Sacramento Zoo Project Kit

Congratulations! You're going to the Sacramento 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 Sacramento 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

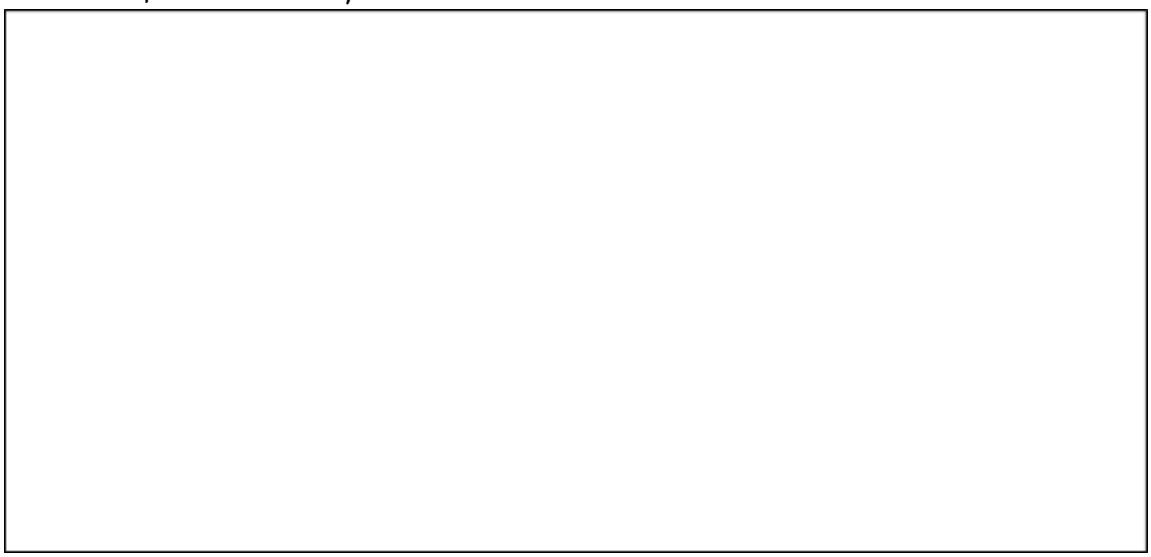
Teaching or learning notes:

Fun Facts

- In 1948, the Sacramento Union Newspaper sponsored a drive raising money to buy the Zoo an elephant. In the fall of 1949, SUE ("Sacramento Union Elephant") arrived at the Zoo.
- The Reptile House was built in the shape of a snake and opened in 1970.
- The Sacramento Zoo began as the William Land Park Zoo in March 1927. It consisted of approximately 40 animals housed on four acres of land.
- In 1942, the zoo budget was $150 for one year! In 2015, the Zoo budget is over $6 million for one year.
- Approximately 50,000 schoolchildren visit the Sacramento Zoo annually.
- The Sacramento Zoo exhibits over 500 animals, featuring over 130 species of carnivores, birds, reptiles, ungulates and primates.
- Approximately 1,745 volunteers donate more than 42,000 hours of expertise and hard work annually.
- The total yearly animal food budget is over $150,000—almost $50,000 is spent on fruits and vegetables which are delivered twice a week.
- Herkimer, the Desert Tortoise is the oldest resident at the Sacramento Zoo, he was born the same year that the Zoo opened.
- Anteaters in the wild can eat up to 30,000 insects in one day.
- Chimpanzees are one of the few non-humans that use tools. Chimps use sticks to draw termites out of termite mounds and use rocks and braches to crack palm nuts.
- The giraffe has the same number of vertebrae in their neck as a human--seven!
- The orangutan has the strength of eight men.
- Kangaroos are the best jumpers of all mammals and can jump over 30 feet in one hop and 6 feet high, with a speed up to 40 mph.
- Ruffed lemurs are the only primates that make nests for their infants instead of having the babies hang on to them.
- Fruit bats don't use echolocation, only insectivorous bats do.
- Giant Anteaters do not have teeth; instead, they have tongues that can reach as much as 2 ft. in length!

Sacramento 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 monkey you saw at the zoo.

6. What are the differences between reptiles and amphibians?

BONUS:

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 _____