

Oakland Zoo Project Kit

Congratulations! You're going to the Oakland Zoo! Use these project ideas to enrich your educational experience in the park. Read through them before you go to make sure you understand the terms and concepts, and to help you determine if you want to expand upon any of them. **You'll find fun facts and printable worksheets at the end of this packet.**

a- elementary level activity b- middle school level activity c- high school level activity

Language Arts

Animals have language, too! Take some time to observe animals interacting with each other. How are they communicating to each other? How are they reacting to one another? Do you see positive or negative emotions in their communications? What are they trying to achieve? Is the way they are communicating effective? What can we learn from them?

- a. Draw a picture about what you see. Talk or write about it.
- b. Write a few short paragraphs about what you see. Talk about it.
- c. Write a short essay about what you see. Discuss ways in which we, as humans, can use some of our communication skills to better exist in harmony with one another. What kinds of communications should we avoid, and which should we employ more frequently?

Materials required: Notebook, pen/pencil

Submission: A copy of your writings/drawing, and any pictures/videos

Teaching or learning notes:

Applied Math

Animals eat a lot! How much animal food does the Oakland Zoo have to purchase and prepare? How many animals live at the park? Use technology or ask a docent/keeper/employee to get estimates, and use those estimates to calculate how much money the zoo spends to feed its animals.

- a. Choose one animal to research how much it eats in a day. Calculate how much food it would need in a year. Draw or write about your findings.
- b. Choose one animal to research how much it eats. Calculate how much food it would need in a year, and estimate how much that food will cost. Then, multiply that figure by the number of that type of animal the park takes care of. Record your calculations.
- c. Calculate estimates of food needs for each animal, each type of animal, and all of the animals at the park. Do this per day and per year. Estimate how much that would cost. Record your calculations.

Materials required: Notebook, pen/pencil, calculator or smartphone (optional)

Submission: Your calculations, estimations, and conclusions, and any pictures/videos

Teaching or learning notes:

Science

Animals are awesome! Zoologists study animals. Every animal has a unique life history. A “life history” is the story of an animal’s life from birth (or fertilization) to adulthood (and death). How many different ways can an animal begin it’s life? Are some animals more independent as babies than others? Why do you think this is? What about their lives affect how vulnerable they are when they are born? What kinds of animals raise their babies, and what kinds don’t? How does this affect how many babies survive to adulthood?

- a. Choose an animal to think about these questions for. Draw or write about your ideas.
- b. Discuss and diagram the unique life history of one of the animals you see. Write a paragraph about your findings.
- c. Discuss the life history of one of the animals at the park. Write a short essay on your findings. Then, explore zoology. What kinds of things does the zoo need to keep in mind about each animal's' life history when it is designing its living space and their plan for taking care of it? Does the zoo have breeding programs for any of the animals? What are they working on currently? Ask a zookeeper.

Materials required: Notebook, pen/pencil

Submission: A copy of your drawings, diagrams, maps, or designs, and any pictures/videos

Teaching or learning notes:

Social Studies

There can be a lot of people at the zoo! How does a zoo handle the crowds? What affect does the layout of the park have on the movement of people? How does the design help both the animals and the people have an enjoyable time? Can you see these same principles in use in the planning of large cities or other social environments?

- a. Notice how many people are in the park. Discuss some of the things the zoo does to control crowding and help make each guest's experience pleasurable. Write down the techniques you see and how often you see them being used.
- b. Analyze the layout of the park and if/why certain features were designed with the purpose of managing crowds. Use the map, and write down what you find.
- c. Discuss crowd control and analyze the layout of the park. Discuss the things you've seen in light of larger social environments you've been in. How universal are these techniques? What are your ideas for improving guest experience at the zoo?

Materials required: Notebook, pen/pencil, park map

Submission: A copy of your writings/drawings, and any pictures/videos

Teaching or learning notes:

FUN FACTS

- The Oakland Zoo has 100 acres of natural habitats specifically designed for its animals.
- The zoo is nationally known for its excellent elephant exhibit and has been praised for allowing their elephants to roam freely.
- Every weekend, teen volunteers/wild guides, also known as TWGs (pronounced "twigs"), come to the Children's Zoo to tell the public about the animals depending on which station they are at; Bats, Goat Barn, Gators, Bugs, Rad Room, Otters, Lemurs, and occasionally Face Painting in the Children's Zoo, or working at the Sun Bear or Chimp stations. The age range is 12½–19 years.
- The zoo is home to over 660 native and exotic animals.
- There are approximately 8,500 reticulated giraffes living in the wild and they live in the Horn of Africa, in Somalia and southern Ethiopia.
- Recent civil wars in the Congo, Rwanda, Somalia, Sudan, Ethiopia, and Uganda have caused dramatic declines in all wildlife populations, including those of Grant's zebra. It is now extinct in Burundi.
- As with nearly all other Old World fruit bats, flying foxes lack the ability to echolocate but compensates for it with well-developed eyesight.
- The Gila monster is the only venomous lizard native to the United States and one of only two known species of venomous lizards in North America.
- The black widow spider's web is strong enough to catch animals as large as mice, though they do not eat mice.
- Zazu, from the Lion King, was a hornbill in the same family as the red-billed hornbills you can find at the zoo. In fact, the Oakland Zoo is home to all of the major characters from the Lion King, including lions, hyenas, meerkats, warthogs, and hornbills.

Oakland Zoo

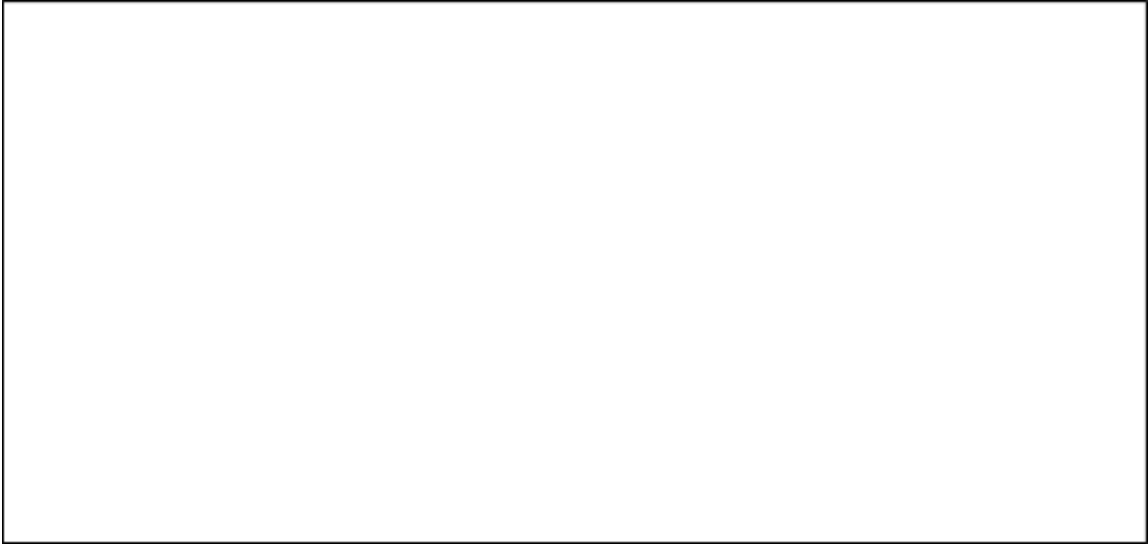
1. Draw a picture of your favorite animal at the zoo.



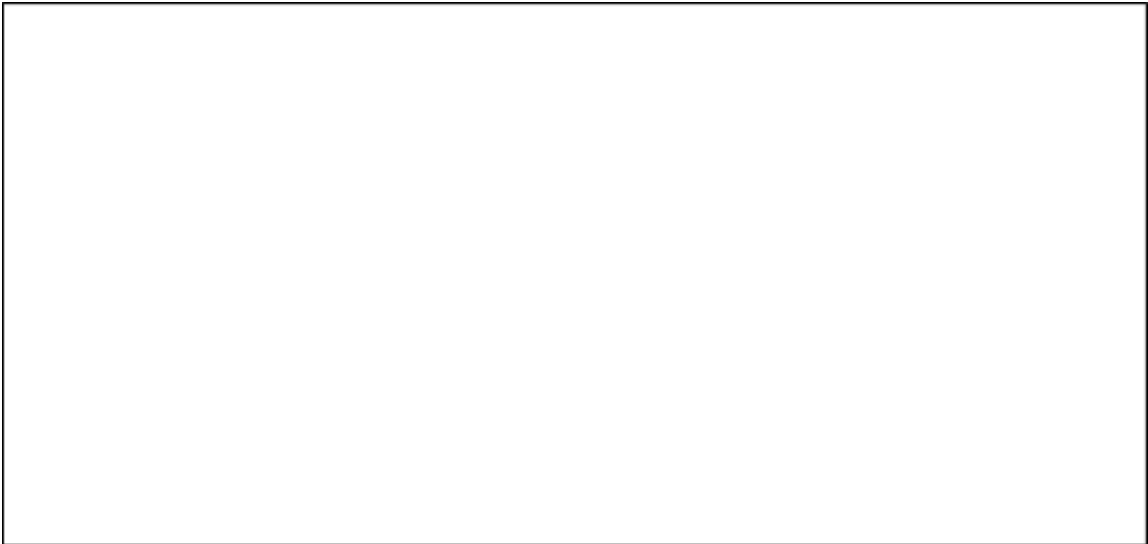
2. Describe your favorite animal, something it did while you were there, and why you love it.

3. What is one thing you learned about carnivores at the zoo?

4. Draw or describe a bird that you saw at the zoo.



5. Describe or draw a reptile you saw at the zoo.



6. What are the differences between mammals and birds?

BONUS:

Oakland Zoo Scavenger Hunt!

- Something with wings _____
- Something that hibernates _____
- Something that is bipedal _____
- Something that is blue _____
- Something with fangs _____
- Something that eats mice _____
- Something that eats vegetables _____
- Something that has talons _____
- Something that is diurnal _____
- Something that lives in the water _____
- Something that likes to hide _____

