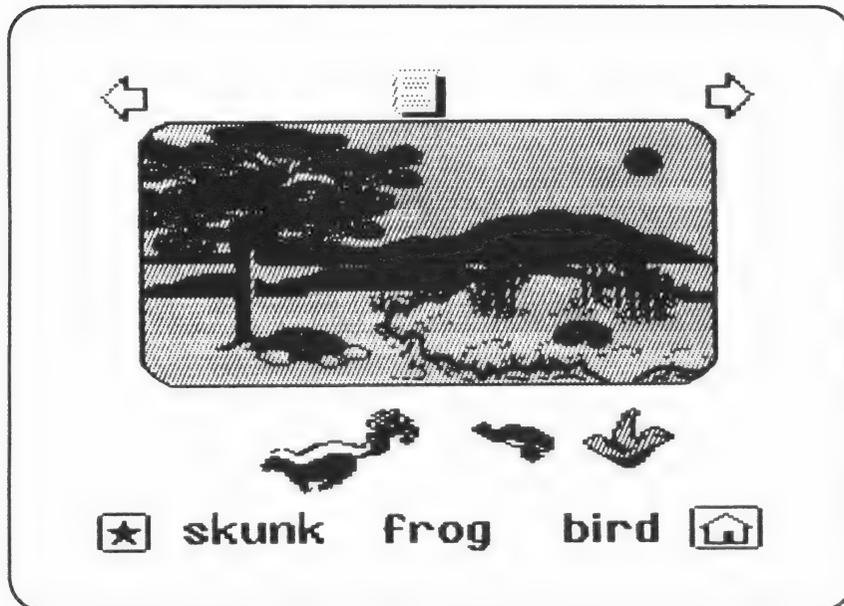
Skills Developed:	picture recognition, vocabulary, matching, problem solving
Students Work With:	pictures of animals and their homes, and words
Vocabulary:	skunk, frog, bird, squirrel, fox, turtle, snake, rabbit, mouse, nest, den, pond, bushes, log, rocks
Teaching Objectives:	To introduce the animals on disk To match animals and their homes To label/caption the animals
Correlated Lessons:	Precomputer Lesson page 13 At the Computer Lesson page 13 Postcomputer Lesson 1 page 14 Postcomputer Lesson 2 page 15

LESSON PLAN:

1. Explain to the students that they will be studying about animals. Write the names of the nine animals in the program on the board as you say them. The animals are turtle, frog, mouse, fox, rabbit, snake, skunk, squirrel and bird. Point to the first and last sounds of the names. Ask the students to pronounce these sounds, then pronounce the whole names.

2. Ask the students to close their eyes and think about what they know about these animals. Tell them to raise their hands when they are ready to share their thoughts with the class. Encourage them to share whatever they know. Guide them by asking questions such as, *How big is it? What color is it? What does it like to eat? Where does it live?*

3. Provide brief background information on the animals students are unfamiliar with. Use pages 48-56 in this guide or use supplementary material from the school library.

Variations:

• After briefly introducing the nine animals on disk, have a Show and Tell session. Tell students to close their eyes and think about their pet, or an animal they've seen in the zoo, on a farm, or in a pet store. Tell them to think about what the animal's home was like. Call on volunteers to describe the animal's home or where it sleeps.

HOMES
At the Computer Lesson

LESSON PLAN

1. Show students how to boot the disk and select the HOMES unit from the Menu.

2. Have students choose the INFORMATION icon. Read the instructions aloud: *Put each animal in its home.*

3. Demonstrate each activity below. Then ask the students to repeat what you have done.
   • "Catch" each animal by placing the pointer on top of the animal and selecting it, then move it to its home and drop it. (If the answer is correct, the animal stays where it is placed and transforms: that is, the fox curls up and goes to sleep. If the answer is incorrect, the animal keeps moving.)

- Select one home on screen. The name of the home will appear. Have the students read the name of the home aloud. Select other homes and read their names.
- Pick up the labels from the bottom of the screen and match them with the animals.
- Create a sentence on screen by placing the pointer where you want to begin, then start typing. If you reach the end of the screen, press RETURN (or the STOP key on the Muppet Learning Keys), and continue to the next line.

4. Ask the students to name each animal and its home to summarize the lesson.

Additional Activities:

Ask students to:
- count the animals and homes they see.
- type in the names of the animals and their homes.
- type complete sentences about the homes; that is, *The mouse lives in a log.*

**HOMES
Postcomputer Lesson 1**

Materials needed: drawing paper, crayons.

LESSON PLAN

1. Take students for a walk in a nearby park or somewhere outdoors. Ask them to point out places where animals might build homes. Have them identify materials animals might use. Return to the classroom.

2. Have each student select one animal from the program to draw. Tell the student to draw and color the animal and its home. Call on students to share their work with the class.

3. Use the students' pictures to have a problem-solving session. Hold up a picture and pose problems to the class such as: *The bird's nest gets destroyed in a wind storm. What should it do? The bird can't find enough dry grass to build its nest. What other materials can it use?*

Variation:

Read to the students from *Tricks Animals Play*, National Geographic Society, 1975. This book contains excellent photography and interesting facts about animal homes and behavior.

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Materials needed: one large piece of paper or posterboard, markers or crayons.

LESSON PLAN

1. Explain to the students you are going to make a wall chart (see the sample chart below). The chart will contain information about the animals on the disk, plus several other animals chosen by them. Explain that as they do the sections on the disk, they will fill in the chart.

2. Draw the lines of the chart. Fill in the names of the disk animals and their homes.

3. Together decide on three or four other animals for the chart. Write the names on the chart.

4. Display the chart in a prominent place where it can be added to as each section of the program is done.

ANIMALS					
name	home	food	babies	movement	size
squirrel	nest				
fox	den				
turtle	pond				
skunk	den				
frog	pond				
bird	nest				
snake	rocks				
rabbit	bushes				
mouse	log				

Variation:

Share with students information from a library reference book such as: *Animals in Rivers and Ponds, Animals at the Water's Edge* and *Animals in Houses and Gardens*, Raintree Publishers, Inc., 1988. This series is an excellent resource for supplementary information.

References:

Who lives here? Animals of the Pond, Forest, Prairie, Desert, Mountains, Meadow and Swamp by Dorothy and Sy Barlowe. New York: Random House, 1978.

Animal Homes. Random House All About Books by Theodore Rowland Entwistle. New York: Random House, 1978, 1987.

Animals Build Amazing Homes by Hedda Nussbaum. Step-Up Books. New York: Random House, 1979.

FOOD
Skills and Objectives
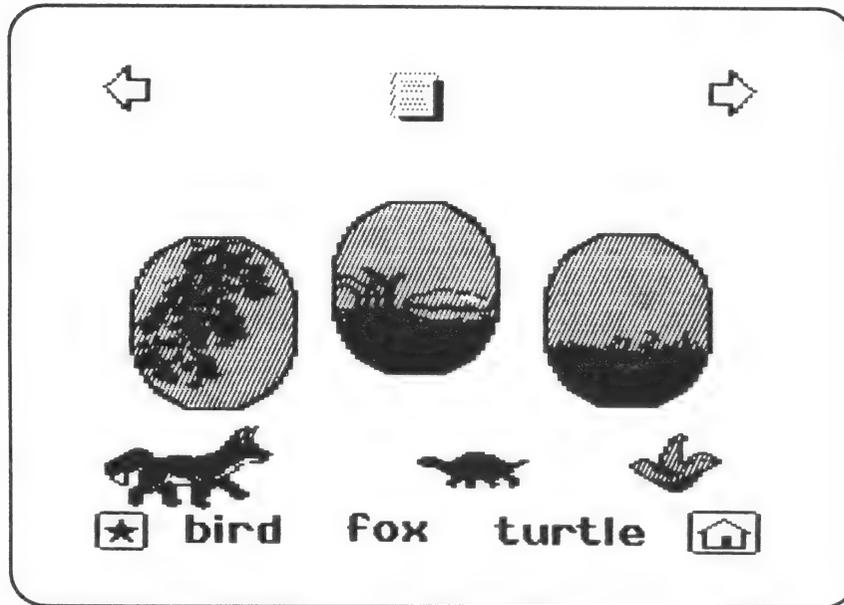
Skills Developed:	picture recognition, vocabulary, matching, problem solving
Students Work With:	pictures of animals and their foods, and words
Vocabulary:	skunk, frog, bird, squirrel, fox, turtle, snake, rabbit, mouse, plums, fish, worm, fly, berries, acorns, newt, grass, cheese
Teaching Objectives:	To match animals with their food To label/caption the animals
Correlated Lessons:	Precomputer Lesson 1 page 17 Precomputer Lesson 2 page 17 At the Computer Lesson page 18 Postcomputer Lesson 1 page 19 Postcomputer Lesson 2 page 19

LESSON PLAN

1. Do the following fingerplay slowly as the students listen. Repeat.

    The Turtle by Vachel Lindsay

There was a little turtle	
Who lived in a box,	(gesture outline of a box using both hands)
He swam in a puddle,	(make a swimming motion)
He climbed on the rocks.	("walk" with fingers using both hands)
He snapped at a mosquito,	(make snapping motion using fingers and thumb)
He snapped at a flea,	(repeat)
He snapped at a minnow,	(repeat)
And he snapped at me.	(repeat)
He caught the mosquito,	(snap hand quickly once and hold)
He caught the flea,	(repeat)
He caught the minnow,	(repeat)
But he didn't catch me!	(point to self proudly)

2. Ask the students simple comprehension questions such as, *Where did the turtle live? What did he snap at? Did he catch a butterfly? What did he catch?*

3. Tell students to stand up. Do the fingerplay slowly with the students joining in. Encourage students to use exaggerated gestures. Repeat several times until students feel comfortable with the fingerplay.

4. Say *box* and write it on the board. Tell students to listen for a word that sounds like *box*. (*rocks*). Repeat the first stanza. Then say and write *flea*. Repeat the remainder of the fingerplay. Ask students to tell you the word that rhymes with *flea* (*me*).

Materials needed: old copies of *The National Geographic, Ranger Rick,* and other magazines that contain pictures of animals, scissors, paper, crayons.

LESSON PLAN

1. Ask the students to cut out some pictures of animals from the magazines. If possible, have them cut out pictures of things the animals eat as well. (Students can draw pictures of animals they can't find photos of.)

2. Make a wall poster of the pictures. Display the wall poster in the classroom. Encourage students to add to the poster as they find other examples.

Variation:

Select some pet, farm, or zoo animals and discuss how their diets would vary according to where they live. For example, *If a fish is a pet, what does it eat? What does it eat in nature? If a tiger is in the zoo, what does it eat? What does it eat if it lives in the jungle?* The focus here should be on motivating the students to think about this relationship. Encourage them to make predictions based on what they know from TV or personal experiences.

FOOD
At the Computer Lesson

LESSON PLAN

1. Tell the students to select FOOD from the Menu.

2. Have students choose the INFORMATION icon. Read the instructions aloud: *Help each animal find its food.*

3. Ask students to:

- select a food picture to find out the food names. Read the names aloud.
- match each animal to its food. (If the answer is correct, the animal changes position and starts eating; if incorrect, the animal keeps moving.)
- match the labels to the animals.
- type a sentence about a food: *A frog eats a fly.*

Additional Activities:

Ask students to:
- type in the names of the animals.
- type in the names of the foods, or type words that rhyme with the foods (*plum/some*) or start with the same sound (*plum/please*).

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┌─────────────────────────┐
│ FOOD                    │
│ Postcomputer Lesson 1   │
└─────────────────────────┘
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Materials needed: "The Fox and the Grapes" (Aesop's Fable).

LESSON PLAN

1. Have the students sit in a semicircle in front of you. Tell them they will hear a famous story called "The Fox and the Grapes." Ask them to guess what the story is about.

2. Tell the story. Use a hand puppet for the fox, if possible. Stop at intervals and ask the students to predict what will happen next.

3. Discuss the moral of the story. Ask students to try to think of experiences in their own lives similar to the fox's.

Variation:

Help students make stick puppets of the fox. Call on several students to tell the fable in their own words.

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┌─────────────────────────┐
│ FOOD                    │
│ Postcomputer Lesson 2   │
└─────────────────────────┘
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Materials needed: wall chart begun in HOMES, markers or crayons.

LESSON PLAN

1. Return to the wall chart. Explain that you are going to add to the chart what each animal eats. Ask different students to add the information from the program.

2. Ask students if they know what the other animals on the chart eat. Help them to predict by asking them to think about where the animals live (underground, in the water, and so on.)

Variations:

•   Review what the animals in the program eat by playing an aural matching game. Clap your hands. Pause and snap your fingers on your left hand as you name an animal (*bird*). As you snap the right hand, students say what it eats (*worms*).

•   Teach problem-solving by explaining that sometimes an animal's food supply is disrupted because of a natural occurrence such as a snowstorm or a drought. Some example situations: the summer is very dry and there isn't enough grass for the rabbits to eat; the snow comes early and squirrels aren't able to store enough nuts for the winter; it's very cold and foxes can't find food. Ask the students what they can do to help in these situations. Bring up the issue of the potential impact on the ability of the animals to survive on their own if humans intervene.

19

BABIES
Skills and Objectives
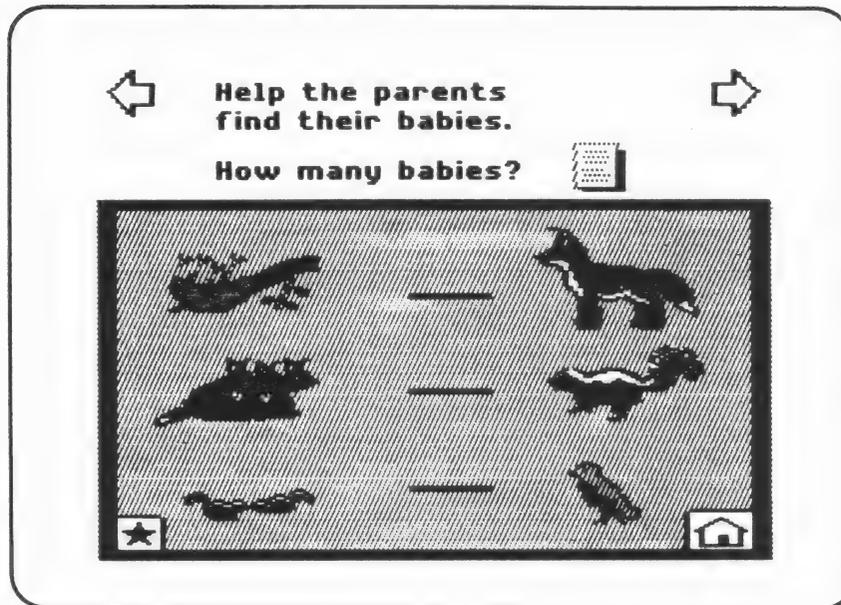
Skills Developed:	picture recognition, vocabulary, matching, problem solving, counting
Students Work With:	pictures of animals and their babies, words, numbers
Vocabulary:	On-screen directions and various descriptive sentences on each animal and its babies
Teaching Objectives:	To match animals with their babies To count the animal babies
Correlated Lessons:	Precomputer Lesson page 21 At the Computer Lesson page 21 Postcomputer Lesson 1 page 22 Postcomputer Lesson 2 page 23

Materials needed: Ask students to bring real baby animals (hamsters, rabbits) into class.

LESSON PLAN

1. Play "I'm thinking of....." to review the names of the animals. Students stand in a circle. Use the words' initial sounds or use rhyming words. For example, say, *I'm thinking of an animal that starts with [sku].* Model the response *skunk.* Say, *I'm thinking of an animal that rhymes with box.* Model the response *fox.* Use the list below or develop your own.

animal	rhyming	initial sound
turtle	hurdle	turn
frog	log	front
mouse	house	mountain
fox	rocks	follow
rabbit	habit	rattle
snake	make	snail
skunk	bunk	skull
squirrel	girl	squirt
bird	third	birth

2. Have students sit in a semicircle in front of you. Ask the students what baby animals they might see in the spring on a farm, in a pet store, in the zoo, and in nature. Explain how a tadpole becomes a frog. (See page 53 for background information on frogs.)

3. Ask the students who brought in baby animals to show them to the class and share their experiences in caring for them. Ask the other students to tell about their personal experiences with baby animals.

**BABIES
At the Computer Lesson**

LESSON PLAN

1. Tell the students to select BABIES from the Menu.

2. Have students look at the on-screen instructions as you read them aloud: *Help the parents find their babies. How many babies? Help the babies find their parents. How many babies?*

3.   Ask students to:
- count the babies and type in their answers on the line provided.
- add all the babies, then select the INFORMATION icon to check their answers.
- move the parents to the babies or vice versa. (If the answer is correct, interaction occurs: that is, baby mice start drinking milk. If incorrect, there is no interaction between parent and babies.)
- select a picture of a parent or babies to view the sentences about the animals. Read the sentences aloud as the students follow along.

Additional Activities:

Ask students to:
- type out the number names next to the numerals.
- type a descriptive sentence: *There are five tadpoles.*
- listen to math problems and type in answers: *There are two tadpoles. Two more swim up. How many are there? Three baby turtles are playing. One goes to sleep. How many are playing?*

BABIES
Postcomputer Lesson 1

Materials needed: book of baby animals with large illustrations.

LESSON PLAN

1.   Start with the fingerplay below. Model it first as the students listen. Repeat.

Five Little Squirrels

Five little squirrels sitting by the door,	(hold up hand and fold down
One ran away and then there were four.	fingers one at a time)
Four little squirrels climbing up a tree,	
One ran away and then there were three.	
Three little squirrels with coats so new,	
One ran away and then there were two.	
Two little squirrels sitting in the sun,	
One ran away and then there was one.	
One little squirrel left in the sun,	
She ran away and then there were none.	

2.   Recite it again as the students follow along. Repeat.

3. Ask five students to come to the front of the class to be the squirrels. Tell them to pantomime the actions as the rest of the class recites the lines.

4. Repeat with a second group of five if time permits.

5. Using a book of animals from the school library, have students count the animals on different pages. As you turn the pages, ask students to identify the animals (*What do you see?*) and count them (*How many are there?*).

**BABIES
Postcomputer Lesson 2**

Materials needed: wall chart started in HOMES, markers or crayons.

LESSON PLAN

1. Turn to the wall chart started in HOMES. Tell the students the common classes of animals: mammals, birds, reptiles, and amphibians. Briefly explain that one difference between them is how and where the babies are born. Reptiles and birds lay eggs. Mammals keep their babies inside until they are born alive. Amphibians place their eggs in water where they are later born.

2. Help students to classify the animals in the chart.

3. Ask a student to write M (Mammal), R (Reptile), B (Bird), or A (Amphibian) next to the names of the animals on the chart.

*Variation:*

If there is a children's zoo in your community, plan a field trip there. Prepare the students by talking about the animals they will see. After the trip, have students make drawings of their impressions or share orally with the class what interested them.

Reference:

The Love of Baby Animals by Robert Burton. Octopus Books Ltd. USA: 1976. This book has excellent photographs.

MOVE
Skills and Objectives
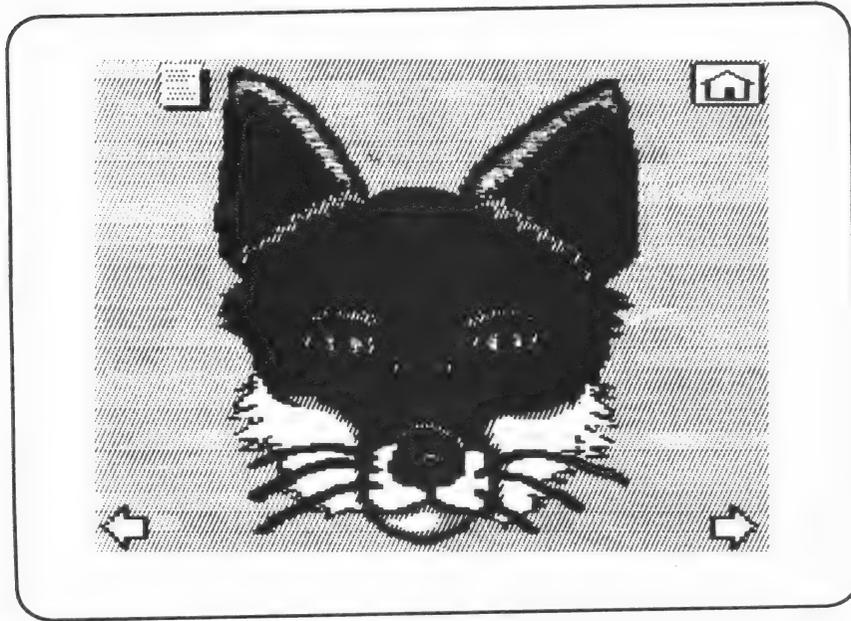
Skills Developed:	picture recognition, vocabulary, matching, problem solving
Students Work With:	pictures of animals and words
Vocabulary:	run, jump, fly, crawl, hop
Teaching Objectives:	To match each animal to the word that shows how it moves
Correlated Lessons:	Precomputer Lesson 1 page 25
	At the Computer Lesson 2 page 25
	Postcomputer Lesson 1 page 26
	Postcomputer Lesson 2 page 27

MOVE
Precomputer Lesson

LESSON PLAN

1. To stimulate students' interest in thinking about how the different animals move, play a pantomime game.

2. Have students stand in a circle. Tell the students that you will name an animal. They are to move like that animal.

3. Tell them to start moving clockwise in a circle. When you clap your hands, they are to stop and listen for the name of an animal. Then they are to move in place like that animal.

4. When they hear you clap twice, they should start moving in a circle again.

Variation:

Have students stand up. Play a variety of music. Ask students to listen to the music and move like any animals it reminds them of.

MOVE
At the Computer Lesson

LESSON PLAN

1. Tell students to select MOVE from the Menu.

2. Have students choose the INFORMATION icon. Read the instructions aloud: *Put each animal above the word that tells how it moves.*

3. Read the labels of the movements aloud.

4. Ask students to:
   - match each animal with its movement by placing the animal above its label. (If the answer is correct, the animal stays above label and continues to move in place; if incorrect, the animal keeps moving across the screen.)

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Additional Activities:

Ask students to:
- type sentences: *The snake crawls. The frog goes hop, hop.*
- type rhyming words underneath labels: *crawl/ball, run/fun, hop/stop.*
- type words that start with the same sounds: *crawl/cry, run/read, hop/have.*
- make up chants expressing the rhythm of the animal movements: *The frog goes hop bop bop bop hop.*

MOVE
Postcomputer Lesson 1

Materials needed: paper, crayons or markers.

LESSON PLAN

1. Have students do a visualization exercise. Tell them to close their eyes and imagine the animals on the disk moving. Name the animals one at a time; pause for them to visualize the movements.

2. Next, do a pantomime exercise. Whisper to one student at a time to go into the center of the circle and move like one of the animals. Ask the rest of the class to identify the animal *(What is the animal?) (The animal is a rabbit.),* or the movement *(What is the animal doing?) (The animal is hopping.).* Vary the tempo at which you tell the students to move. Encourage students to answer in complete sentences.

3. Students return to their seats. Pass out the art materials. Tell the students to fold their papers to divide them into two equal sections. Let each student decide which two animals to draw in moving positions. Demonstrate on the board using *rabbit/hop.* Write *rabbit* and *hop* beneath the drawing. Emphasize self-expression, not correctness.

4. Circulate and help those students having difficulty deciding which animals to do.

Variation:

Have students make finger puppets from construction paper and use them to show the animal movements.

MOVE
Postcomputer Lesson 2

Materials needed: wall chart begun in HOMES, markers or crayons.

LESSON PLAN

1. Have students add to the wall chart the movements of the animals.

2. Ask students to pantomime how each of the animals moves one at a time. Call on volunteers to give the names of the verbs. Supply the words they don't know. Write them on the board.

3. Model the verbs as the students repeat them aloud.

4. Have two volunteers fill in the verbs on the chart.

5. Ask students to think of words that start with the same sounds. Make a list of them on the board.

Variation:

Read "The Tortoise and the Hare" (Aesop's Fable). Discuss the moral lesson. Ask students to think of examples from their own lives if they can.

SIZE
Skills and Objectives

HOW BIG?

About how many frogs long
is the robin?

_____

About how many frogs long
is the skunk?

_____

Skills Developed:	measuring, comparing sizes (big and small), picture recognition, vocabulary
Students Work With:	pictures of animals, words, and units of measurement
Vocabulary:	small, smaller, smallest, big, bigger, biggest
Teaching Objectives:	To estimate the length of various animals To match animals to their sizes
Correlated Lessons:	Precomputer Lesson page 29 At the Computer Lesson page 29 Postcomputer Lesson 1 page 30 Postcomputer Lesson 2 page 31

LESSON PLAN

Materials needed: pencils.

1. Have the students measure things in the classroom. Do not use a ruler, but use an everyday object, a pencil, as a standard of measurement.

2. Ask the students to take out a pencil. Tell them to hold it next to their right foot. How many pencils long is their foot? Continue measuring other objects, such as desktops, or books. Next have each student measure something different in the room: the door, the width of the doorway, the blackboard, the teacher's desk and so on. Tell the students to return to their seats.

3. Call on students to report what they measured. Make comparisons between the objects. Ask the class to decide which objects were longer, which were shorter.

Variation:

Take the students to the playground. Ask them to measure things there. Use a different object as the unit of measurement.

┌──────────────────────────┐
│ **SIZE**   │
│ **At the Computer Lesson**│
└──────────────────────────┘

LESSON PLAN

1. Tell students to select SIZE from the Menu.

2. Tell students to look at the on-screen instructions as you read them aloud: *HOW BIG? About how many frogs long is the robin? About how many frogs long is the skunk?*

3. Ask students to:
    *   move the frogs to measure the robin and the skunk.
    *   type in their answers on the lines.
    *   check their answers by selecting the INFORMATION icon. (Answers: The robin is about 2 frogs long. The skunk is about 4 frogs long.)

4. Read the answers aloud. Help the students to pick out the words they know in the answers even if they can't read the complete sentences.

Additional Activities:

Ask students to:
- type out the answers; that is, *The robin is about 2 frogs long.*
- count the total number of frogs at the top of the screen.

5. Have students continue to the next scene in the unit and answer the questions.

6. Have students choose the INFORMATION icon for the next part of this unit. Read the instructions aloud: *HOW BIG? Match the sizes.*

7. Ask students to match the animals on the left with the shapes on the right. (If the answer is correct, the shape transforms into the animal; if incorrect, there is no transformation.)

Additional Activities:

Ask students to:
- type in size labels and the names of the animals.
- type a sentence: *The fox is the biggest. The fox is bigger than the frog.* (Model on board first. Emphasize relative size.)

SIZE
Postcomputer Lesson 1

Materials needed: wall chart begun in HOMES, markers or crayons.

LESSON PLAN

1. Have students compare the sizes of the animals in the chart by ranking them from smallest to largest based on what they know from TV or personal experiences.

2. To help them establish the ranking, ask them to make comparisons between the animals two at a time.

3. Select a student to fill in the ranking on the chart.

LESSON PLAN

1. Explain to the students that they are to go home, choose five things to measure, write down the measurements, and bring them to class. Have them use a crayon box as their unit of measure. The main purpose here is to give them further practice and to develop awareness, not to test them. Therefore, explain that it is all right for someone to help them.

2. Give students examples of things to measure: a bed, a TV or VCR, a kitchen chair, the bathroom sink, a bicycle, a toy, or a tape recorder. Measure a box in front of the class to demonstrate the difference between height, width, and length. They should pay attention to which they are measuring and write it down. On the board, write examples: *TV - 5 tall, sink - 6 wide, bicycle - 10 long.*

3. Ask students to share their information the next day. Start by asking questions: *What did you measure, (Jose)? How long was it? What did you measure, (Vi)? How big was it?* If several students measured the same thing, call on the class to make comparisons, for example, *Whose bicycle is longer, (Barbara's or Teresa's)?*

WORLDS
Skills and Objectives
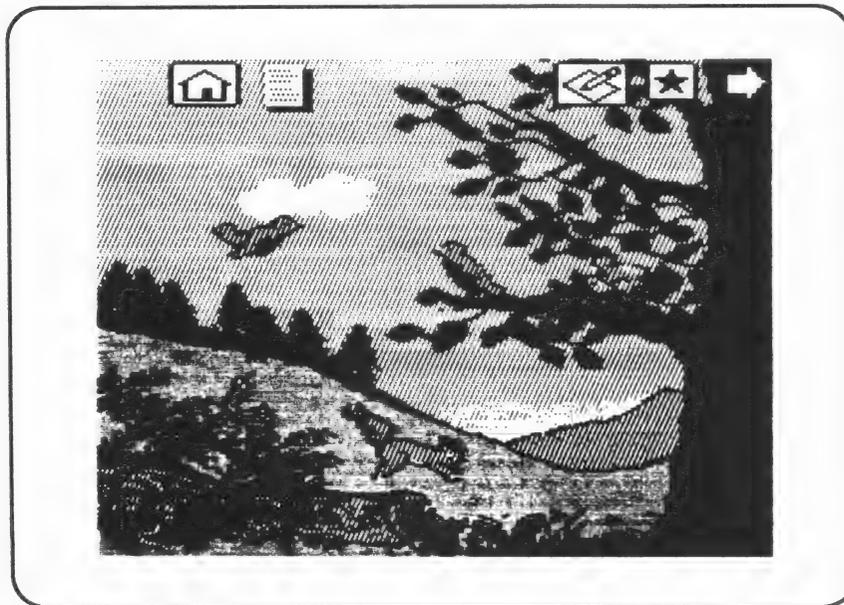
Skills Developed:	observation, identification of animals, creation of sentences
Students Work With:	pictures, words, and sentences
Vocabulary:	student's choice of words
Teaching Objectives:	To discover camouflaged animals To create scenes and stories
Correlated Lessons:	Precomputer Lesson page 33 At the Computer Lesson page 33 Postcomputer Lesson 1 page 34 Postcomputer Lesson 2 page 35 More Teaching Ideas page 35

Materials needed: a variety of objects from nature (such as shells, feathers, acorns, pine cones, nuts, bark, seeds, grass, and rocks).

LESSON PLAN

1. Play Twenty Questions to review the information in the program. Make a statement. Have students raise their hands to answer with a corresponding question. For example, *I like to eat grass. (Are you a rabbit?)* Continue with individual students making up the statements while other students provide the answers.

    Examples:
    -   I live in a nest.
    -   I hop.
    -   I swim in the water.
    -   I live in the ground.
    -   I like nuts.

2. Ask students to identify how the objects that you have provided (nuts, cones, etc.) are used by animals. Ask the students to bring in more objects that animals use. Put them on a display table.

Variation:

Have students sit quietly. Ask them to close their eyes and imagine they are in the woods. Say, softly: *You are taking a walk. You are walking in the woods. You see many things: many animals, many things growing. You smell and feel many things. What do you see/feel/smell/hear?* Pause for one minute. Have students raise their hands and share with the class what they have "experienced." Encourage them to use complete sentences.

**WORLDS
At the Computer Lesson**

LESSON PLAN

1. Tell students to select WORLDS from the Menu.

2. Have students choose the INFORMATION icon. Read the instructions aloud: *Can you find all the animals? Make your own animal picture. Tell a story about it.*

3. Ask students to:
    -   find hidden animals in the picture.
    -   type sentences about what they see: *I see two birds. I see a cloud in the sky.*

- use the CHARACTERS, OBJECTS, and BACKGROUNDS in the MENU BAR to make changes in the picture.
- use the PAPER/PENCIL icon to create a world of their own. (For ideas, see "Using the PAPER/PENCIL Icon" on page 10.)
- make up stories based on the worlds they have created.
- print out their work.
- share their worlds and stories with the class.
- make up titles for their worlds and stories, and display them.

Additional Activities:

Ask students to:
- describe the colors they see in the scene, what season it is, and how they know.
- describe what colors they'd see and what changes there would be in the environment if it were a different season (winter or fall).
- work in pairs or small groups to describe each other's pictures. *"I see a..." "There are..."*
- practice adding and subtracting by giving each other directions: *Put two birds in the tree. Take one branch and put it on the log. Add two more.*
- take turns hiding and finding animals.

WORLDS
Postcomputer Lesson 1

Materials needed: clay, twigs, leaves, acorns, paper, crayons.

LESSON PLAN

1 Divide the students into small groups. Each group will make a diorama of an animal's world.

2. Pass out the supplies. Tell the students to create clay animals.

3 Ask them to work together to decide what else they need to include to make an animal's world. If possible take them to a park or area outdoors where they can find things to use. Otherwise, provide samples from nature such as sticks, leaves, and acorns.

4. Show students how to use clay mounts with twigs to make trees and foliage.

5. Help students add other environmental elements to make a world. Display in the classroom.

Make jigsaw puzzles. Have students use pictures printed from the disk (or scenes with animals from *The National Geographic* or another science magazine). Show students how to glue the picture to cardboard, cut it up into puzzle pieces, then mix it up and reassemble it. Have them exchange puzzles with classmates.

**WORLDS
Postcomputer Lesson 2**

Materials needed: paper, crayons.

LESSON PLAN

1. Write the names of the four seasons on the board. Ask students to talk about each season and to share what they like and dislike about each.

2. Ask students what they think happens to the animals in winter in a cold climate.

3. Ask students to make a drawing to illustrate what they learned. Encourage them to include labels.

4. Display the pictures.

Variation:

Have students make draw pictures of the animals. Provide a variety of materials of different textures, such as imitation fur and leather, cotton, feathers and cloth. Have students glue bits of these materials to their drawings. Have students write the name of each animal under its texture picture. Display.

More Teaching Ideas

CREATE A SCENE

Create a new scene with the computer using the animals of your choice and type instructions like the following ones at the bottom of the screen.

1. Color the squirrel brown.
2. Find two eggs and one snake. Color the eggs blue and the snake black.
3. Find an animal that starts with the letter "f" and color it green.
4. Find an animal that rhymes with *box* and color it yellow.
5. Find three birds. Draw a red circle around them.

Print out the screen in black and white and ask the students to follow the instructions.

RHYME TIME

Select the PAPER/PENCIL icon on a WORLDS scene. On the blank screen, type in the names of homes, food or animals that are easy to rhyme. Evenly distribute them on the screen. Print out. Have the students fill in rhyming words and keep the page. Have them use it to record new rhyming words they learn.

SPELL IT

Select the PAPER/PENCIL icon on a WORLDS scene. On the blank screen, make two columns. In one, have the names and/or pictures of the animals. In the second have the names of their foods. Leave blanks in the names of the foods. Print out and tell the students to fill in the missing letters.

OR

Make a scene. Type in labels for the animals, omitting some of the vowels by hitting the SPACE BAR as you type. Print out and have students add the missing vowels. Or, omit the words' beginning and ending letters and have the students supply them.

HOW MANY?

Start with one of the original WORLDS screens.

At the top, type in:	At the bottom, type in:
Add:	How many are there now?
1 bird	____birds
2 frogs	____frogs

OR

At the top, type in:	At the bottom, type in:
Take Away:	How many are there now?
2 frogs	____frogs
1 mouse	____mice

Select the PAPER/PENCIL icon on a WORLDS scene. On the blank screen, put clusters of animals (for example: 5 skunks, 2 snakes, 3 foxes) in different parts of the screen. Type the numerals 1-5 below each cluster. Print out in black and white. Students count the animals, circle the correct number, then color the animals.

WHO AM I?

Select the PAPER/PENCIL icon on a WORLDS scene. At the top of the screen, type in rebus sentences using a combination of WORDS and CHARACTERS/OBJECTS from the MENU BAR: *"I live in a (picture of a nest)." "I am a ____."* Write the answers at the bottom of the scene. Print out and have the students fill in the answers using the words at the bottom of the page.

OR

Complete the second sentence with two pictures and have students circle the one that completes the sentence appropriately. Example: *I am a (picture of a mouse) (picture of a fox).* The number of pictures and words used can be modified according to reading abilities. Therefore, it is possible to make several versions of the same worksheet. Use more pictures for a lower group, fewer pictures for a more advanced group.

TELL A STORY

Select the PAPER/PENCIL icon on a WORLDS scene, and start a story. Save the story and have the students complete it on the computer using only text or a combination of WORDS and CHARACTERS/OBJECTS from the MENU BAR.

OR

Create a new scene with two animals. Type in several lines of dialogue between the animals and save the scene. Have students complete the dialogue on the computer.

CREATE
Skills and Objectives
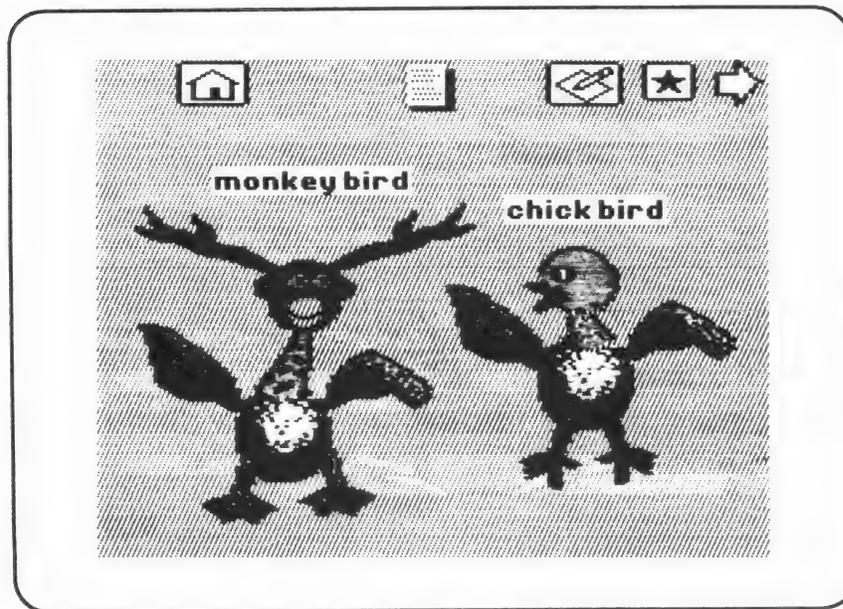
Skills Developed: developing creative thinking, using imagination

Students Work With: animal parts and words

Vocabulary: student's choice of words

Teaching Objectives: To create a real or an imaginary animal
                            To name the animal and write a story about it

Correlated Lessons: Precomputer Lesson page 39
                            At the Computer Lesson page 39
                            Postcomputer Lesson page 40
                            More Teaching Ideas page 41

LESSON PLAN

1. Create several "fantasy" animals on the board by using parts from different animals the students select. For example: Start by drawing a circle for a head. Ask the students to add horns, legs, tail, wings, or whatever parts the students wish. Encourage the students to have fun and use their imaginations.

2. Talk about what would be suitable homes and foods for these fantasy animals and why.

Variation:

> Have students work in small groups to create fantasy animals. Pass out paper to each student. Tell students to draw one part of an animal, then pass their papers to the right. Students continue adding parts until animals are created. Have students give names to their group animals and introduce them to the class.

CREATE
At the Computer Lesson

LESSON PLAN

1. Tell students to select CREATE from the Menu.

2. Have students choose the INFORMATION icon. Read the instructions aloud: *Make up your own animal. Give it a name. Tell a story about it.*

3. Show students how to take apart the on-screen animals and create new ones.

4. Ask students to:
    *   select CHARACTERS and OBJECTS in the MENU BAR to add other parts to the animals.
    *   type in the names of the animals, or select animal names from the WORDS menu and combine them to make new names.
    *   type in their stories or tell them orally to their partners.
    *   use the PAPER/PENCIL icon to create an entirely new animal of their own. (For ideas, see "Using the PAPER/PENCIL icon" on page 10.)
    *   make up stories based on the animals they have created.
    *   print out their work.
    *   share their animals and stories with the class.
    *   make up names for their animals and stories, and display them.

Ask students to:
- work in pairs or small groups to create animals.
- give each other instructions for creating animals.
- type in the sounds their animals might make.

CREATE
Postcomputer Lesson

Materials needed: paper, stapler.

LESSON PLAN

1. Inform the students that they are going to make books about the animals they created. Pass out paper to each student.

2. On the board, write the following sentence openers:
   This is (<u>name of animal</u>).
   It lives_____.
   It likes to eat_____.
   It has (<u>number</u>) babies.
   It _____ to move.
   It likes to_____.

3. Read these aloud one at a time. Tell the students to copy these sentences on paper and put them in their books. Encourage them to add any additional information as well. Circulate around the classroom and help them write out their ideas. Have the students do an information sheet on each animal they created.

4. Have students make covers for their books, then assemble the information sheets and animal pictures into a book. Staple the sheets.

5. Ask volunteers to share their books with the class. The emphasis here should be on creativity. However, if a student has created a scenario that is very inappropriate—for example, the animal has no beak, but eats worms—ask the student to explain how it gets the worms in order to focus students on the relationship between physical attributes and behaviors.

6. Display the books in the classroom. Ask students to help title the exhibit.

MAKE AN ANIMAL

Make a mystery animal and print it out. Have students work in pairs at the computer. One student describes the mystery animal to the other student who recreates it on screen. If possible, create two sets of mystery animals, so students can change roles. (This can also be done where students work in small teams to produce mystery animals. Screens are then printed out and other small groups recreate them on computer or on paper according to the description given.) Students then show their animals to the originators, who check them.

Write a set of instructions on the chalkboard for the students to follow, such as "Make an animal that flies. It has two webbed feet." Students work alone or in pairs to read the instructions and produce the correct animal. This can also be done with pairs or small groups of students generating the directions for each other.

MASKS
Skills and Objectives
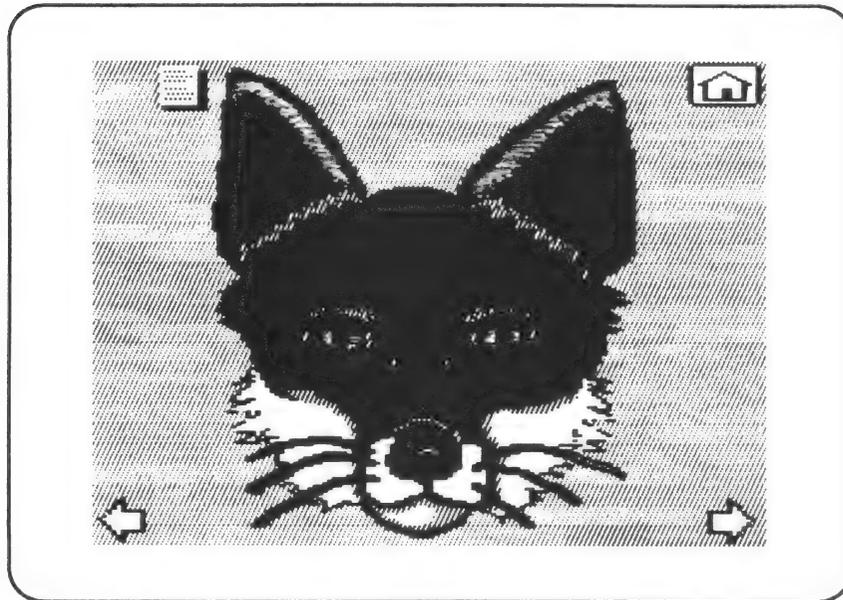
Skills Developed: coloring, role play with mask

Students Work With: masks

Vocabulary: none

Teaching Objectives: To provide masks for students to color and use in role play
or story development

Correlated Lessons: Precomputer Lesson page 43
At the Computer Lesson page 43
Postcomputer Lesson page 44

MASKS
Precomputer Lesson

Materials needed: small paper bags, crayons, scissors.

LESSON PLAN

1.   Talk about the last Halloween. Ask students to describe the costumes and masks they wore and how they felt wearing them.

2.   To stimulate the students' self-expression, have them make simple paper bag rabbit puppets.

3.   Tell students to cut two holes at the top of the bag through which to stick their fingers for ears.

4.   Tell them to think about how the rabbit is feeling and to draw the face to express that mood.

5.   Ask volunteers to move their puppets according to the moods they have selected. Have the rest of the class guess what the moods are.

MASKS
At the Computer Lesson

Materials needed: crayons, markers, scissors.

LESSON PLAN

1.   Tell students to select MASKS from the menu.

2.   Have students choose the information icon. Read the instructions aloud: *Print me in black and white.* (If a printer is not available, reproducible copies of the masks are on pages 45-47.)

3.   Ask each student to:
     *   select a mask.
     *   print, then decorate the mask. Use bits of imitation leather and fur to give the mask texture.
   *   cut out the mask.

LESSON PLAN

1. Have students walk around the room wearing their masks.

2. Play music of different tempos and encourage students to change their movements, gestures, and sounds along with the beat.

3. Call on animal groups one at a time to move: *All rabbits hop to the front of the room.*

4. Ask students to return to their seats.

5. Divide the students into small groups. Tell each group to make up a short skit about the animals they are or select a play from the school library for them to act out. Circulate around the classroom and help them or develop a story together as a class and select volunteers to be in the play. Act it out for another class.

6. Ask students to wear their masks for a parade around the playground or in another classroom.
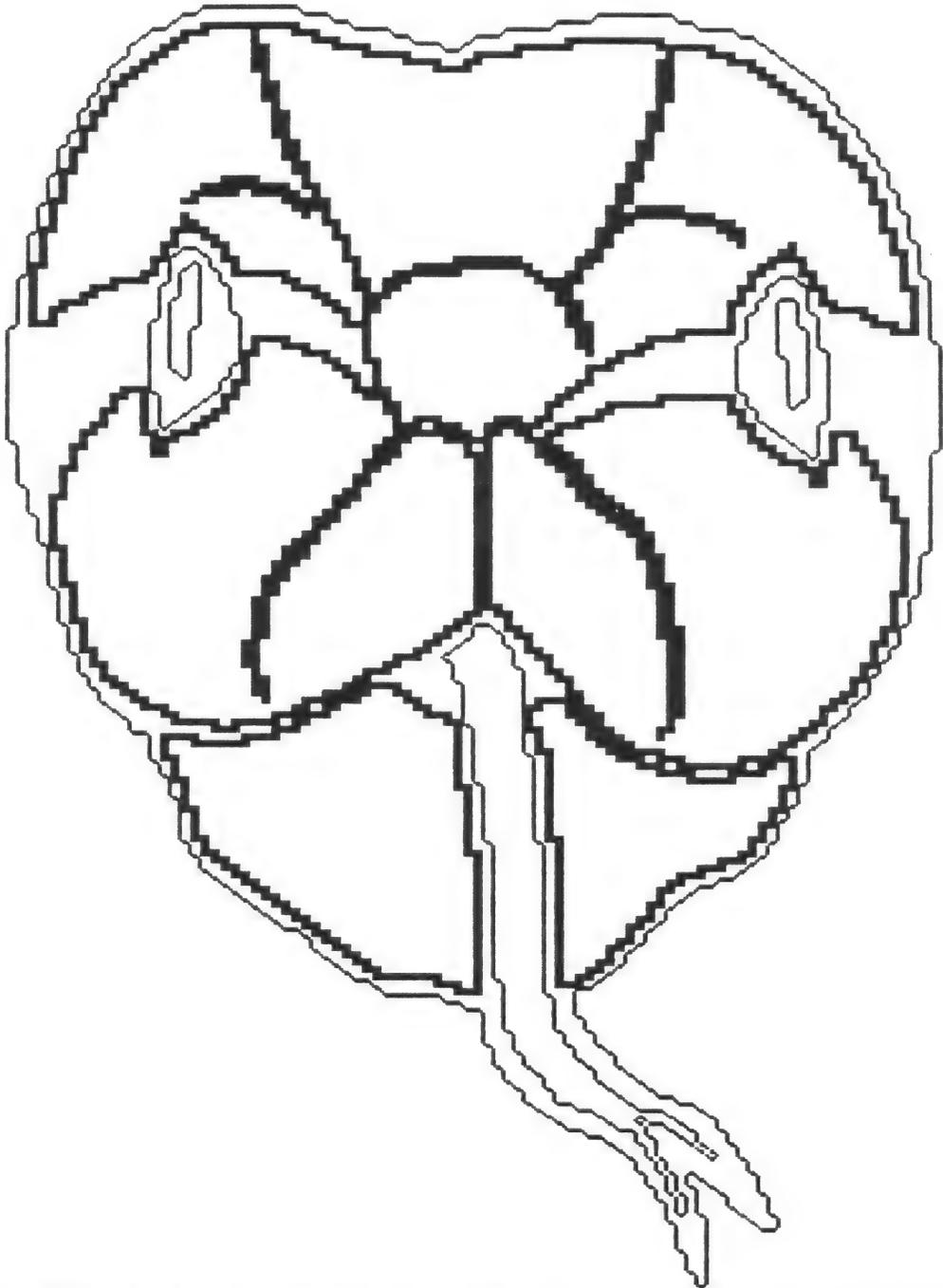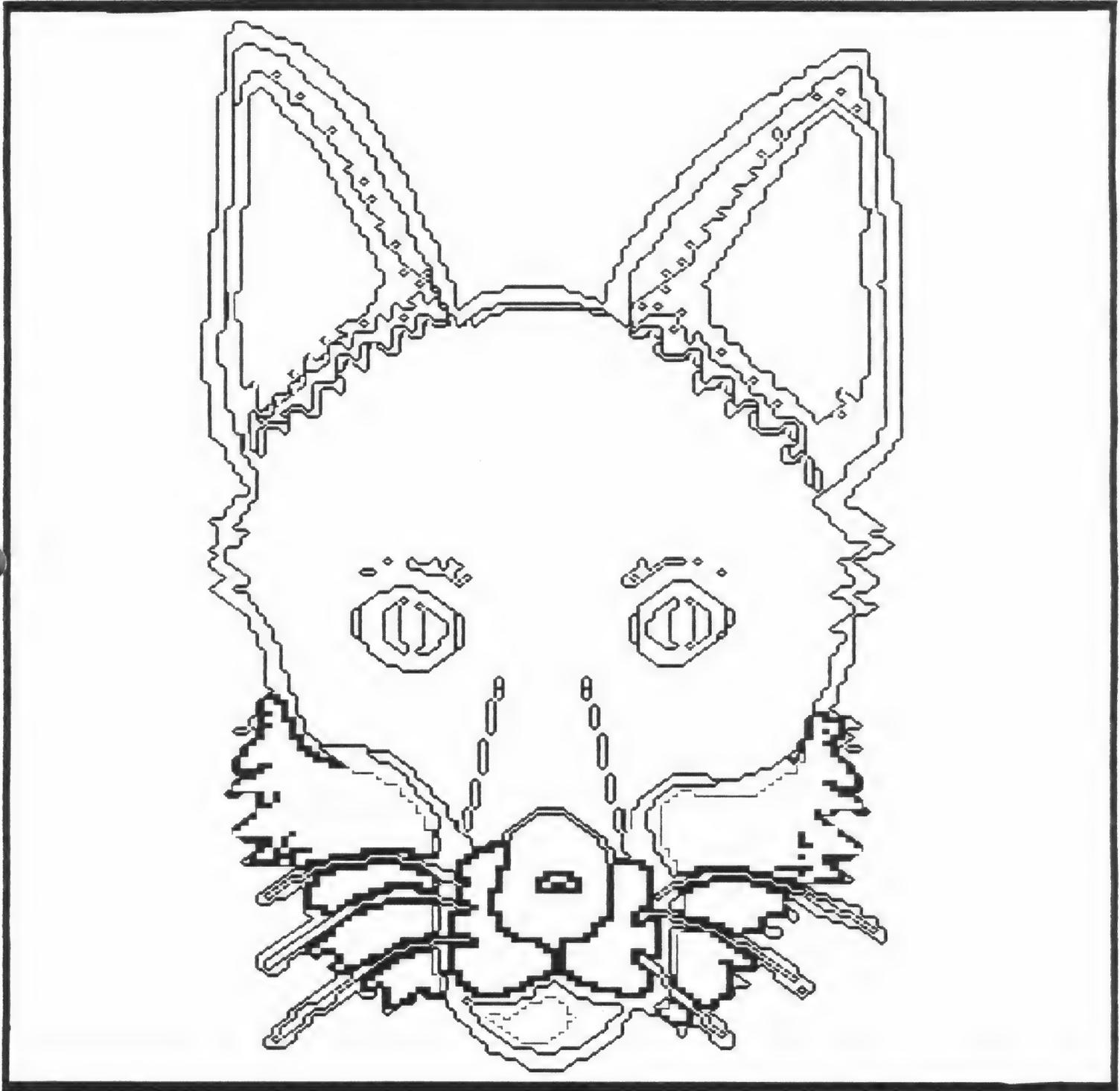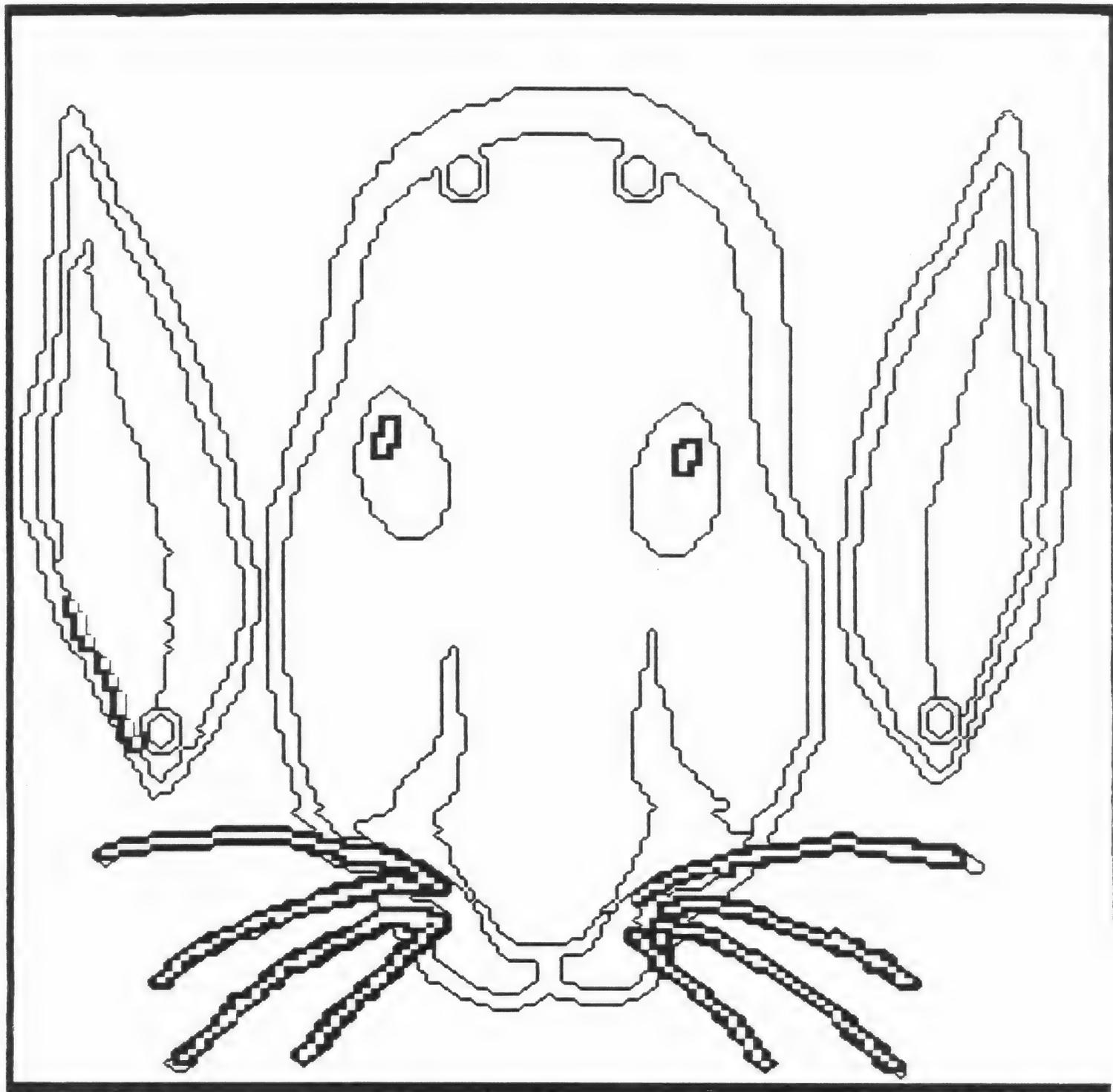
BACKGROUND INFORMATION ON ANIMALS FOR THE TEACHER

The students in your class will probably have more questions about the animals shown in the **Learn About** Animals program. Some background information is provided about each animal that you can share with your students.

SNAKES

Snakes live all over the planet, but they're less likely to be found in colder places. Some live in the ocean or in streams or lakes. Others live in trees or rocks. Most snakes live underground.

Snakes eat small animals like mice and rats, birds, fish, frogs, lizards, and grasshoppers. There are no "vegetarian" snakes. Some snakes are poisonous to human beings, but the "venom," as the poison is called, is used to kill the small animals that snakes eat. Boa constrictors do not bite their prey, but coil around their food and squeeze it to death. Most snakes will not attack a human being unless they feel provoked. A snake would have to be very large to eat a person, because snakes can't bite their food into pieces — they have to swallow it whole!

Baby snakes are usually hatched out of eggs, although some species bear their children alive. Mother snakes lay their eggs in shallow holes, rotten logs, tree stumps, and on flat stones. The number of eggs laid varies from 20 to 100 at a time. Most snakes leave their eggs after laying them, but pythons and king cobras may coil on top of the eggs to guard them.

Snakes slither and crawl over the ground or swim through the water. They sunbathe on warm rocks, coiled like a piece of rope. When snakes attack prey, they strike, which means that the upper part of their body lunges forward suddenly to bite. Snakes look as if they're trying to taste everything they come in contact with because their tongues dart in and out constantly. The snake is actually using its tongue to smell, not to taste.

Snakes range in size from as small as six inches to as large as 8 1/2 feet, depending on the species. The smallest snakes are garden snakes; the largest are the pythons and boa constrictors.

The most popular misconception about snakes is that they're slimy, but in fact a snake's skin is usually dry and silky, like leather. Its skin is made of platelets that are hooked together. A snake will shed its skin at least once a year. Under the outer skin, new skin forms, and when the snake is ready, it literally rolls out of the old skin, turning it inside out. A signal that a snake is preparing to shed its skin is when its eyes cloud over. The eyes stay cloudy for about eight days, and during this time the snake is almost blind. When the eyes clear up, the snake is ready to get rid of the old skin.

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TURTLES

Turtles are air-breathing reptiles, but they live in both fresh and salt water. They can stay underneath the surface for a long time. Some turtles hardly ever leave their home water, while others spend more time on land, going from one pond or lake to another.

Some turtles eat mostly meat, while others are vegetarians. They eat worms, small fish and shellfish, insects, and plants. Pet turtles love lettuce. Turtles don't have teeth, but they tear their food into pieces using their hard, powerful jaws, and their front feet.

A mother turtle lays her eggs on land, in a nest-hole she has dug. She covers the 20-100 eggs with sand or dirt. Birds, snakes, raccoons, and other animals like to eat turtle eggs, and sometimes a whole nest will be devoured. If the eggs are not disturbed, the baby turtles — called "hatchlings" — all hatch at the same time, usually in the evening. The tiny turtles all work together to dig their way out of the nest. They are in danger of being eaten, too, so they scurry quickly into the water.

Turtles move slowly on land. "Top speed" for a turtle would probably be the same as a fast human walk. In the water, though, turtles swim swiftly with their powerful legs and webbed feet. Turtles also like to bask in the sun on a rock or log.

The size of a turtle, depending on the species, can range from a few inches to four feet long. Some weigh hundreds of pounds, and they often live as long as 150 years.

A turtle's shell is attached to its spine. It can move its head, legs, and tail in or out of its shell. This is how a turtle protects itself from predators. It's important to know that the turtle's shell is a living part of the turtle. It's sensitive to touch, and it can crack or break. Painting a turtle's shell or carving your initials on it will kill the turtle.

SKUNKS

Skunks generally live in the bordering woods of a town, either in an old tree, an abandoned man-made shelter like a barn or shed, or an underground den lined with dry leaves. They have even been known to live quite happily in cities as large as New York!

Skunks like to eat grasshoppers, caterpillars, beetles, slugs, snakes, small rodents, eggs, and fruit. Seeds, leaves, and some flowers are also appealing to skunks, as well as garbage from people's homes. Even though they pose somewhat of a smelly risk to farmers, they are welcome in the fields because they eat many of the insects that would otherwise destroy crops. Skunks are nocturnal animals, gathering their food at night and sleeping in the daytime. When the weather turns cold in the autumn, skunks eat more than usual in order to build up their body fat for the cold months ahead. Even though they don't hibernate in winter like bears or woodchucks, they spend more time in their cozy dens and only come out to eat and exercise when the weather turns warm.

Baby skunks are known as kittens, and they weigh only about half an ounce when they're born. They are born blind and hairless, and don't open their eyes until they are three weeks old. There are usually about four or five kittens in a litter. They are very dependent on their mother for about three months; by that time their mother has shown them how to search and hunt for their own food, and soon after they've learned, the young skunks don't spend very much time in the den. During autumn, the grown skunks go their own way and seek out shelter for the coming winter months.

Skunks amble slowly along with a kind of waddle. They are about the size of small housecats when grown, weighing approximately eight pounds and measuring twelve to sixteen inches from nose to rump.

The characteristic that makes skunks unique is their ability to defend themselves by spraying a foul-smelling liquid at a would-be attacker. When a skunk is angry or afraid, it stamps its front feet and makes a hissing noise as a warning. A person or animal in the skunk's vicinity is safe until the skunk turns around and fires the oily yellow fluid called musk. The musk not only smells terrible, it also causes pain, burning, and temporary blindness.

The automobile is by far the skunk's most deadly enemy. Because the skunk is so used to going anywhere it likes with no fear of attackers, it often wanders onto the highway and meets with disaster. If skunks see oncoming headlights, they apparently think the car is just another potential enemy, and that their scent will scare it away.

Descented skunks make interesting pets, but even when born and raised in captivity a skunk remains a wild animal and keeps its wild characteristics. It is very independent, not affectionate like a dog or cat, and it will move around much more at night than in the daytime. Once descented, skunks cannot be returned to the wild because they would have no way to defend themselves.

FOXES

Foxes are found around the world from the frozen Arctic to the hot desert. The red fox, the most common one in North America, usually lives on the fringes of forests and in rural areas bordering towns. They live in dens—in cornfields, under hedges, under tree roots—and in sandy banks and hollow logs.

Foxes eat rabbits, mice and other small animals, as well as insects, worms, frogs, lizards, fruit, birds, and eggs. They may raid garbage dumps and occasionally steal chickens from farms. Foxes have a set of 42 powerful teeth which they use to tear their food into chunks. When hunting is particularly productive, the fox will store the surplus by burying it. His excellent sense of smell helps him find the food later.

Fox babies, called cubs or kits, are usually born four to six in a litter and weigh less than four ounces each. They snuggle close to each other and to their mother to keep warm, and spend their first ten days of life nursing and sleeping. During this time, their mother never leaves them. The male fox stays outside the den, but brings food to the family. At the age of three months, the cubs can find their own food, but the family remains together until the young foxes are six months old.

The fox's most common gait is the trot, with which it can cover about five miles an hour. They can go for hours without any signs of exhaustion. If necessary, foxes can gallop at a speed of 45 m.p.h. When hunting, a fox pounces on its prey like a cat.

A grown fox is between two and three feet long from nose to tail-tip, stands about sixteen inches at the shoulder, and weighs about ten pounds. Its thick fur makes it appear larger. Foxes are part of the dog family, and like all dogs, they have sharp senses of hearing and smell. They use these senses to hunt prey and avoid danger. Domestic dogs can't see well at night, but foxes' pupils have special cells that give them excellent nocturnal vision. Their ability to evade their two main enemies, man and domestic dog, has given them a well-deserved reputation for being clever.

There are many tales and superstitions about foxes. The Apache Indians believed the fox brought fire to mankind by stealing it from the gods with his tail. In the southern United States, thinking about a fox without a tail is supposed to cure hiccups.

Farmers complain that foxes steal their chickens, yet they also keep down the rodent population in the farmers' corncribs and wheat bins. Hunters complain that foxes reduce the number of game birds available for shooting, yet foxes are really helping to keep the game bird population from exploding to a dangerously high level at which many birds would starve to death. The fox is a beautiful part of our ecosystem.

RABBITS

Rabbits nest in burrows dug in the ground or in banks or hillsides, where rainwater drains off easily and leaves the burrow dry. A collection of burrows is called a warren. Some rabbits make nests in bushes or tall grasses. Rabbits spend a lot of time in open fields, but they like to be close to a hedge or wall where they can easily run for shelter.

Rabbits feed on grass, clover, and weeds or share food with cattle, sheep, and other farm animals that live in the fields. Rabbits are also very fond of garden vegetables and other crops, making them quite unpopular with farmers. In winter, they eat roots, bark, and twigs. This can destroy trees and other plants. Rabbits feed from dusk to dawn, when there is less chance of being seen by an enemy.

A female rabbit, called a "doe," may have three to four litters of babies in a year. There are usually about six baby rabbits, called "kits" or "kittens." Before they are born, the mother rabbit prepares a special "nursery" nest for them using grass and her own fur to keep the babies warm. Newborn rabbits are blind and deaf, have no fur, and cannot move their legs. They grow quickly because their mother's milk is rich in vitamins and nutrients. By the time they are three weeks old, they can leave the nest to eat grass. At the age of two months they go their own way to find mates and raise families of their own.

Rabbits hop when they are feeding or aren't in a hurry, but when danger threatens they run very fast. A mother rabbit may stumble or limp as if injured when she is trying to lead a predator away from her babies.

Hares are very much like rabbits, only bigger. Both hares and rabbits have long ears, strong hind legs, long whiskers, and big front teeth called incisors. Their sensitive noses give them a much better sense of smell than humans. Rabbits can weigh anywhere from a pound to sixteen pounds.

Foxes, wolves, and coyotes eat rabbits, and so do eagles, hawks, and buzzards. Rabbits can't fight back, so they must depend on speed and camouflage for protection. The snowshoe hare lives in the far north, where there is snow much of the year. During this time, the snowshoe hare has white fur. For the short summer, his white fur molts and he grows a brown coat to disguise him. Rabbits feed in groups, and if danger approaches, a "lookout" rabbit warns the others to run by thumping his feet loudly.

Rabbits raised by people are called "domestic" rabbits. Many are kept as pets or shown in rabbit shows. Others are raised for their fur or their meat. Over 90 different breeds of rabbits have been developed. One especially interesting type is the Siamese rabbit. It has black ears and paws and blue eyes like a Siamese cat!

FROGS

Frogs live on land and in the water and belong to a group called "amphibians." They like to sit on lily pads, logs, or rocks that are in the water. Here they can keep an eye out for food.

Frogs eat earthworms, minnows, spiders, and other insects. A frog's sense of sight is very keen. Its eyes are very large and it can see objects and colors quite distinctly. A frog's neck doesn't have muscles that allow it to turn its head, but the eyes are so wide that it can see what's coming in practically any direction. When a frog spots an insect that it would like to eat, it sits very quietly for a while, waiting for the insect to come too close. Then, in an instant, the frog grabs its prey with a long sticky tongue and draws it into its mouth.

A frog begins life as a tadpole, a creature that behaves and looks more like a fish than a frog. Tadpoles are hatched from eggs, which are grouped together by the thousands in a gelatinous mass at the bottom of ponds where frogs live. Not all eggs hatch, for many are eaten by other pond inhabitants. Tadpoles have gills and must live under water. As the tadpole matures, it grows arms and legs, loses its tail, and develops the lungs that will help it to breathe on land. At this point it is a fully-grown frog.

Frogs normally hop and jump, but sometimes they walk on all fours. The leathery pads on the frog's front feet help it to grasp onto rocks. The back feet have five toes, connected by a web of skin. This web allows the frog to swim very quickly. In fact, flippers that we manufacture for swimming and diving are based on the design of a frog's foot. Most frogs are small enough to hold in your hands — if you can catch them!

A frog's skin is moist, slippery, and green. Its skin keeps out dirt and germs, but lets water in. This is how a frog drinks, and partially how it breathes, absorbing the oxygen molecules that are contained in the water. Almost half a frog's weight is from water that the skin absorbs. If a frog stays on land too long, it may lose too much body moisture and actually dry up.

Frogs like to sing, and each species of frog has its own song. Most frogs sing in early spring, although the bullfrog waits until early summer. Male frogs sing in order to call the female frogs. They make noises by forcing air back and forth between their mouth and lungs.

BIRDS

Most birds build nests for their homes, located in trees, rocks, or even on top of a mountain. The biggest nest ever recorded was built by a bald eagle. It was 20 feet deep and 9 1/2 feet across, and weighed more than 4,000 pounds! The eagle lived in it with its family for 35 years. Birds build their nests with twigs, dry grass, mud, fur, leaves, and any other material they can find. Some birds decorate their nests with sprigs of pine or spruce. Certain birds don't build nests, but lay their eggs on the ground, unprotected.

The eating habits of birds depend on the species, and there are thousands of different kinds of birds. Robins (like the one in this program) eat worms, insects, and seeds when they're available. Ocean birds like fish and people's garbage, while owls, eagles and hawks prefer small rodents and reptiles. Birds don't have teeth, but they have strong, powerful bills that work just as well to grind and tear their food.

Some birds, like California condors and puffins, incubate only one egg at a time, while some others, like barn owls, brood up to eight eggs. The baby birds — called chicks or fledglings — use what's known as an "egg tooth" to hatch out of their eggs. The egg tooth is a sharp, pointy tip that's attached to the top of the bill. To help them even more, chicks have special "hatching" muscles, located on the back of the head and neck, so the tooth can be more powerfully forced against the shell. Both disappear soon after the chick escapes from the shell. Both parents care for the fledglings, tirelessly bringing them food and defending them from predators. The fledglings must learn to fly and find food before they are ready to venture out on their own.

Birds are able to fly not just because of their wings, but also because they have small frames and light bones filled with air sacs. The average flight speed for birds is 20 to 30 m.p.h., but some birds have been clocked at 175 m.p.h. Birds who cross oceans when migrating must fly long distances before they find a resting spot on land. The Arctic tern migrates from the Arctic to the Antarctic — a distance of 11,000 miles.

Birds vary greatly in size. The smallest bird is the hummingbird, which could be mistaken for a butterfly. The largest is the ostrich, which can stand as tall as an adult human. A bird's sense of sight is better than any other creature's. The eye of a hawk has eight times as many visual cells as that of a human. Birds' eyes give them the fast, accurate information they need in order to fly quickly without mishaps.

Many birds have names that sound like the calls they make, for instance the whippoorwill and the chickadee. Birds sing in different ways for different reasons, even though the basic song may sound the same. Different calls indicate alarm, distress, scolding, warnings, courtship, or merely happiness. Most birds learn to sing by imitating others of the same species. That's why you can teach a parakeet or parrot to talk or whistle.

SQUIRRELS

Squirrels live in nests, also called "dreys," which are usually built high in trees. The nest is about the size of a basketball and looks like a crow's nest. It is made of leafy twigs, closely twined together with other random materials a squirrel might find. Squirrels also make nests in tree hollows.

Squirrels love oak trees because acorns are their favorite food, but they will also live in and feed from beech, chestnut and hazel trees. Mushrooms, fruits, berries, grain, peas, and beans are things squirrels like to eat, as well as an occasional bird egg, or insect. Sometimes a squirrel will even eat dirt, which provides minerals. When other food is scarce, squirrels will strip the bark from trees. They obtain nutrients from the sap, but this activity kills trees, and farmers often take drastic measures to exterminate the squirrels.

When a mother squirrel is expecting babies, she lines the nest with soft fur and feathers. Baby squirrels are only about four inches long at birth, and are nursed by their mother for about ten weeks, until they shed their initial baby fur. A few weeks later, they leave the nest. A young squirrel is fully grown by six or seven months.

Squirrels are able to climb and play among the most delicate of branches, relying on their small weight and large tails for balance. A squirrel may leap distances of up to twelve feet when going from branch to branch or from tree to tree. Squirrels have excellent eyesight, which helps them in this high-speed travel through the treetops. Their large eyes give them a wide angle of vision. They also have a keen sense of smell, which helps them to find food, especially previously buried nuts.

The average size of a squirrel's body is about ten inches, and its tail is around eight inches long. They usually weigh between about a pound and a pound and a half. Their fur, which is shed twice a year, not only keeps them warm but also helps to camouflage them from predators.

MICE

Mice are small, intelligent animals found almost everywhere in the world. Some live in houses, barns, and other buildings. Others live away from people in forests, mountains, swamps or deserts where they build nests in bushes, tall grass or hollow logs, or dig underground burrows. Some mice spend the winter in burrows under the snow and feed on the underground parts of plants.

Mice have long sharp front teeth called incisors, which help them eat very tough foods like hard nuts and dry seeds. These incisors are constantly being worn down by chewing and gnawing, so they continue growing throughout the mouse's life. Mice also eat insects, fruits, leaves, buds, roots, and stems. Their front feet are like tiny hands and are used to hold their food.

Mice do not often live for more than a year, but during that year a mother mouse may have many litters of up to seven babies each! Mice mothers have short pregnancies — only 18 days. Newborn mice are blind, deaf, helpless, and not even as big as your thumb. They drink their mother's milk until they can eat solid food. This only takes about seven days. They grow quickly, and when they are only three weeks old their mother leaves them to build a nest for her next litter. At two months, the babies are as big as their mother.

Mice move very quickly. They run, scamper, jump, and climb in their fight to stay alive. Their long sensitive whiskers twitch almost constantly. They have many enemies, and their only defense is to run away and hide. Fortunately, they have excellent hearing and keen eyesight to help them hear and see predators.

There are hundreds of different kinds of mice in the world. The little European Harvest Mouse is only three inches long, while the African Giant Rat, a close mouse-relative, is an incredible three feet long! They all have furry bodies. Most have long scaly tails and very big ears. Their big ears help them to hear four times better than humans can.

Mice who live in the desert have to travel long distances to find food. Jerboa and Kangaroo mice, both desert mice, have long back legs and large hind feet. They hop like kangaroos and can cover ten feet in a single leap. Pack Rats collect shiny objects in a special storage place in their nests.

BIBLIOGRAPHY

Here are some books that children in early grades might enjoy reading to find out more about these animals. While some of the words may not be fully established in a student's vocabulary, the pictures and simple explanations of the concepts will still make for interesting reading.

A Frog's Body, by Joanna Cole, with photographs by Jerome Wexler. Text and illustration copyright 1980 by Joanna Cole and Jerome Wexler, respectively. Published by William Morrow and Company, Inc., New York, NY.

Grey Squirrel, by Oxford Scientific Films, photographs by George Bernard and John Paling. Text copyright 1982 by Oxford Scientific Films; illustration copyright 1982 by Bernard and Paling. Published by G.P. Putnam's Sons, New York, NY.

The Misunderstood Skunk, by Lilo Hess, with photographs by the author. Copyright 1969 by Lilo Hess. Published by Charles Scribner's Sons, New York, NY.

On the Trail of the Fox, by Claudia Schnieper, with photographs by Felix Labhardt. Published originally as *Dem Fuchs auf dem Spur*, by Kinderbuchverlag KBV Luzern AG, Lucern, Switzerland. English edition copyright 1986 by Carolrhoda Books, Inc., Minneapolis, MN.

This section lists problems that sometimes occur, along with likely solutions. If these solutions do not work, try running the program on another computer to determine if there is a hardware problem. Also, please read "What Happens If...? - Sunburst Courseware and Warranty" on page 65.

If the Program Disk will not load

- Do you have the correct disk in Drive 1?
- Is the disk inserted upside down?
- Is the disk drive open?
- Is the disk drive properly connected to the computer?
- Is the computer's memory 128K?
- Does the computer's 80-column card have double high-resolution graphics?

If the program does not move past the title screen

- Have you inserted the Student Disk?
- Is your setup correct?

If you cannot select another unit

- Is the Student Disk on the correct side?
- Has the file been deleted from the disk?

If the pointer does not move

- Was your input device plugged in before loading?
- Is your input device correctly plugged in?

If the pointer has disappeared

- Has the pointer been completely moved off the screen?
- Is the computer trying to print?
- Have you selected a CHARACTER, OBJECT, or WORD?

If a CHARACTER has disappeared

- Has the CHARACTER been completely moved off the screen?
- Did you press the DELETE key while the CHARACTER was selected?

If a CHARACTER'S animation has stopped

- Has another CHARACTER, OBJECT, or WORD been placed on top of it?
- Are there too many CHARACTERS in the scene?
- Was this CHARACTER a duplicate created with the SPACE BAR? (Duplicates will not animate.)

If you cannot save the Setup

- Is the Program Disk in Drive 1?

If the computer displays an error message

- Is the disk drive open?
- Is the correct disk in the drive?
- Are there too many OBJECTS (about 200), text letters (about 750), or CHARACTERS (over 19) in your scene on Side 2 of the Student Disk?

The following problems are pertinent only to Side 2 of the Student Disk:

If you cannot add new CHARACTERS, OBJECTS, and/or WORDS

- Are there too many CHARACTERS, OBJECTS, or WORDS in the scene?
- Is the pointer directly on the CHARACTERS, OBJECTS or WORDS you are trying to select?

If you cannot save a scene

- Is the scene locked?
- Does a scene with the same name and number already exist?
- Is the Student Disk in the correct drive according to Setup?
- Is the disk full?
- Is the disk damaged?
- Is the disk drive malfunctioning?
- Is there an error message on the screen? If so, correct the problem and select "Try Again." Then reenter the information needed to save the scene.

If the characters will not move

- Are there too many CHARACTERS and OBJECTS in the scene?
- Is the CHARACTER behind another CHARACTER, an OBJECT, or a WORD? (Only the CHARACTER on top will move.)

If a scene will not print or prints incorrectly

- Is the Setup correct?
- Is the printer's Select button on?
- Is the printer hooked up, turned on, and plugged in properly?
- Is the paper centered properly?
- Are you using an Apple IIGS with with your own printer card? If so, you must enter the Control Panel. On SLOTS, make sure that SLOT 1 is set to your card.

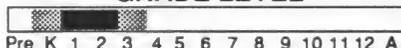# Learn About Animals

Science/Language Arts/Mathematics/Art

Overview

Students explore the natural habitats, foods, homes, sizes and offspring of a variety of familiar animals.

READING LEVEL
1

GRADE LEVEL

Pre K 1 2 3 4 5 6 7 8 9 10 11 12 A

TIME REQUIRED
10-15 min./unit

Curriculum

PREREQUISITE SKILLS
- Basic visual discrimination skills
- Ability to follow simple directions

OBJECTIVES
- Develop an understanding of animals and their environments
- Develop counting skills
- Practice matching
- Improve ability to follow directions
- Compare and contrast sizes
- Practice classifying, and labeling.
- Encourage and develop creativity
- Increase vocabulary

PROBLEM SOLVING SKILLS
- Analyzing
- Logical thinking
- Size discrimination
- Information gathering
- Trial and error

Courseware

NOTEWORTHY FEATURES
- Should be used with color monitor and printer with graphic capabilities.
- Requires 128K memory
- Students can create scenes, real or fantasy animals, and stories on disk and print them out.
- Animal masks can be printed and used for role playing.
- Program includes activities in science, language, math, and art.
- Correlated Lesson Plans for all eight sections of the program are provided.

TEACHER OPTIONS
- Teachers may use the program to create and print out customized worksheets.
- Student-created scenes and stories can be saved and printed.

RELATED MATERIALS
- None

Hardware

- Apple
  └ Muppet Learning Keys • mouse • Koala Pad • joystick

Learn About Animals

DESCRIPTION

Learn About Animals is a beautifully illustrated animated program that introduces students to animal life using an interactive format. In the first five sections, the homes, food and babies of nine animals are studied, along with their sizes and movement. In other sections, students locate hidden animals, create real or imaginary animals, and print out masks which can be colored and used for role-playing. Students can also write stories on the screen and print them out.

The Teacher's Guide features 30 lesson plans, suggestions for additional activities, and resources.

GETTING STARTED

Write the names of the nine animals on disk on the board, and ask students to share what they may already know about the animals. Provide additional information as needed. Make a wall chart listing the animals and making columns for homes, food, babies, movement, and size. Explain to the students that they will fill in the chart as they complete each section of the disk.
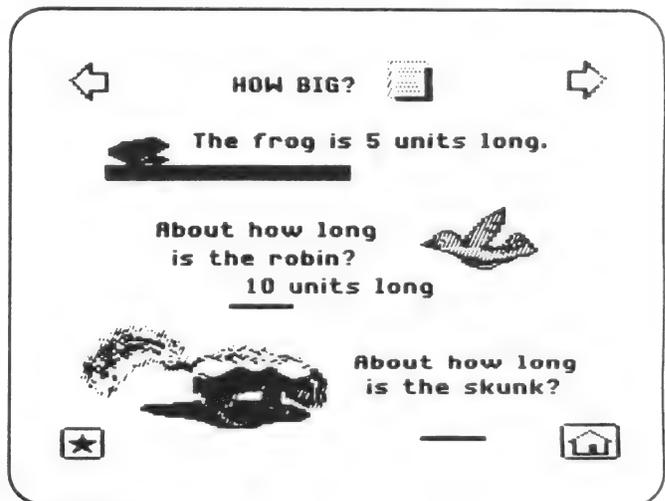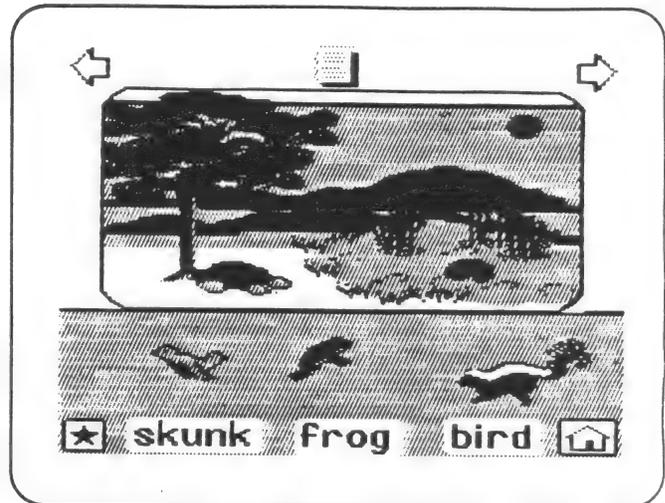
AT THE COMPUTER

Boot the Program Disk, then insert Side 1 of the Student Disk. At the main menu, show the students how to select "HOMES." Explain the directions using the Information icon. Then demonstrate how to manipulate what is on the screen. Have the students put each animal in its home, and label each animal with its name.

SUGGESTED EVALUATION

Have the students fill in the "HOMES" section of the wall chart started at the beginning of this lesson.

SPECIAL KEYS

- Control T accesses Teacher Utilities from MENU BAR.
- ESCAPE (or ZAP on Muppet Learning Keys) accesses the MENU BAR.
- HOME icon exits program and returns to the main menu.

Apple: Working with Your Computer

To Use the Program

1.   Turn on the television or monitor.

2.   Turn on the printer if you are using one.

3.   Insert the Program Disk into the disk drive.

4.   Close the door to the disk drive.

5.   Turn on the Apple computer.

6.   You'll see a red light on the disk drive turn on. If the disk drive light does not turn off in about ten seconds, turn the Apple computer off and make sure your disk is placed correctly in the disk drive.

7.   You will see the Sunburst logo. Then, you will be asked if you are using the Muppet Learning Keys. If so, press "Y" on your regular keyboard to indicate that you are. From then on, you may use the Muppet Learning Keys. If you are not using the Muppet Learning Keys, type "N" to continue. (If you are using the Muppet Learning Keys on a IIGS, you must set the System Speed to Normal. See page 64.)

8.   The title screen of **Learn About** Animals and an information screen will follow.

9.   Read "For help..." for information on using the Apple keyboard, mouse, Muppet Learning Keys, KoalaPad and joystick with this program.

10.   If you wish to make any changes to disk drive setup, printer type in use, or printer card type, you should do this now, through the MENU BOX located on the top left corner of the information screen. (See SETUP on page 9).

11.   Proceed with the directions on this screen to continue the program.

To Turn Off the System

1.   Remove the disk, and turn off the Apple computer, the television or monitor, and the printer.

Note: **This program is not compatible with the Apple II+. It works on an Apple IIe, IIc, IIc Plus, or IIGS with 128K.**

APPLE IIGS: CONTROL PANEL SETTINGS

To allow your Apple IIGS to work properly with Sunburst software, certain Control Panel settings must be selected. The Apple IIGS retains these settings even after the power is turned off.

To Use the Control Panel:

- Turn on the Apple IIGS and monitor.
- Enter the Control Panel main menu by holding down the CONTROL and Open Apple (○) keys, and press ESC.
- Press the ↑ key to enter the Control Panel. Use ↑ to highlight Control Panel, and press RETURN.
- Use ↓ and ↑ to highlight the feature you want to change and press RETURN. Again use ↓ and ↑ to highlight a specific option and change it by using the ← and → keys.
- After you have finished making changes, select Quit to use the Apple IIGS.

Change the Display:

- Highlight **Display** and press RETURN.
- Set **Type** to **Color**.
- Set **Columns** to **40**.
- Set **Text** to **White**.
- Set **Background** to **Black**.
- Set **Border** to **Black**.
- Press RETURN to save the changes and to go back to the Control Panel.

Change the System Speed:

- Set **System Speed** to **Normal** and press RETURN if you are using the Muppet Learning Keys.

Change the Slots:

- Highlight **Slots** and press RETURN.
- Set **Slot 1** to **Printer Port**, if you are using a printer connected to the printer port. If you are using a printer connected to a controller card in **Slot 1**, select **Your Card**.
- Set **Slot 6** to **Disk Port**, if you use a 5.25 - inch drive connected to the disk drive port.
- Set **Slot 6** to **Your Card**, if you use a 5.25 - inch drive connected to a controller card in Slot 6.
- Set **Startup Slot** to **Scan**.
- Press RETURN to go back to the Control Panel.

Apple: Working with Muppet Learning Keys

Installing the Muppet Learning Keys

1. Plug the Muppet Learning Keys into the joystick port on the back of the Apple IIe, IIc, or IIGS. If you are using a IIGS, you must enter the Control Panel and set the System Speed to Normal.

2. Follow the steps on page 62 to turn on your Apple computer and start the program.

3. After the title screen, you will be asked if you are using the Muppet Learning Keys. Press "Y" on the regular keyboard to indicate that you are. From then on, you may use the Muppet Learning Keys.

Operating the Muppet Learning Keys

1. The ARROW keys move the pointer on the screen. The ARROW keys act like the arrows on the keyboard.

2. The ARROW keys can be pushed sequentially or held down.

3. Pressing in the **middle** of the arrows sets the speed of the arrows; they will go faster or slower. The speed remains set until the middle is pressed again.

4. The GO key selects the item you are pointing to.

5. When typing, or using the letter, number, or SPACE keys, press STOP to go to a new line.

6. To erase, press OOPS or the ERASER key.

7. Choose between upper and lower case letters by pressing the ABC for uppercase and abc for lowercase.

8. The ZAP and HELP keys are active on the WORLDS, CREATE, and the MASKS scenes. The ZAP key opens the MENU BAR and the HELP key moves the pointer to an icon.

"What Happens If...?" — Sunburst Courseware and Warranty

1. **What happens if a program will not load or run?**

   Call us on our toll-free number and we'll send you a new disk.

2. **What happens if I find an error in the program?**

   We have thoroughly tested the programs that Sunburst carries so we hope this doesn't happen. But if you find an error, please note what you did before the error occurred. Also, if a message appears on the screen, please write the message down. Then fill out the evaluation form or call us with the information. We'll correct the error and send you a new disk.

3. **What happens if the courseware is accidentally destroyed?**

   Sunburst has a lifetime guarantee on its courseware. Send us the product that was damaged and we'll send you a new one.

4. **Can I copy the disks?**

   The material on the disks is copyrighted. You should not copy the disks.

5. **Can I take the Program Disk out of the computer after the program has been loaded and put it into another computer?**

   No, it is not recommended.