



◀ Education Program Packet—PreK & Kindergarten ▶

Zoo Atlanta Education Programs:

PreK: Field Trip Programs: All Star Babies or Super Senses

ZooMobile Outreach: On The Move or WILD Features

K: Field Trip Programs: Panda & Pals

ZooMobile Outreach: Beastly Basics

GPS &BFTS Content Standards: For program information and Georgia Performance Standards and Bright From the Start Content Standards for each program, click http://www.zooatlanta.org/education_school_programs.htm and follow the links to the program(s) you registered for.

Activity Packet: Stage 1-Desired Results

◀ Subject/Course: Life Science

◀ Grade: Pre Kindergarten and Kindergarten

Packet Established Goals:

Pre Kindergarten *Bright From the Start Content Standards*

- **SD 1** Children will use processes of science to actively explore and increase understanding of the environment. **b.** Uses senses to observe, classify, and learn about objects. **a.** Uses senses to observe, classify, and learn about objects. **c.** Uses language to describe observation. **e.** Records observations through dictating to an adult, drawing pictures, or using other forms of writing.
- **MD 3** Children will sort and classify objects. **e.** Explains sorting or classifying strategy.
- **MD 4** Children will develop a sense of space and an understanding of basic geometric shapes. **a.** Recognizes describes and compares basic geometric shapes.

Kindergarten:

- **SKCS1.** Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works. **a.** Raise questions about the world around you, and be willing to seek answers to some of the questions by making careful observations (5 senses) and trying things out.
- **SKL2.** Students will compare the similarities and differences in groups of organisms. **a.** Explain the similarities and differences in animals (color, size, appearance, etc.)
- **SKCS5.** Students will communicate scientific ideas and activities clearly. **a.** Describe and compare things in terms of number, shape, texture, size, weight, color, and motion. **b.** Begin to draw pictures that portray features of the thing being described.

<p>Understandings: Students will understand that...</p> <ul style="list-style-type: none"> • Animals can be grouped by their appearance, size, motion and where they live. • Living organisms need air, food, water and shelter. • Living organisms need food, water, shelter and air in order to live. Non-living things do not move, grow and change. • Animals are many different sizes, shapes and colors. Animals can move in different ways, like walking, flying, hopping or swimming. They can be grouped according to number, shape, texture, size, weight, color and motion. 	<p>Essential Questions:</p> <ul style="list-style-type: none"> • Why is it important to group animals? • How are animals similar? How are they different?
<p>Students will know...</p> <ul style="list-style-type: none"> • Physical features and characteristics of animals • Animal groups by physical characteristics: size, color, appearance, motion, number, shape, size, weight, and where they live. • Key vocabulary terms 	<p>Students will be able to...</p> <ul style="list-style-type: none"> • Sort animals by size, color, appearance, motion, number, shape, texture, size, weight and where they live. • Identify, compare and contrast animal characteristics. • Use their senses to describe and compare animals. • Ask questions about animals. • Use vocabulary appropriate for the content.
 <p>Stage 2-Assessment Evidence</p>	
<p>Performance Tasks:</p> <ul style="list-style-type: none"> • The task is to create animal art, which includes animals of different sizes, shapes, colors and movement. Students will design and build models specific to the animals' appearance. The students will include an information booklet about each animal. Present your artwork to your classmates. 	

Key Criteria

- Correctly describe and classify animals by their physical characteristics: color, size, shape, appearance, texture, weight, etc.

Other Evidence

- Observations
- Thoroughness of project
- Quality of presentation
- Dialogues

Stage 3-Learning Plan

Materials:

pencil, graphic organizer, realistic plastic animal models and pictures, one set of animal picture cards, and one set of cards with animal names

Vocabulary: **appearance**- the way in which some thing is dressed or groomed; **color**- the visible aspect of an object, other than form or size, that depends on the hue, or brightness of light that it reflects or emits; **size**- the physical extent or dimensions of anything; **stripes**- a relatively long, narrow band or strip distinguished from the surrounding area or surface by color, texture, or the like; **solids**- uniform, as in color; and **spotted**- marked with spots

Learning Activities

Pre-visit Classroom Activities

- Read [Animals at the Zoo](#) by Rose Greydanus. Discuss the appearance, size, shape and color of the animals.
- Guide students as they compare and contrast realistic animal plastic models or animal pictures. Discuss sizes, appearance, movement, and color of animals.
- Sort realistic animal plastic models by size, shape, color, number and movement. Create a bar graph.

Post-Program Zoo Activities

- Tell students to notice the animals' appearance, color, size and movement. Count and record animal's outer coverings, size, motion, etc.
- Discuss the interaction between the animals. What are the animals doing? Why do you think they are doing that? Have students think of questions that can be answered after the Zoo visit.

Post-visit Classroom Activities

- Clarify any questions about the Zoo visit. Have students act like an animal observed at the Zoo.
- Facilitate a discussion about animals (color, appearance, shape, movement and size). Students will make animal pop-up books.
- Play Concentration. Make one set of animal picture cards and one set of animal names. Have students match pictures to the animals' name. Students can also sort pictures by size, appearance, movement and color.

- Draw pictures of the animals seen at the Zoo. Tell or write sentences describing what the animals were doing. Share with class. Make a bar graph depicting the number of particular species. Draw pictures of your Zoo experience.
- Bring a pet to class, or invite Zoo Atlanta's ZooMobile Outreach program. Have students use their five senses to describe the animal.



Suggested Reading

Zoo Animals (Beginners Activity Books) by Pat Stewart

Zoo Animals by Annie Ingle

Zoo Animals by Angela Royston,

Zoo Animals at Your Fingertips by Judy Nayer, Greg Harris

How to Draw Zoo Animals by Jocelyn Schrelber

A Kid's Guide to Zoo Animals by Michelle Gilders

Animals at the Zoo by Rose Greydanus

Zoo Animals by Brian Wildsmith

Life at the Zoo: Behind the Scenes with the Animal Doctors by Phillip T. Robinson

My Book of Baby Zoo Animals by Ronnie Peltzman Randall

DK Finders: Zoo Animals by Dorling Kindersley Publishing

How Animals Live : The Amazing World of Animals in the Wild by E. Bertram

Suggested Websites

Zoo Atlanta – www.zooatlanta.org

Association of Zoos and Aquariums – www.aza.org

World Wildlife Fund - www.wwf.org

Enchanted Learning - www.enchantedlearning.com/subjects/animals/animalbabies.shtml

Animal Needs - <http://www.harcourtschool.com/activity/animalneeds/>

Graphic Organizers



Student Name _____ Date _____

Draw an animal that fits the description below.

Big

Little

Covered with feathers

Covered with fur

Moves fast

Moves slow

Colorful

Heavy

Choose another description. Draw the animals below.



Sensing the Animals

Student Name _____ Date _____

Directions: Use 4 of your 5 senses to describe an animal.

Animal 1

Animal 2

Sight

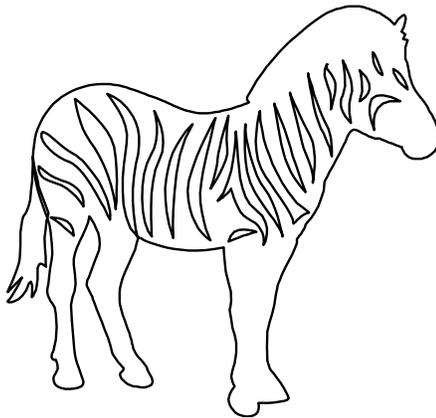
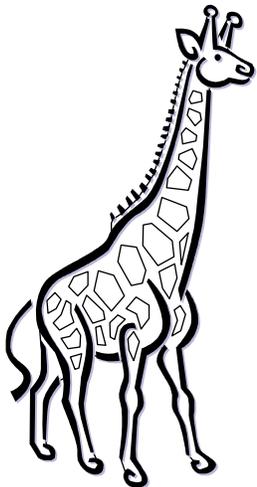
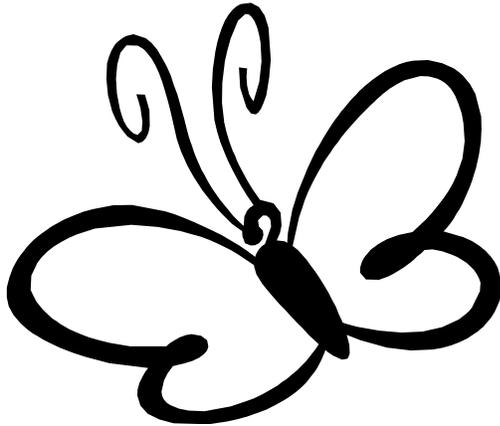
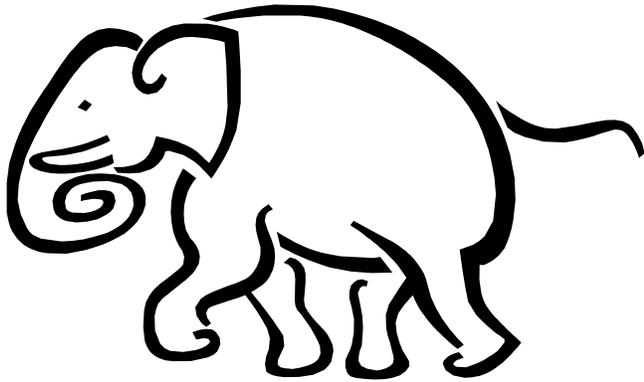
Touch

Smell

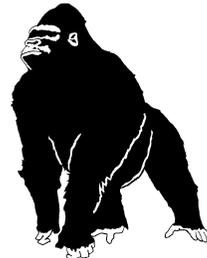
Hear

Student Name _____ Date _____

Directions: Something is missing. Which animals should have spots, solid colors or stripes? Complete each picture.



Can you find these animals at the Zoo or in an animal book? Write their names below.





Rubric

	Exemplary 4	Accomplished 3	Developing 2	Beginning 1
Classification	Consistently demonstrates the ability to sort animals into the proper groups.	Usually demonstrates the ability to sort animals into the proper groups.	Sometimes demonstrates the ability to sort animals into the proper groups.	Rarely demonstrates the ability to sort animals into the proper groups.
Use of Scientific Language	Consistent, accurate usage of terms.	Adequate usage of scientific terms.	Occasional use with few errors.	No terms of frequent errors in usage.
Identification	Demonstrates full understanding of living and nonliving items.	Displays a complete and accurate understanding of living and nonliving items.	Displays an incomplete understanding of living and nonliving items.	Demonstrated severe misconceptions about living and nonliving items.
Teamwork	Assumed leadership role within group; strong contributions.	Participated with good contributions.	Participated with weak contributions.	Did not participate in group discussions.
Application to the Real World	Able to apply learning.	Usually finds practical application.	Occasionally relates to real life skills.	No practical application.
Communication	Uses rich, vivid, and powerful description in a variety of ways to clearly communicate observations, data, and conclusions.	Consistently communicates information effectively through accurately recording and describing observations and conclusions.	Communicates plausible facts but lacks clarity in presenting facts and observations.	Is ineffective in communicating information.
Presentation	Presents information in logical, interesting sequence; demonstrates full knowledge (more than required); Maintains eye contact; Uses a clear voice; pronounces words correctly.	Presents information in logical sequence; Feels at ease with expected answers; Maintains eye contact most of the time. Voice is clear; pronounces most words correctly.	Audience has difficulty following presentation because student jumps around; Student is uncomfortable with information; Occasionally uses eye contact; Voice is low and incorrectly pronounces terms.	Audience cannot understand presentation due to no sequence; Does not have grasp of information; Reads all of the report with no eye contact; Mumbles or incorrectly pronounces terms.