OREGON ZOO

K–2 at the Zoo




Teacher Resource Guide

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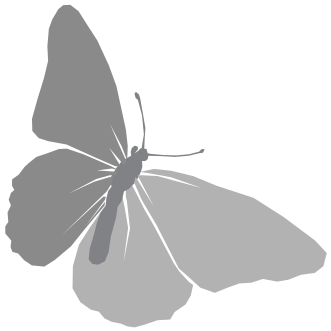
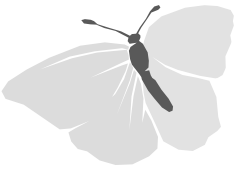
INTRODUCTION



This teacher's resource guide was created for the K-2 classroom by K-2 teachers. It was designed to enhance a visit to the Zoo, although many of the activities are done at school. The lessons are in line with the Washington State Essential Academic Learning Requirements and Oregon State Benchmarks. The lessons extend into several aspects of the curriculum, including science, math, reading, writing, speaking, social studies, and art.



You will find age-appropriate activities focusing on life cycles, habitats, classification, and community. The activities are accompanied by extensions for you to enjoy.

HABITAT

A habitat is a place where animals and plants live. A habitat provides for all the needs of a living thing, such as food, water, shelter, space and a place to reproduce.

Habitats can be as big as a rainforest or as small as a crack in the sidewalk.

We All Have Homes

Students understand that animals need homes to survive.

Benchmarks: Describe a habitat and the organisms that live there. Write in a variety of modes.
EALR: Understands how interactions within and among systems cause changes in matter and energy.
The student writes in a variety of forms for different audiences and purposes.
Materials: Books on animals' homes (Recommended book: A House Is A House For Me by Mary Ann Hoberman)
Time: 40 minutes

Procedure:

Discuss with students what the essential items are that people need to survive. Focus on shelter and discuss the different items that are found in a human's shelter. Introduce the word habitat and discuss. Read a book about animal homes. Discuss the essential items found in an animal's habitat. Compare and contrast human habitats (homes) and animal habitats. Fold a piece of paper in half. On one side have students draw and label their homes. On the other half of the paper have students draw and label an animal habitat.

Extension/Adaptation:

Use a Venn diagram to compare and contrast a human home with an animal home.

HABITAT

Habitats Around You

Students will sort Northwest animals into habitats.

Benchmark: Describe a habitat and the organisms that live there.
EALRS: Use properties to identify, describe, and categorize substances, materials, and objects, and use characteristics to categorize living things. Recognize the components, structure, and organization of systems and the interconnections within and among them.
Materials: Animal cards provided on page 32, pictures of various habitats (optional): ocean, river, forest, high desert, 3 x 5 index cards with habitat names written on them.
Time: 10 minutes for directions. Can be used as a literacy center.

Procedure:

Hold up pictures of habitats and ask who lives in them and why. Discuss why some animals can live in more than one habitat.

Students sort habitat pictures and animal cards by putting the appropriate pictures next to the 3 x 5 index cards with the habitat name. Write the name of the animal and habitat on the back of the 3 x 5 index cards for students to check their own work.

Extensions:

Go through magazines to cut out pictures of animals. Use a broader range of habitats such as rainforest, polar, desert, swamp, grassland. Draw one of the habitats including the plants and animals. Using the same cards, have the students classify animals by MAMMAL, AMPHIBIAN, BIRD, FISH.

This goes with
NORTHWEST ANIMAL
SCRAMBLE on page 21
in the classification section.

HABITAT

Safari Around the School

Students will find animals or signs of animals living in the schoolyard. Students will describe how the environment provides those animals with what they need to live.

Benchmark: Explain the interdependence of organisms in their natural environment.
EALRS: Understands how interactions within and among systems cause changes in matter and energy.
Materials: Magnifying glasses, telescopes or binoculars made from toilet paper rolls, clipboards
Time: 30-45 minutes

Note: Prepare students for seeing animals that may scare them, such as worms or spiders

Procedure:

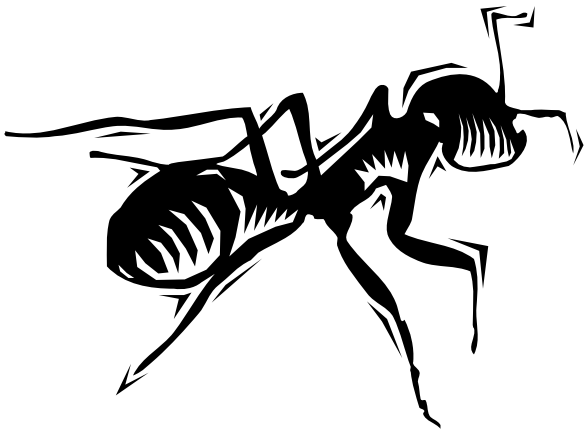
To prepare for the safari, talk about observation skills such as looking and listening. Remind them to look on the edges of the building, in the grass, and under a rock. Have students work in pairs observing and recording on their clipboards what they noticed.

Questions:

What animals did you see?
What was the largest animal you saw?
What was the smallest animal you saw?
What signs of animals did you see or hear but not see the animal? Do these animals live in the yard or visit? What do these animals need that the schoolyard provides?
What surprised you?

Extensions:

Go on a neighborhood safari.
For homework, have the children go on a safari in their backyard.
Research an individual animal or insect.
Graph the animals.
Compare your schoolyard to another habitat.
Describe your schoolyard to someone that has never been there before.



Optional books to extend the lesson:

Listening Walk by Paul Showers, Where Do Insects Live? by Susan Canizares and Mary Reid, Who Lives in the Arctic? by Susan Canizares and Mary Reid.

HABITAT

Habitat Acrostic Poems

Students will write an acrostic poem about a habitat.

Benchmarks: Describe a habitat and the organisms that live there. Write in a variety of modes.
EALRS: The student writes in a variety of forms for different audiences and purposes. Understands how interactions within and among systems cause changes in matter and energy.
Materials: Books on habitats (Autumn: An Alphabet Acrostic by Steven Schnur is a good model for acrostic poems).
Time: 45 minutes-1 hour per session (1 - 3 sessions)

Procedure:

Read several books on one or more habitats. Make a list of words that describe a given habitat or make a list of words for several habitats. Explain how an acrostic poem is written. Write an acrostic poem together as a class. Have the students work in pairs or individually to write acrostic poems about a habitat. Have students illustrate their work. After writing poems have the students come together and share their work.

Opal water
Crashing waves
Evening sunsets
And seagulls cry
Next to the sea

Pools of water
On a sunny day
Newts and frogs
Dive in water

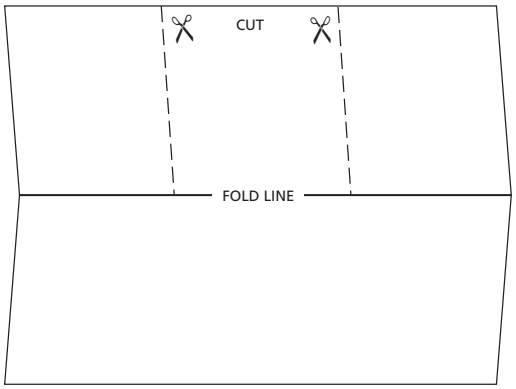
Roaring water
In between lands
Visions of fish
Escape through rocks
Rushing into the night

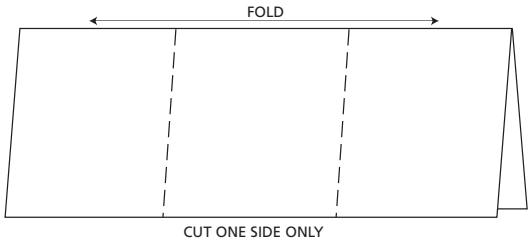
HABITAT

Who Lives Here?

Students will make flip books to show their knowledge of habitats and animals that live there.

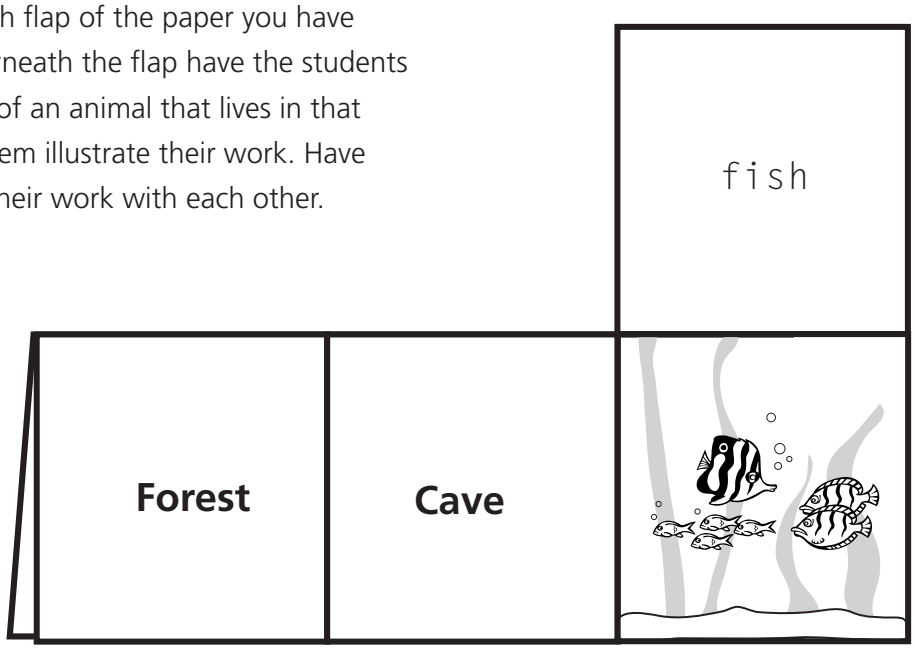
Benchmarks: Describe a habitat and the organisms that live there. Write in a variety of modes.
EALRS: Understands how interactions within and among systems cause changes in matter and energy. The student writes in a variety of forms for different audiences and purposes.
Materials: Books on habitats (recommended books: Who Lives in A Tree by Susan Canizares & Daniel Mareton, Homes in the Ground by Mary Reid, One Day in the Woods by Jean Craighead George), paper 8 1/2" x 11" inches folded. (See diagram) Make two cuts up to the fold line at approximately 3". (See diagram)
Time: 30-40 minutes





Procedure:

Read several books on animal habitats. Make a list of different habitats. Have students choose three habitats. Have each student write the name of a habitat on each flap of the paper you have prepared. Underneath the flap have the students write the name of an animal that lives in that habitat. Have them illustrate their work. Have students share their work with each other.



Habitat

Could You Survive Here? Is This a Habitat For You?

Students will understand what an animal needs in order to survive in a given habitat.

Benchmark: Describe a habitat and the organisms that live there.
EALRS: Understands how interactions within and among systems cause changes in matter and energy.
Materials: Animal Cards provided on page 32, habitat clues created by teacher (example: There is deep fresh water here with many plants.)
Time: 20 minutes

Procedure:

The students need to have prior knowledge of the animals and their needs (habitat) before playing this game. Explain that you are going to play a game to see which Northwest animals are found in similar habitats. Give each student an animal card (provided). Have the students stand in a large circle. The students will need to listen carefully to the clues the teacher gives. If the clues represent a habitat that their animal could live in, the student will step into the circle. Have each child state why they belong in that habitat. Have the kids in the center rejoin the circle and read another set of clues.

Extensions/Adaptations:

When visiting the Zoo assign an animal that the students will see at the Zoo, but was not already studied in the activity above. Have students create an animal card and clues for the habitat of the animal they were assigned. Use these cards to repeat the activity above.

Life Cycles

Insects go through distinct, observable stages in their life cycle. In one kind of cycle, after an egg is laid, it turns into a larva, then a pupa, then a mature insect. The other kind of insect cycle starts with an egg that turns into a nymph that grows into a mature insect. All insects have six legs and three body parts.

Insect Mystery Box

Students will use questioning strategies to determine what is in the box and the stage of its development.

Benchmarks: Describe how related plants and animals have similar characteristics. Recognize characteristics that are similar and different between organisms.

EALRS: Use properties to identify, describe, and categorize substances, materials, and objects, and use characteristics to categorize living things.

Materials: Box, a live, preserved, or fake insect in any stage of development (egg, larva, adult, or pupa), chart paper

Time: 30 minutes

Procedure:

Discuss questioning strategies and the difference between asking and telling. Define a "yes" or "no" question. Explain the game. Students will have 20 "yes" or "no" questions to figure out what is in the box. After the game look at the insect. Have the class collaboratively fill in a chart describing the characteristics of the insect in the box and what stage of development it is in. Compare this insect to other insects and humans.

Graphing Stages of an Insect

Using exploratory methods, students will observe and compare stages of a life cycle for various insects.

Benchmark: Science: Unifying concepts and processes – Arrange parts of a cycle.

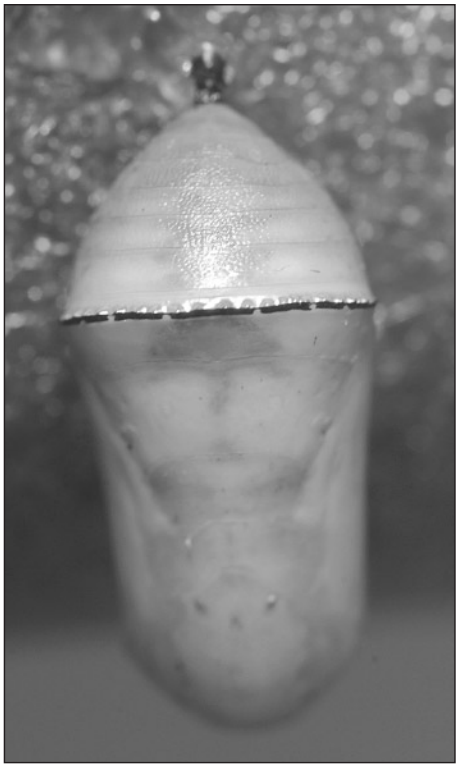
EALRS: Recognize the components, structure, and organization of systems and the interconnections within and among them.

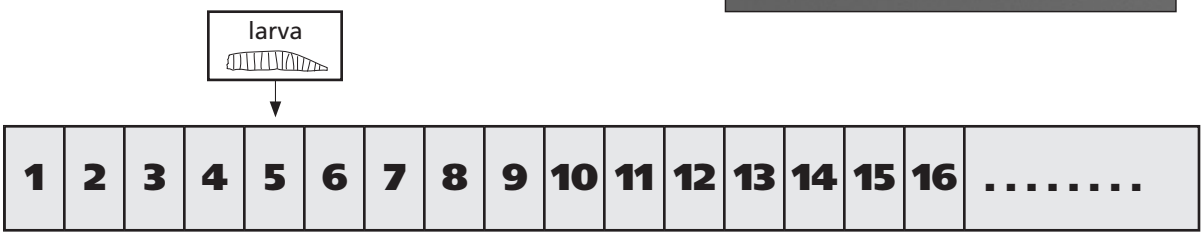
Materials: Insects in the egg stage of development*, insect journal, adding machine tape numbered from 1 – 45 (see below).

Time: 20 minutes daily for fifteen days

Procedure:

In an appropriate container place one insect, in the egg stage, on each group's desk. Have students observe their insect daily and record observations through a picture and/or sentences. On days when major change occurs, place a student-drawn picture and labels (scientific name of stage) on the adding machine tape. For example, if the change occurred on the fifth day, put the picture and the label on or above the five on the adding machine tape. Continue recording the stages in students' insect journals and on the class counting tape until all four insects have reached the adult stage. Compare and contrast the time line of the different insects and stages of change.





* *Insects are available from science supply companies. Common examples are mealworms, painted lady butterflies, milkweed bugs, mosquitoes, and tobacco hornworm moths.*

Life Cycles

Characteristics of an Insect

Students will recognize the characteristics of an insect by looking at various pictures of insects.

Benchmark: Recognize characteristics that are similar and different between organisms.
EALRS: Recognize the components, structure, and organization of systems and the interconnections within and among them.
Materials: Pictures of insects (gathered from books, stickers, newspapers, magazines, greeting cards, posters), chart paper, insect journal or plain sheet of paper
Time: 45 minutes

Procedure:

Display pictures of insects. Have students observe pictures in groups of four students. Groups of four discuss the characteristics that all of the insects have in common. With their group, students will list characteristics that all the insects have in common. Have each group report its findings to the whole class while the teacher records the data on chart paper. Review the characteristics with the class. Have students record the characteristics and draw an insect in their insect journal or on a plain piece of paper that contains all characteristics. Have students label the characteristics that all insects have.

Painted Paper Butterfly

Students will use the art concept fill space to create a symmetrical butterfly.

Benchmark: Folding of individual shapes to show symmetry.
EALRS: The student understands and applies the concepts and procedures of mathematics
Materials: One copy of the **butterfly worksheet on page 15** copied onto construction paper for each child, and painted paper (student–created ahead of time) or colored construction paper
Time: Two 45–minute sessions

Procedure:

Discuss what it means to fill space. Model how to cut out the butterfly and how to cut construction paper or painted paper to fill all the space on one side of the butterfly. Discuss symmetry: if you fill the space on one side with green you have to do the same on the other side. Allow children to cut out their butterfly (provided) and fill its space. In the second session show kids how to add details on top of their filled spaces. Show them that when you add a detail to one side you have to add the same detail to the other side.

LIFE CYCLES

Metamorphosis

Students will be able to identify the stages of a life cycle and arrange them in the correct order.

Benchmark: Science: Unifying concepts and processes – Arrange parts of a cycle.
EALRS: Recognize the components, structure, and organization of systems and the interconnections within and among them.
Materials: Bumblebee at Apple Tree Lane by Laura Gates Galvin, From Caterpillar to Butterfly by Dr. Gerald Legg, popcorn kernels, curly pasta, shell pasta, bow tie pasta, paper plates, construction paper (11 x 18, white), index cards (with egg, larvae, pupa, and adult labeled on each)
Time: 1 hour

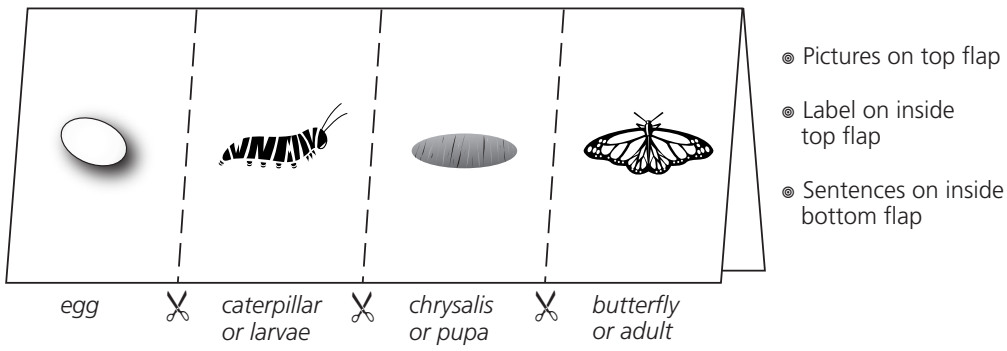
Procedure:

Read Bumblebee at Apple Tree Lane and discuss stages of a cycle. Then read From Caterpillar to Butterfly and discuss the stages of a cycle. Have students divide a paper plate into four equal parts. Have students draw a leaf and glue a popcorn seed to the leaf in one quadrant. In that quadrant have them write egg. In the next quadrant students draw a leaf and add curly pasta. Have students write caterpillar in that quadrant. In the next quadrant students draw a tree with a shell pasta hanging from a branch, and label it chrysalis. Finally, in the last quadrant, draw antennae and glue a piece of bow tie pasta and label it butterfly.

Have students independently make their own flipbook and draw a picture of each stage on the front, one picture per flap. On the inside bottom flap they write one or two sentences describing the stage pictured on the front. On the inside top flap they label the stage.

Extension:

Teacher passes out a set of labeled cards (with egg, larvae, pupa, and adult labeled on each) to groups of four students. Each child gets one card. Students arrange themselves in correct order and each child tells the group something that happens during that stage.



Life Cycles

The Story of Benny and Gill

Students will correctly identify stages of an insect's life cycle by writing missing words in a story about the insect.

Benchmark: Arrange parts of a cycle.
EALRS: Recognize the components, structure and organization of systems and the interconnections within and among them.
Materials: Story worksheet provided on page 14.
Time: 15 minutes per story

Procedure:

Explain to the students the stages of an insect's life cycle. Give various examples of different insects. Explain the difference between incomplete and complete metamorphosis. Insects such as butterflies, bees, and flies develop through complete metamorphosis (egg, larva, pupa, adult). Insects such as dragonflies and grasshoppers develop through incomplete metamorphosis (egg, nymph, adult). Have the students read the stories on the worksheets (provided) and fill in the missing words using the words from the word bank.

Extension:

To make stories more challenging, white out the illustrations.

Name:_____

Gill the Grasshopper

WORD BANK		
 nymph	 adult	 egg

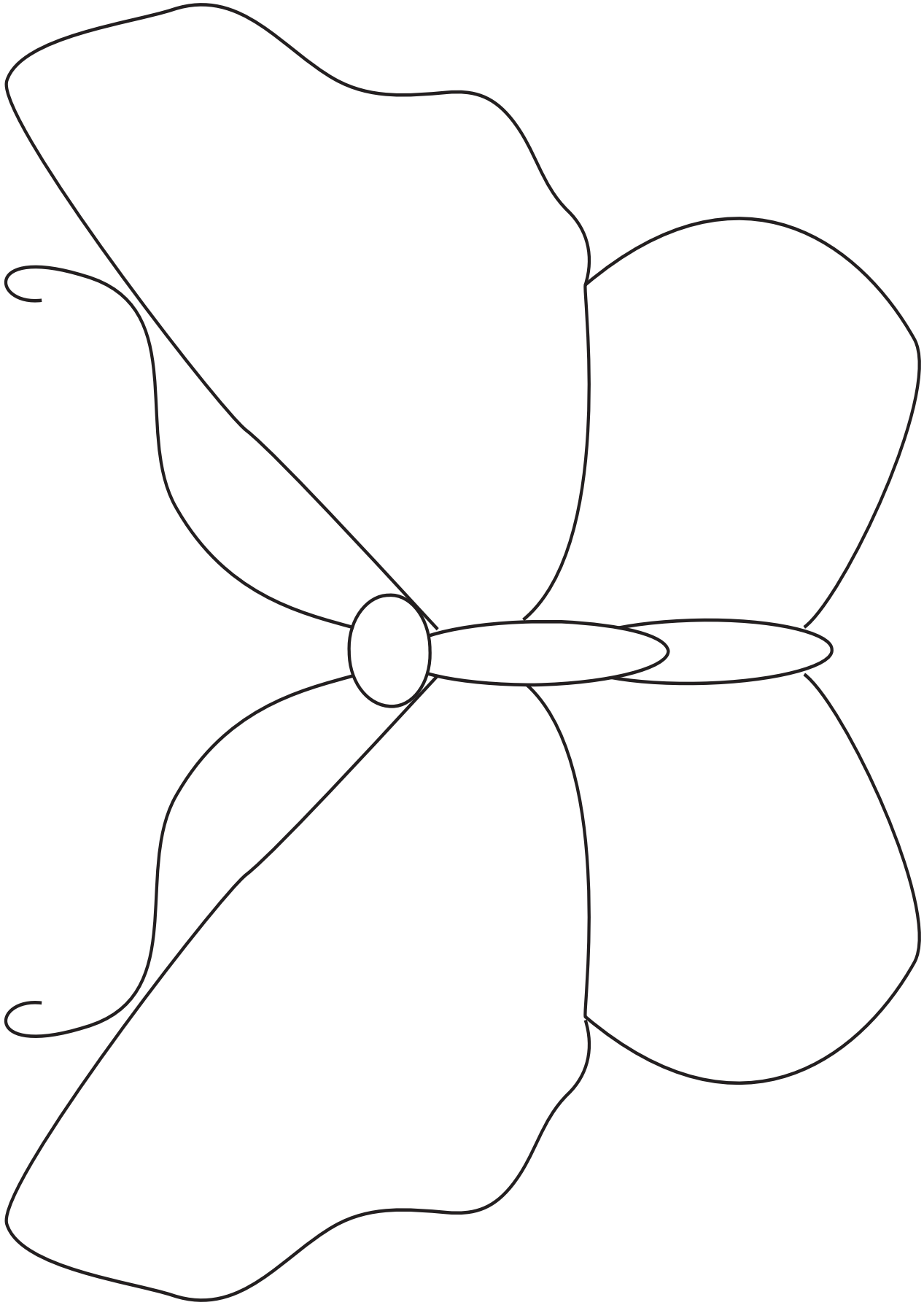
I began my life as an  _____. When I came out of the egg as a 

_____, I looked like a small adult grasshopper without wings. I had six legs and three body parts. I grew and grew and grew, so I had to shed my skin many times. When I was fully-grown with wings I became an  _____.

Benny the Butterfly

WORD BANK			
 butterfly	 egg	 caterpillar	 chrysalis

Benny the butterfly began his life as an  _____. Benny burst out of his egg as a  _____. Benny ate until he was bulging. Then he became blissfully sleepy. Benny began to change again and became a  _____. He broke out of the chrysalis and his eyes began to bulge as he looked at his beautiful bright wings and three body parts. He also had six legs to climb stems of plants. He was a  _____!



Zoo Field Trip

Students will explore the Zoo and be able to identify insects throughout the Zoo.

Benchmarks: Describe how related plants and animals have similar characteristics. Recognize characteristics that are similar and different between organisms.

EALRS: Recognize the components, structure, and organization of systems and the interconnections within and among them.

Materials: A map for each chaperone marked with the places in the Zoo that have insects, a plain piece of paper for each chaperone. (You will need to use the free pass given to each teacher when they register their class for a field trip. Go to the Zoo before your field trip and highlight on the Zoo map where there are insects in the Zoo.)

Time: One day

Procedure:

Prior to going to the Zoo give students background information on insects. Discuss insect life cycles so the students will be able to compare when they go to the Zoo. Give a map of the Zoo to each chaperone. Point out to each chaperone how the insects throughout the Zoo are identified on the map. Divide the class into groups and have each chaperone be responsible for one group. Have students be on an insect hunt throughout the whole day. If students pass through a building where there is an insect and they do not locate it, chaperones will prompt them by saying, "My map shows that there is an insect in this building." Chaperones will record all the insects that the students find on their insect hunt. This includes the paved paths in the zoo where there are wild insects flying about. When students return to school they will report to the class what insects their group found. They will also compare the insects to other animals at the Zoo in a Venn diagram.

CLASSIFICATION

Among animals with back bones there are five major groups. Animals that share the same characteristics are put into groups. Mammals have hair or fur. They are the only animals that drink milk from their mothers' bodies when they are babies. The babies are born live (not from eggs). Birds have feathers and lay eggs. Mammals and birds are warm blooded. Fish live in water. They have fins, scales, and gills. The gills are what a fish uses to breathe under water. Amphibians are born in water and breathe with gills. When they grow up, they lose their gills and live and breathe on land. Reptiles have scaly skin and lay eggs on land. Fish, amphibians, and reptiles are cold blooded, which means they get hot or cold depending on the air or water around them.

Who Am I?

Students will ask yes or no questions to determine their animal.

Benchmark: Recognize characteristics that are similar and different between organisms.
EALRS: Use properties to identify, describe, and use characteristics to categorize living things.
Materials: Animal cards provided on page 32, tape
Time: 20 minutes

Procedure:

Brainstorm questions that may help identify animals. Do I have feathers? Do I live in a hole? Is it cold where I live? Without letting students see, tape a card with an animal on the backs of a group of students. The kids with the cards are the "askers." The askers have to phrase their questions in a "yes" or "no" format (example: Do I have feathers?). The kids without the cards are the "answerers." Let the students mingle as they ask and answer questions. Once the "asker" guesses what their animal is, the card is removed and they become an "answerer." Play continues until all the children have guessed their animal. Next, tape cards to the "answerers" so everyone gets a chance to be an "asker." For very young students, yes or no questions are not necessary. Following, are possible questions for very young students:

- What kind of body covering do I have?
- Do I lay eggs or have babies?
- Where do I live?
- What does my home look like?

CLASSIFICATION

Dear Zoo

Students classify animals by one characteristic.

Benchmark: Write in a variety of modes.
EALRS: The student writes in a variety of forms for different audiences and purposes.
Materials: Book: Dear Zoo by Rod Campbell, teacher–created page for book (one for each student, see sample at bottom of page), sticky notes or pieces of paper cut to cover the animal on each page. Optional: tag board, paint, and paint sticks
Time: 45 minutes

Procedure:

The teacher reads the book Dear Zoo. Discuss the animals and their characteristics. Make a list of animals that might be found at the Oregon Zoo. Discuss their characteristics. Discuss what animals make good pets. Discuss what animals don't make good pets and make a class list of the characteristics that prevent it from being a good pet. Through discussion compare these animals to animals found at the Zoo. Each student will now make a page for a class book. Each child chooses an animal found at the Zoo. Students write the name of the animal they chose and the characteristic that makes it a bad pet. On page two they write the pet they chose as a good pet. Next students draw their animal. A flap to cover the animal can be made from a sticky note or a piece of paper that is glued onto the page. The flap can be decorated to look like a special box. As a class, decide what animal will come from the Zoo and will be kept or sent back. Assign someone to make the last page. Enjoy the finished book together.

I wrote to the zoo to send me a pet.

They sent me a _____.
He was **too** _____.

I sent him back!

I wrote to the zoo to send me a pet.

They sent me a _____.
He was perfect!

I kept him!

Extensions/Adaptations:

Do this activity after visiting the Zoo and use the animals the students saw. Children can make their own books with three or more pages. Perform the book as a play. Each child can paint a large animal on tag board. Cut the animal out and attach a stick on the back to create a puppet. This activity could be done after reading other books including: Brown Bear, Brown Bear, What Do You See? and Polar Bear, Polar Bear, What Do You Hear? by Bill Martin, Jr.

CLASSIFICATION

Animal Data Sheets

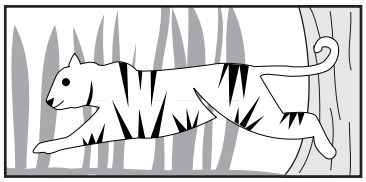
Students will identify the body covering, habitat, and diet of many animals.

Benchmarks: Describe a habitat and the organisms that live there. Write in a variety of modes.
EALRS: Use properties to identify, describe, and categorize substances, materials, and objects, and use characteristics to categorize living things. The students write in a variety of forms for different audiences and purposes.
Materials: Teacher–created Animal Facts Sheet (see example), books about the animals you will be studying
Time: 30-45 minutes per session (one session per animal being studied).

Procedure:

Ask students to tell you what they know about the animal this class is going to study. Before reading a book or an article to the class about the animal, ask students to be listening for the following information: type of body covering, habitat, and diet. After reading, discuss what they discovered. Have the students fill in the worksheets (see sample) with the information they gained from the book and discussion. Have students draw a picture of the animal in its habitat. Have students share their work with each other.

Animal Facts



Tigers
I think tigers are very nice
They have a lot of stripes
And big sharp teeth
That help them smile!

Body Covering _____
Habitat _____
Diet _____

Extensions/Adaptations:

Students can create a book using all the pages they make. This can be used as a pre– or post–Zoo visit activity. Students can choose a habitat to study and create their own pages for animals in that habitat. Habitats could include their backyard, garden, Portland, etc.

CLASSIFICATION

Animals and Technology

Students classify animals by one characteristic.

Benchmarks: Describe a habitat and the organisms that live there. Write in a variety of modes.
EALRS: Use properties to identify, describe, and categorize substances, materials, and objects, and use characteristics to categorize living things. The students write in a variety of forms for different audiences and purposes.
Materials: Computer and Internet access, computer painting or drawing program (need to set up websites ahead of time for students to access photos or download photos into painting or drawing program). Optional books: Count Us In and Those That Float, Those That Don't by Keith Potter
Time: One hour

Procedure:

Discuss and make a list of several ways that animals can be classified (reptiles, mammals, big, small, herbivores, nocturnal, hooves, sharp teeth, etc.). Explain that each child or pair of students will be choosing an animal to draw and then write about. Have students explore the animal photos on the computer and choose one they will work with. Have the students copy the photo from the Internet and paste it into a drawing program. Have students draw their own animal into the photo. Finally, have the student write facts about the animal. Have each student share his or her work with the class. When all the pages are done, compile them into a class book.

Name:_____

Northwest Animal Scramble

Mammal: Have live babies and breathe air

Fish: Live in water and have gills

Amphibian: Born in water, can live on land when grown

Bird: Have feathers and lay eggs

WORD BOX

reba	rofg	vberae	lek
ttrou	ocd	colnfa	oatd
slanom	ttoer	cduk	oonccra
wol	esa inol	bnroi	alsamdearn

MAMMAL

_____

_____

_____

_____

_____

_____

FISH

_____

_____

_____

AMPHIBIAN

_____

_____

_____

BIRD

_____

_____

_____

_____

CLASSIFICATION

Animal Sort

Students will sort animals in many ways.

Benchmarks: Describe how related plants and animals have similar characteristics. Recognize characteristics that are similar and different between organisms.
EALRS: Recognize the components, structure, and organization of systems and the interconnections within and among them.
Materials: Pictures of a variety of animals. For homework, students can bring in one or two pictures of animals. Photos or pictures of animals from magazines will work. Hula hoops or yarn.
Time: 20 minutes

Procedure:

Discuss the different characteristics of animals. For example, some have fur, some animals eat meat. The students will have their animals in front of them. The teacher states a rule–"Hold up your animal if it flies" or "Hold up your animal if it has whiskers." This will help them become familiar with their animal. Move to the carpet. Make two circles with the yarn or use hula hoops. State a rule, "Animals that lay eggs and animals that do not lay eggs." Students place their animal in the correct circle. Discuss. Students collect animals. Repeat using other rules.

Extensions:

Use plastic or stuffed animals. Use animals that are found at the Oregon Zoo. The teacher can provide a list and the students can draw them. Sort animals by habitat.

Use Northwest Animal Scramble on page 21.
Animal cards on page 32.

COMMUNITY

All of the people that work at the Zoo share a love of animals. When you visit the Zoo, you will see many of the people working. Each person's job plays an important role in the Zoo community. The Zoo staff makes the Zoo an amazing place for the animals to live and for guests to visit.

Guess the Job

Students will correctly guess what Zoo job another student is acting out. The student who is acting out the job will correctly depict the Zoo job.

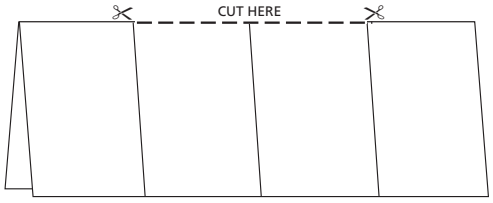
Benchmark: Describe how individuals fit into organizations and systems.
EALRS: Interpersonal and Group Process Skills: The student understands and uses interpersonal and group process skills that prepare them to participate in a democratic society.
Materials: Job description cards of people who work at the Zoo, paper bag.
Time: 30 minutes

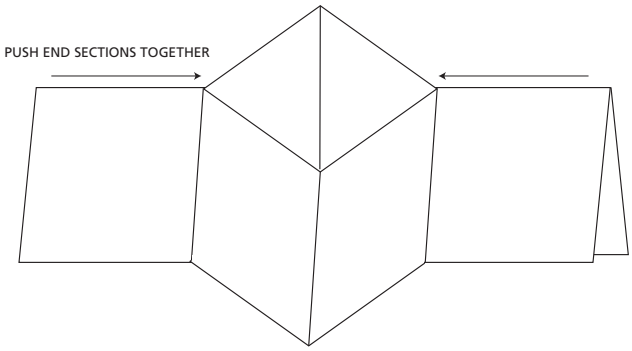
Procedure:

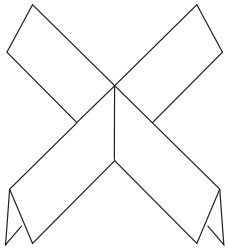
Have students sit in a circle. Choose a student to pick a job description card out of the bag. They look at the picture and read the description, then act it out. Students in the circle raise their hands and guess what the person's job is. Another student is then chosen to act out another job.

Extension:

Have the students draw the illustrations for the book, **"Let's take a trip to the Oregon Zoo," found on page 30.** To prepare this little book, fold and cut according to the solid and dotted lines. First, fold the page in half horizontally to make a long rectangle. Then fold it in half again. Next, fold one flap toward the front and the other flap towards the back. Open the paper all the way. Cut on the dotted line. Fold the paper in half again to make a long rectangle. Open up the middle section of the rectangle. Bring the two outside flaps toward the center. This creates a "star." Now close the book.







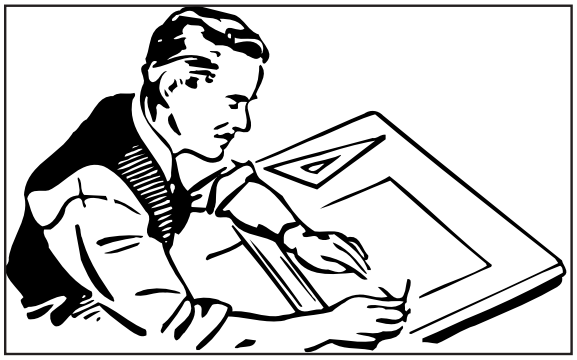
COMMUNITY

Zoo Bingo

Students demonstrate knowledge of Zoo workers' jobs by playing a question/ answer game in the format of BINGO.

Benchmark: Identify ways that people can participate in their communities and the responsibilities of participation.
EALRS: Identify roles of different members of a group, serve in different roles in a group.
Materials: BINGO boards provided on page 27, markers provided on page 28, question cards provided on page 29.
Time: 30-40 minutes

Procedure:



This activity should be done after discussing the jobs at the Zoo and acting out the job description cards. Pass out the BINGO boards and markers. As the teacher reads a question, the students put a marker on the correct answer. When a student gets five in a row, have the student read the answers. If they are correct, the game ends. Students clear their boards and a new game begins. After playing the game, have a discussion with the class. Ask questions such as:

- What job would you like to have?
- What jobs require you to work with animals?
- Which workers will you see at the Zoo?
- Which workers will you not see at the Zoo?
- Which jobs help keep the Zoo clean?

COMMUNITY

Who Works at the Zoo?

Students will demonstrate knowledge of zoo workers' jobs by organizing the job description cards into a Venn diagram.

Benchmark: Identify ways that people can participate in their communities and the responsibilities of participation.
EALRS: The student understands and uses interpersonal and group process skills that prepare them to participate in democratic society.
Materials: Job description cards provided on page 34, yarn (to make the Venn diagram), chart paper, index cards.
Time: 30 minutes

Procedure:

Gather the students together in a circle on the floor. Depending on the age of your students, the teacher or the students will read the cards. Pass out the cards to groups of students. Set up the yarn Venn diagram in the center of the circle. Using the index cards, label one side "works with animals" and the other side "does not work with animals." Have students work together to decide where the cards should go. When all the cards have been placed in the Venn diagram, make a chart of the information for display in the classroom.

Variation: Do the activity as described above but have the Venn diagram labeled "workers we see at the Zoo" and "workers we don't see at the Zoo."

Extension:

Distribute job description cards. Teacher asks a question and students hold up their cards if their worker answers the question. More than one worker may apply. Example questions:

- One of the bears is sick and will need special food. Who will help?
- It will be a very busy day on the 4th of July. Who will help take tickets and sell food? Who else will be involved?
- Who will tell the newspaper about the birth of a new zebra?
- The Zoo will be getting a new exhibit of snakes. Who will be involved?
- The train tracks are rusty. Who will fix them?
- The inside of a food dish has sharp corners and an animal could get hurt. Who can fix this?

Variation: At a literacy center, the teacher puts the cards in a box with the questions and job description cards. Students choose a question and determine which job would solve the problem. The student pretends they have that job and writes a response on how they would solve the problem. Have students think of more problems that could arise at the Zoo. Their peers can respond.

Zoo Workers

Student will correctly describe a job at the Zoo by writing about duties of a particular person.

Benchmark: Describe how individuals fit into organizations and systems.
EALRS: The student understands and uses interpersonal and group process skills that prepare them to participate in democratic society.
Materials: 12" x 18" construction paper, 6" x 6" construction paper, construction paper scraps, wrapping paper, ribbon, felt, yarn, buttons, etc. 8" x 5" construction paper.
Time: 45 minutes

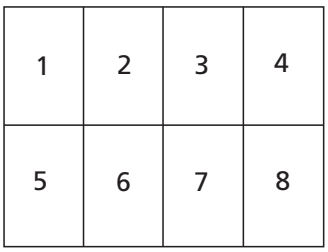
Procedure:

Students choose one of the Zoo job description cards and read the information about the Zoo job. Then they make a paper person (see diagram), color it and design it to look like the Zoo worker. When they have finished designing it, they write a summary of the Zoo job on the inside of the worker.

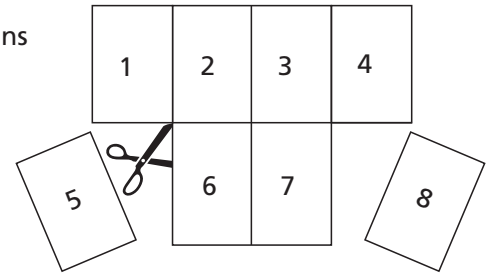
Extension:

Daily rhythm.
Discuss and record what time the Zoo opens, what time your Zoo person might arrive, what time your Zoo person might eat lunch, what time they go home, etc. Also discuss and record what different responsibilities might be done at different times of the day.

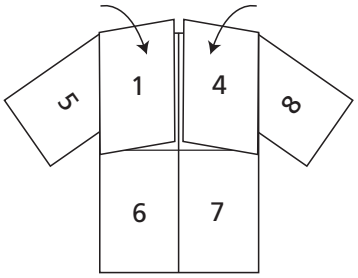
1. Fold a piece of 12" x 18" construction paper as shown.



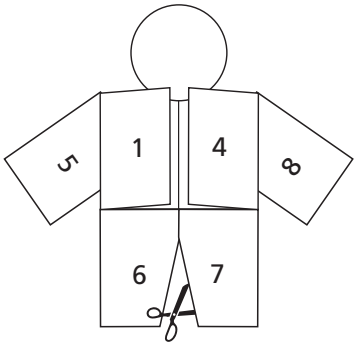
2. Cut out sections **5** and **8**. Save these for arm pieces.



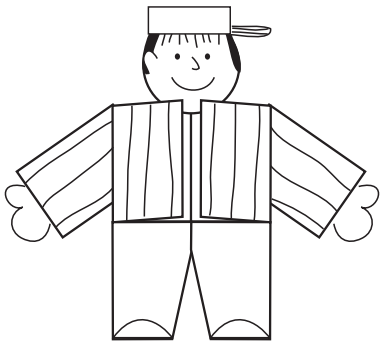
3. Fold sections **1** and **4** toward the center to make a vest or coat. Glue on the arms as shown.

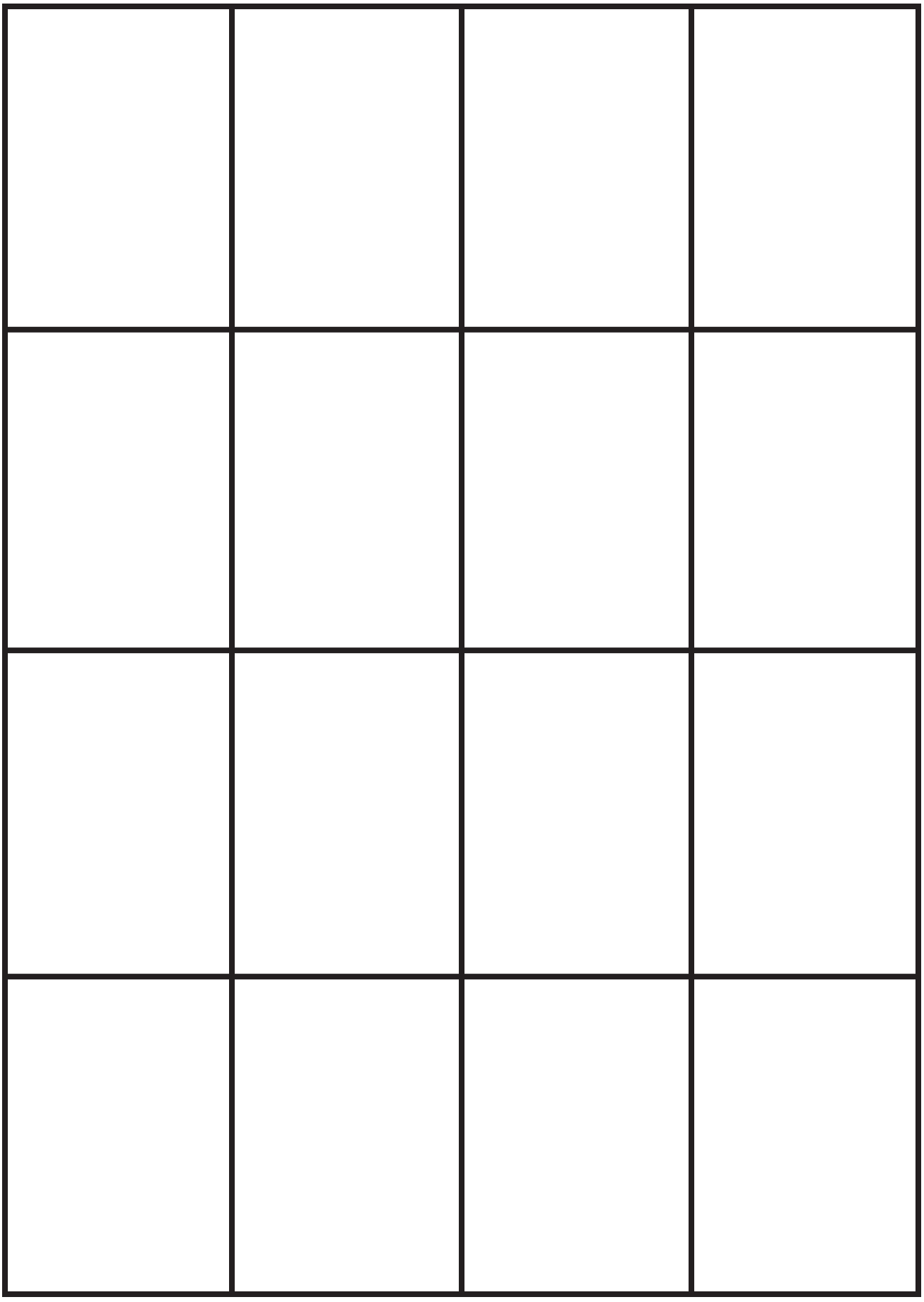


4. Cut a head from the 6" x 6" piece of construction paper. Glue it to the top of sections **2** and **3**. To make pants, cut out a small triangle between sections **6** and **7** as shown.



5. Draw a face; add hair and clothing. Add hands and shoes using scrap paper.





One set for BINGO board and one set for markers.

I decide which animals will come to the zoo.	I drive the train. I say "All aboard!"
I train animals.	I cook food for the guests.
I keep the Zoo neat and clean.	We let you into the Zoo.
I give the animals health check-ups.	I sell stuffed animals.
I hose away dirt from the animals' cages.	I build exhibits.
I give the animals the food they need.	I make maps and posters.
I keep the animals' homes clean.	I plant flowers and trees.
I study animals.	I make sure all the workers do a good job.

Let's take a TRIP to the Oregon Zoo

by: _____

Let's take a trip to the Oregon Zoo to find out what's exciting and new.

Of course there are lots of animals to see. But, there's also a human community.

The zoo workers work together as a team. They keep the zoo safe and clean.

There's hosing and feeding to be done. Working at the zoo must be so much fun!

The gardeners care for the trees and plants. The designers create all the colorful maps.

The custodian's job is to dust and sweep. She keeps the zoo looking nice and neat.

COMMUNITY

A Zoo Alphabet

Students will demonstrate knowledge of Zoo animals and workers by creating a class alphabet book modeled after the book Q is for Duck.

Benchmarks: Identify ways that people can participate in their communities and the responsibilities of participation.
EALRS: The student understands and uses interpersonal and group process skills that prepare them to participate in a democratic society.
Materials: The book Q is for Duck by Mary Elting and Michael Folsom, paper, coloring supplies, chart paper.
Time: 45 minutes

Procedure:

Read the story Q is for Duck to the class. Discuss the format of the story (it has a special pattern). Afterward, make a chart of the words that have to do with the animals and zoo workers. Have each child pick a letter of the alphabet to make a page for the book. When all the pages are done, compile them into a class book.

EXAMPLE:

H is for ***Veterinarian***. Why? Because ***he or she Helps the animals***.

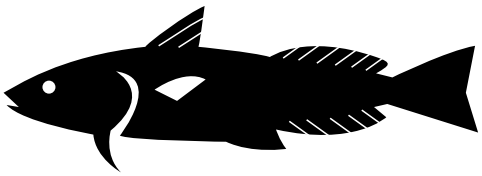
Variation: Have pages printed for each student with the words:

_____ is for _____. Why?

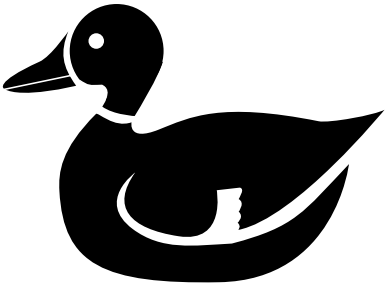
Because _____.

BEAR

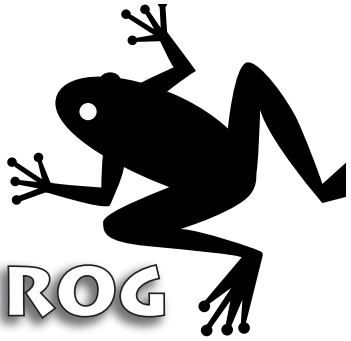
BEAVER



COD



DUCK



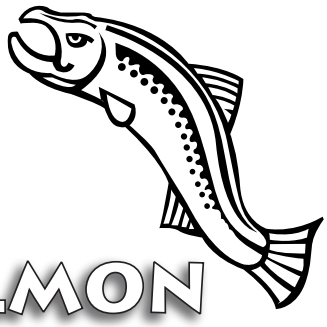
FROG

OWL

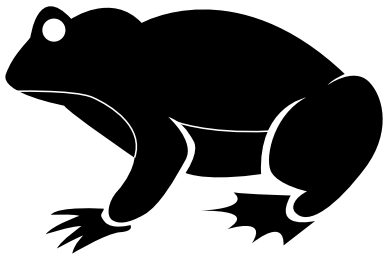
ELK

FALCON

SALMON

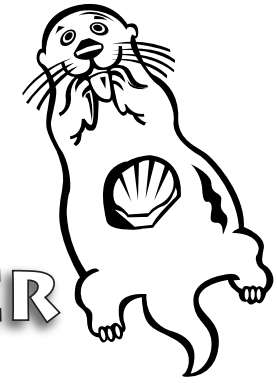


TOAD

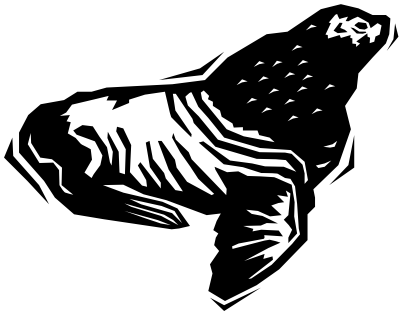


ROBIN

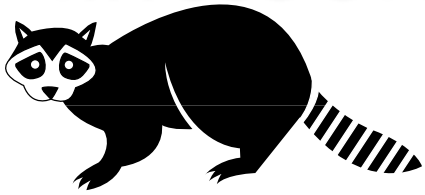
OTTER



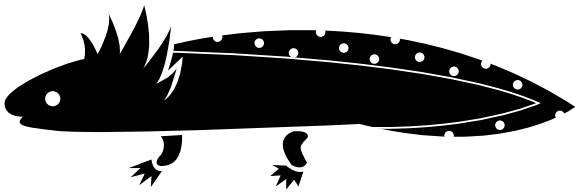
SEA LION



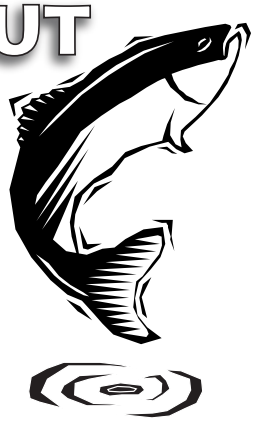
RACCOON



SALAMANDER



TROUT



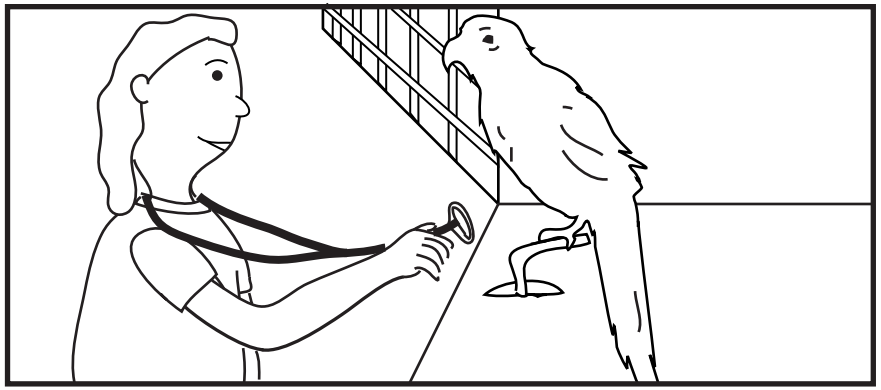
Manager

A manager is like the school principal. He or she makes sure all the people at the Zoo do their jobs well. He or she is in charge of the Zoo's budget (money).

Gardener

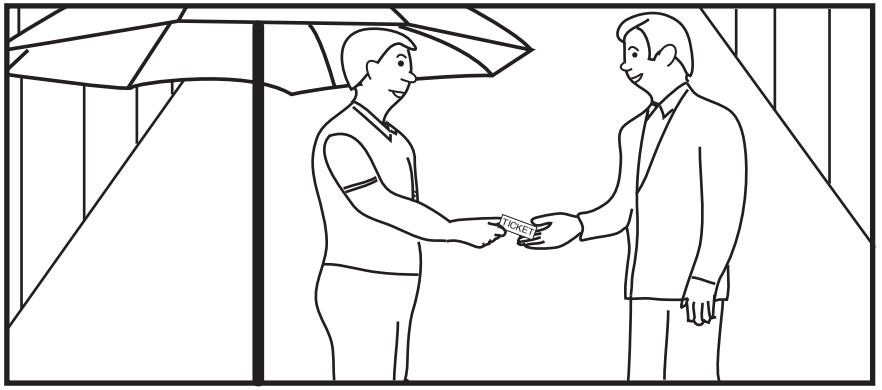
Gardeners plant, prune, weed, water, and fertilize the plants and flowers at the Zoo. They must know about many types of plants. They work very hard outside in all kinds of weather.

Veterinarian



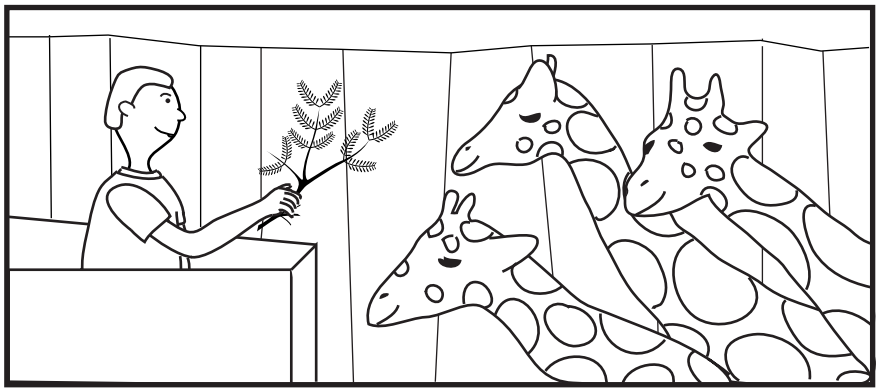
He or she spends a lot of time doing things to keep animals healthy. He or she gives the animals regular checkups and vaccinations to protect them against disease. He or she works closely with the keepers watching for any change in an animal that might be a sign of illness.

Cashier/ Ticket Taker



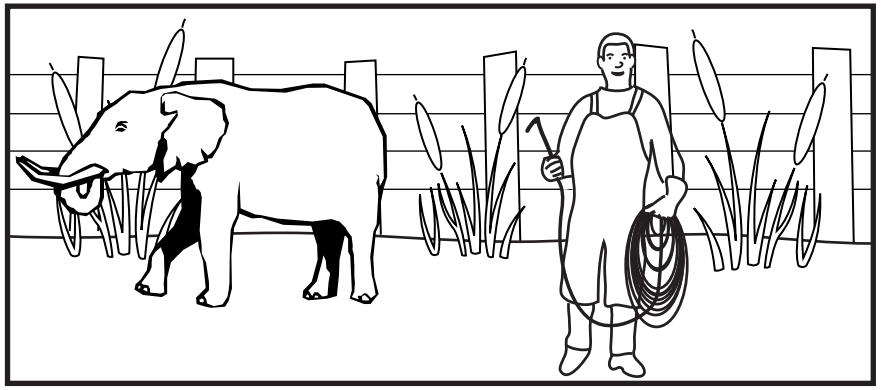
The cashier is the first person you see. He or she sits in a booth, takes your money, and gives you a ticket and a map. You take your ticket and give it to the ticket taker. The ticket taker sits under an umbrella and lets you in the Zoo. He or she usually says, "Enjoy your day!"

Keeper: Feeding



Animal keepers feed the animals a balanced diet. Tons of fruit, vegetables, grain, hay, pellets, meat products, fish, and even live crickets are among the items needed to make the different diets for zoo animals.

Keeper: Hosing

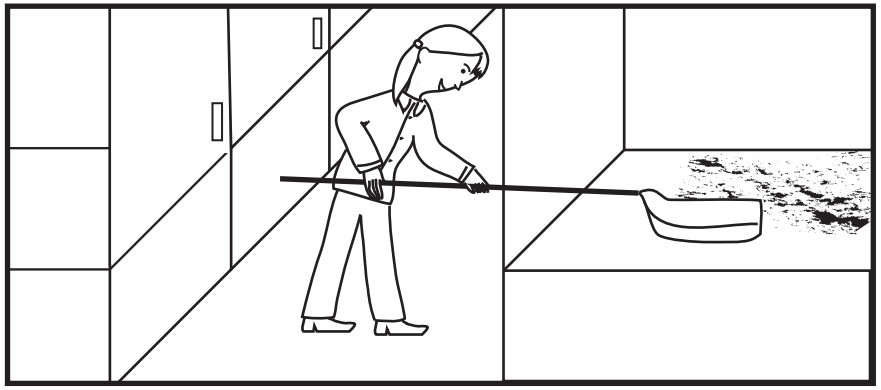


Cages are scrubbed each day to kill germs. Then they are hosed clean to wash away the dirt.

Scientist

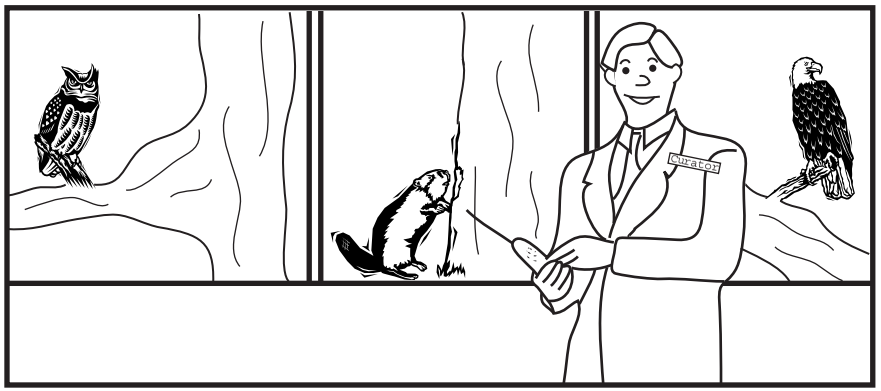
A scientist studies animals to provide the best care in the Zoo. By studying zoo animals, they can also better understand the needs of animals in the wild.

Keeper: Scooping



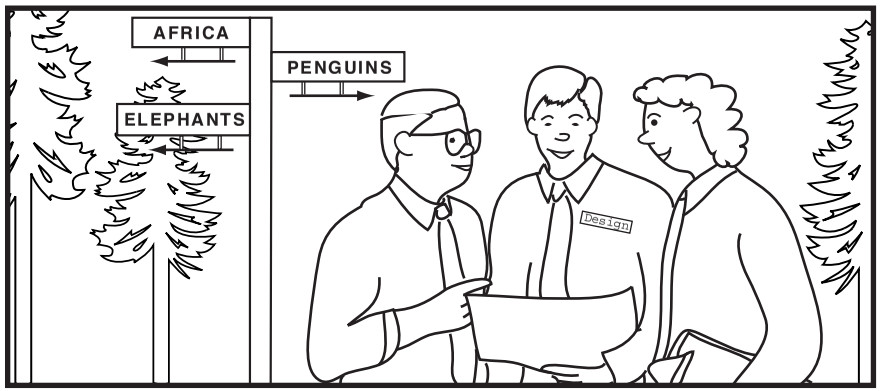
Cleaning up animal droppings is an important task in the Zoo. The animals stay healthy when their homes are clean. A keeper can shovel several wheelbarrows of elephant droppings each day.

Curator



The curator is in charge of all the animals and keepers. Sometimes animals are sent to other zoos, and sometimes new animals come to the Zoo. The curator makes these decisions. They also decide which animals are to be bred.

Design Team

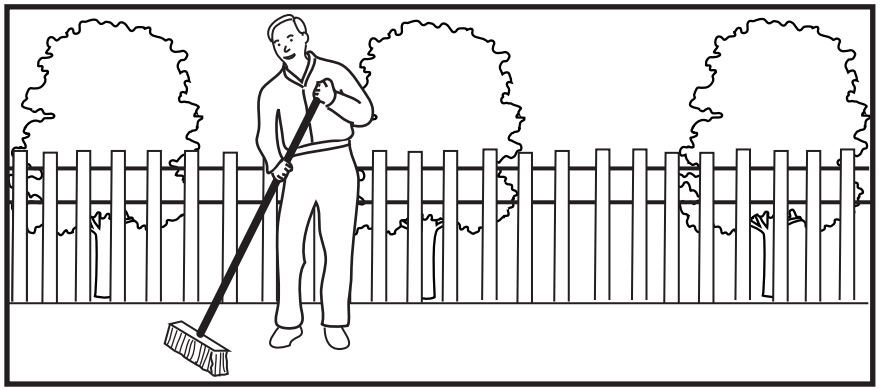


The design team makes maps and posters. They make signs so you will not get lost. They make signs that tell you information about the animals.

Show Trainer

The show trainers teach animals how to perform specific behaviors. The trainers care for and feed their animals. They answer questions about the animals.

Custodian

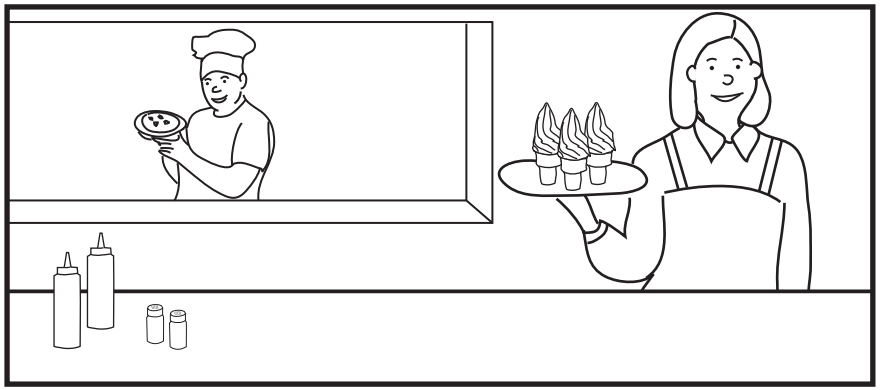


Thousands of people that visit a zoo each day can make quite a mess. Custodians dust, sweep, scrub, and pick up so the zoo stays clean for the animals and visitors.

Gift Shop Worker

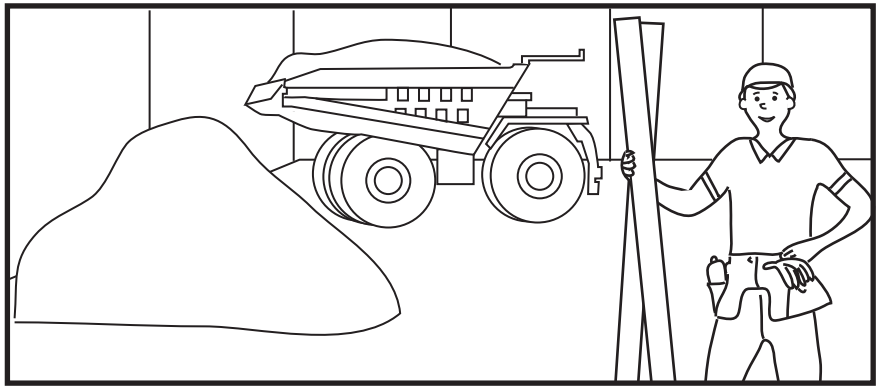
The people in the gift shop decide what things to sell. They sell stuffed animals and postcards. Most things are about the animals. They will take your money and give you change.

Food Service Worker



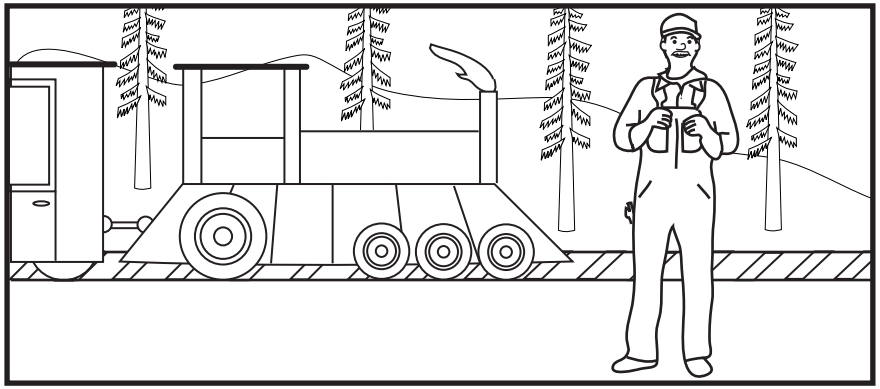
There are many things to eat and drink at the Zoo. The food service people prepare, cook, and sell the food.

Construction Worker



The construction workers build the places where the animals live. They may dig holes for pools or move large rocks and trees for the bears. They also make things for people to use, such as drinking fountains and benches.

Train Conductor



The train conductors drive the trains to show you the animals. They also make sure the trains work well and repair them if they are broken.

TEACHER RESOURCES

BOOKS

ANIMALS/CLASSIFICATION

Animal Feet David M. Schwartz
Animals In Motion Pamela Hickman
Penguins Gail Gibbons
Say It Again Brian Cassie
What Makes A Bird A Bird? May Garelick
Zoo Doings Animal Poems Jack Prelutsky

HABITATS

A Desert Scrap Book Wright-Frierson
A Log's Life Pfeffer
And So They Build Bert Kitchen
In the Forest David M. Schwartz
One Day in the Tropical Rain Forest
Jean Craighead George
Who Lives in the Rainforest? Susan Canizares and Mary Reid

INSECT BIBLIOGRAPHY

The Life of a Butterfly Robin Bernard
I Love Bugs Mary Dixon Lake
Insectopia Douglas Florian
Insects Are My Life Megan McDonald
What is an Insect? Jennifer W. Day – Golden Book
Monarch Butterfly of Aster Way
Elizabeth Ring
Butterflies Gail Saunders-Smith
The Honey Makers Gail Gibbons
How and Why Insects Visit Flowers
Creative Teaching Press
Monarch Butterfly Gail Gibbons
The Praying Mantis Modern Curriculum Press
The Life of a Butterfly Robin Bernard
What's Inside? Insects Scholastic
The Wonder of the Monarchs
Harvey Gunderson
Creepy Beetles! Fay Robinson
Ladybugs Cheryl Coughlan Pebble Books
Bumblebee at Apple Tree Lane
Laura Gates Galvin
Ladybug at Orchard Avenue
Kathleen Weidner Zorhfeld
How Do Flies Walk Upside Down?
Melvin and Gilda Berger
Interesting Insects Avelyn Davidson
The World of Ants Melvin Berger
A Butterfly is Born Melvin Berger
Flies are Fascinating Valerie Wilkinson
Busy as a Bee Melvin Berger
A Ladybug's Life John Himmelmann
From Caterpillar to Butterfly Dr. Gerald Legg
Ant Cities Arthur Dorros
The Fascinating World of Ants Angels Julivert
I Wish I Were a Butterfly James Howe
What Do Insects Do? Susan Canizares and Pamela Chanko
What is an Insect? Susan Canizares and Pamela Chanko
How to Hide a Butterfly and Other Insects
Ruth Heller

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www.oregonzoo.org

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