



# LIVING AND THRIVING

## IN-CLASS PRE AND POST ACTIVITIES

*Ambassador Animal Initiative*

### PRE-VISIT ACTIVITY

#### WANTS AND NEEDS ACTIVITIES

#### LEARNING OBJECTIVES

Students should be able to:

- Describe an animal's five basic needs
- Describe the differences between an animal surviving and an animal thriving

Students will be led through activities to help them understand the basic needs of all animals, including people. Students will also discuss the differences between basic needs, secondary needs, and wants.

#### NEXT GENERATION SCIENCE STANDARDS

##### Driving Question:

What are the ways people can satisfy the wants and needs of the animals in their care?

##### Crosscutting Concept:

- Cause and Effect

##### Disciplinary Core Ideas (Grades 3-5)

- LS4.C: Adaptation
  - For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.

##### Science and Engineering Practice

- Engaging in Argument from Evidence

#### MATERIALS

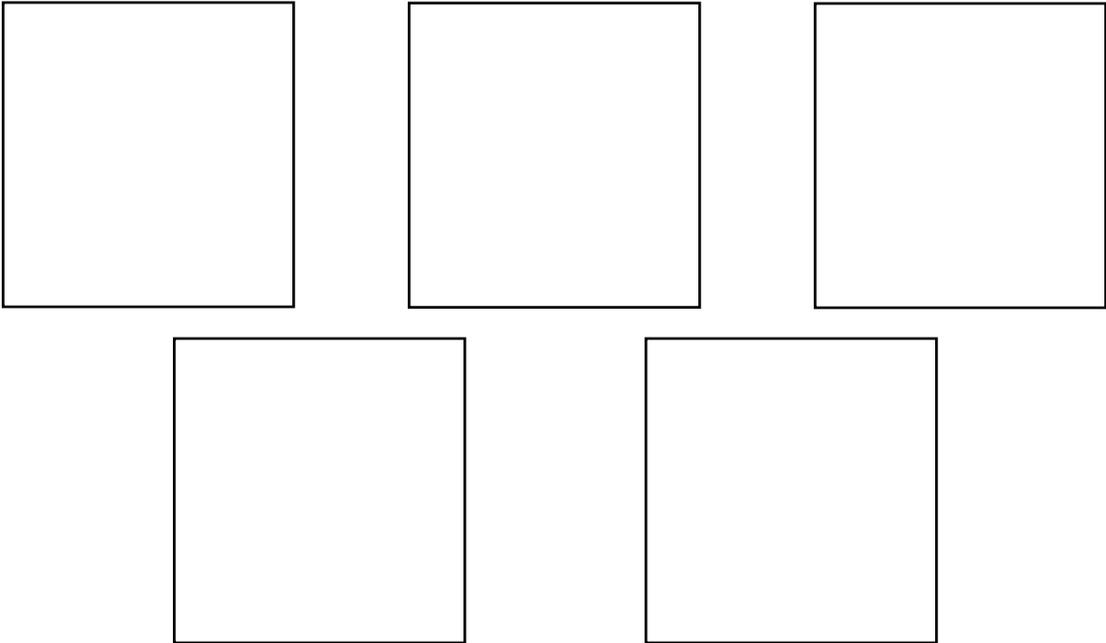
- Images of common household objects (see accompanying PowerPoint)
- Signs which read
  - "Want" - "Basic Need" - "Not sure" - "Secondary Need"

#### ACTIVITIES

1. Organize the students into groups and provide each group with three signs: "Want" "Basic Need" "Not Sure". Explain that we are going to be doing an activity in which we will talking about our opinions, and some of our opinions, or ideas, might be different from our classmate's opinions. It's okay if we disagree. We're all different, and that's a good thing. But we need to remember to be respectful of each other's different opinions.
  - a. Discuss what everyone needs to survive
    - i. As a prompt, ask the students, "Imagine you're stranded on a deserted island. What would you need to survive?"
2. Present a series of objects and ask students to classify the object as either 'Want' or 'Basic Need'
  - i. Discuss why they support their ideas
    1. If there is disagreement, try to come to a consensus about basic needs

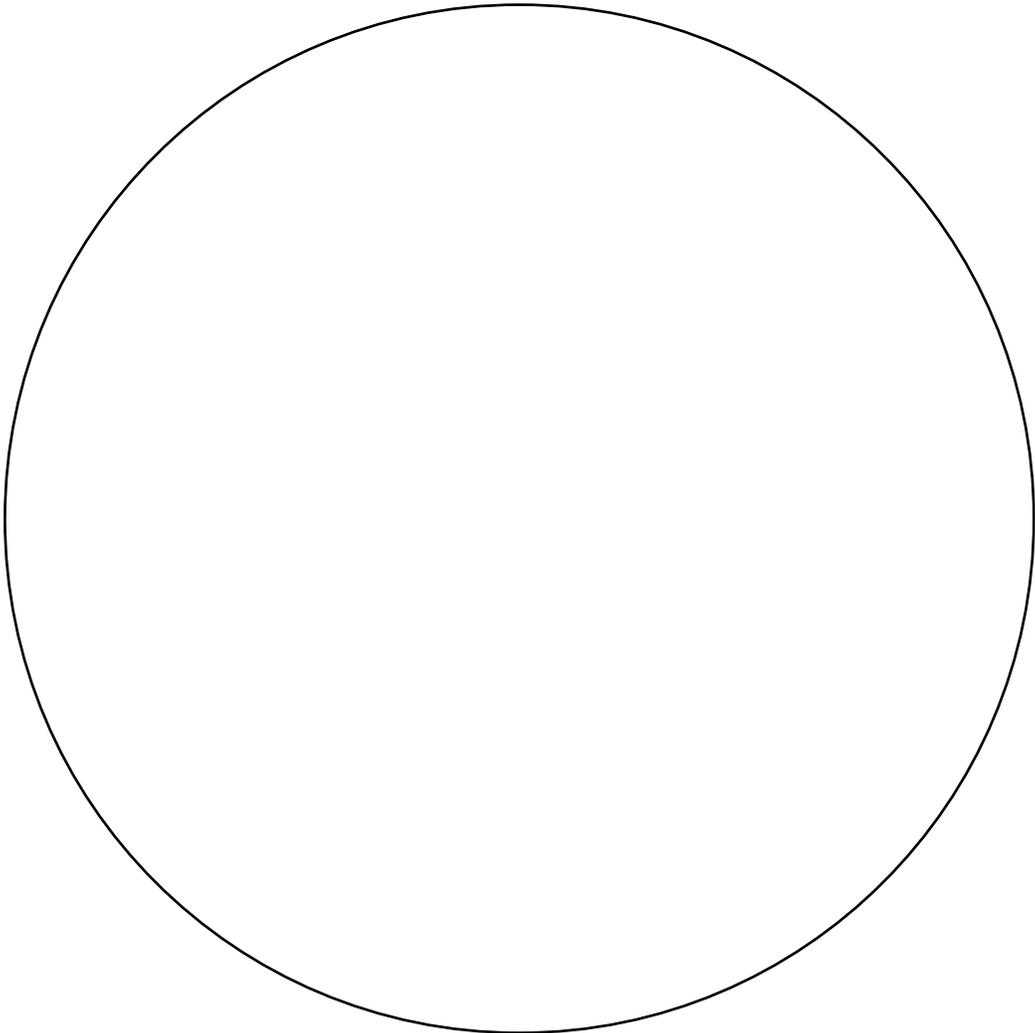
3. Provide each group with the 'Secondary Need' sign. Each group should now have 'Want' 'Basic Need', 'Secondary Need' and 'Not Sure'
  - a. Discuss how secondary needs allow animals, including us, to thrive, stay healthy, or raise a family once basic needs are met. These secondary needs are such things as companionship, education, or toothbrushes.
  - b. Discuss the differences between secondary needs and wants. Wants are luxuries; they are things we would like but may not be necessary for surviving or staying healthy. Wants can make life more interesting. Things like toys, candy, video games, or fancy shoes are wants.
4. Present a series of objects and have groups decide if they are basic needs, secondary needs, or wants.
  - i. Discuss
    1. Students may have differences in opinion. This is because while we all have the same basic needs, we may have different wants and desires. This is because we're all unique individuals.
5. Have students fill out the worksheet with their own personal secondary needs
6. Were there any secondary needs that were not pictured, such as respect, family, or kindness? Why do we need these things to thrive?
  - a. If they are needs, and we need them from other people, how can each of us give kindness and respect to others?
7. During our next visit, animal keepers will share how they help animals thrive at the zoo

**LIST OR DRAW YOUR BASIC NEEDS FOR SURVIVAL**



The form consists of five empty rectangular boxes arranged in two rows. The top row contains three boxes, and the bottom row contains two boxes. These boxes are intended for the user to list or draw their basic needs for survival.

**LIST OR DRAW SECONDARY NEEDS WHICH CAN HELP YOU THRIVE**



A large empty circle is provided for the user to list or draw their secondary needs which can help them thrive.

## **POST-VISIT ACTIVITY**

### **ANIMAL ENRICHMENT ACTIVITY**

#### **LEARNING OBJECTIVES**

Students should be able to:

- Understand the role of enrichment in the lives of zoo animals
- Understand the importance of variety in enrichment
- Identify a problem and design a solution

Students should work in small groups to complete this activity:

1. Research – Students will research their chosen animal, paying close attention to its natural habitat and behavior.
2. As a team, brainstorm ideas for enrichment for their animal which will encourage the animal to play, investigate, and exercise. Enrichment should help the animal thrive and stay healthy and happy.
3. Design – After students have brainstormed what they would like to make they should draft their model onto paper.
  - a. Drafts should include; a picture of the animal enrichment item, a brief statement of why they believe their enrichment item would be beneficial for their animal, and a list of materials they'll need to build it.

#### **ANIMALS**

Humboldt penguin

Brown bear

Komodo dragon

## WORKSHEET

ANIMAL	HABITAT	DIET	BEHAVIOR

**DRAW YOUR ENRICHMENT IDEA ON THE BACK OF THIS SHEET**

**HOW WILL THIS ENRICHMENT HELP THE ANIMAL THRIVE?**

## Checklist

Enrichment items for animals have to meet certain rules. Use this checklist to help you design and build your enrichment.

<b>Research</b>	Did you research your animal's Habitat?  YES NO	Did you research your animal's Diet?  YES NO	Did you research your animal's Behavior?  YES NO
<b>Design</b>	Does your design include a picture of the enrichment?  YES NO	Did you explain how your enrichment helps the animal thrive?  YES NO	Did you provide a list of all the materials that you will need to build the enrichment?  YES NO
<b>Presentation</b>	Did your presentation include why your enrichment helps your animal thrive?  YES NO	Did you show excitement or enthusiasm for your enrichment idea during your presentation?  YES NO	Did you share your knowledge of the animal's habitat, diet, and behavior during the presentation?  YES NO
<b>Safety</b>	Is the enrichment item safe for the animal?  YES NO		
<b>Team work</b>	Did you work together as a team?  YES NO	Can each person explain how they helped the group?  YES NO	

## Brown bear

**Habitat:** These bears live in a variety of habitats, such as forest, tundra, coastline, and even deserts. They make dens in caves, burrows, or other sheltered spots. In very cold climates, these bears will curl up and rest in their dens for up to six months during the cold winter. Brown bears who live in warmer places do not rest for as long.

**Diet:** These bear are true omnivores. They eat almost any food they find. They mostly eat plant matter, such as berries and nuts. They use their strong claws to dig up roots, tubers, and also insects. They also catch and eat salmon, small mammals such as rabbits, and large, hoofed animals such as deer. They have a very good sense of smell and will often stand on their hind legs and sniff the air.

**Behavior:** Brown bears can be busy at any time of day, but they tend to be most active during early morning and evening. They usually live alone, but they are not territorial. They often live very close to other brown bears, especially when they gather at the river to catch fish.



## Komodo dragon

**Habitat:** The five islands where Komodo dragons live are all volcanic. These lizards are usually found in the dry forests and grasslands of the islands.

**Diet:** When a dragon wakes up in the morning, he or she must first warm up in the sun. Then it's time to find breakfast. They will flick their tongues in and out of their mouths to pick up smells from the animals they hunt. Just like a snake's tongue, the forked tongue helps them find exactly where food might be. They're not picky eaters, either. They will eat small lizards, mammals like deer, and also carrion, which is animals that have already died.

**Behavior:** The Komodo dragon is the largest lizard in the world. This amazing reptile can grow up to 10 feet long and weigh up to 175 pounds. When it's time to rest, dragons dig a burrow to rest in. The burrow keeps them warm at night and cool during the hot part of the day. They are solitary, so they hunt and live alone. Young dragons climb trees to stay safe from predators on the ground.



## Humboldt penguin

**Habitat:** Humboldt penguins live along the shores of Peru and Chile, two countries in South America. Where they live is a desert. The land can get very hot during the day and the water off shore can be very cold.

**Diet:** Their torpedo-shaped bodies can shoot through the water at speeds of 30 miles an hour. They can dive deep underwater in search of snacks such as fish (especially anchovies), and other sea creatures such as krill, and squid.

**Behavior:** When the birds need a break from swimming, they come ashore. They are monogamous, which means that mates will stay together their entire lives. They spend all year in their noisy, busy breeding colonies. The birds have sharp claws on their feet to grip the rocky shore and to dig burrows into the sand or into the piles of guano, which is their poop, to lay their eggs.

