

### **Santa Barbara Botanical Gardens Project Kit**

Congratulations! You're going to the Santa Barbara Botanical Gardens! Use these project ideas to enrich your educational experience. 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**

Use your visit to the gardens to spark your imagination and write your own fictional story! As you discover all of the nooks and crannies of the gardens, let your mind build a detailed story of adventure, drama, or humor.

- a. Draw a storybook or write a short story with illustrations inspired by your trip.
- b. Write a short story inspired by your visit, including a main character and the main elements of a story (setting, plot, conflict, and resolution).
- c. Choose between writing a fictional first-person narrative or a screenplay inspired by your visit.

Materials required: Notebook, pen/pencil

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

### **Applied Math**

Nature uses math to design stunning and wonderful creations. Learn more about the patterns and shapes of nature.

- a. Choose one plant to study closely. What shape does it have? Can you find any patterns? Draw a picture of the plant you chose, and use it to compare that plant to others in the garden.
- b. Go on a shape and pattern hunt. Draw and label the shapes you find. Also, draw a representation of at least two patterns you find.
- c. Use math to describe one part of the gardens, whether it be the layout, the plants, or anything else which interested you. Draw a diagram of it and label it with the math you see. Using estimates, include some basic calculations which would describe the visual qualities of your chosen part of the garden.

Materials required: Notebook, pen/pencil

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

#### **Science**

Maintaining a large garden is a lot of work. Learn more about gardening, horticulture, and botany.

- a. Draw and/or write about one plant you found in the gardens. Include where it lives and what it needs to stay alive.
- b. Identify two different species of the same genus. You can use their latin names as clues. Write a short paragraph detailing their similarities and differences.
- c. Explore adaptation in different plants. Identify three different plants, where they are from, and how they are uniquely adapted to that place.

Materials required: Notebook, pen/pencil

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

#### **Social Studies**

The Santa Barbara Botanical Gardens is home to the Mission Dam, built in 1806 to supply water to the mission below. Learn more about the area during that time period, and the importance of the dam.

- a. How do dams help a settlement grow? What is the water used for and why is it important? Draw or write about your findings.
- b. What was life like in Santa Barbara in the early 1800s. Who lived there? What were they doing? Use the internet to find answers to these questions and write about it. Include references to where you found your information.
- c. The Chumash natives were the ones who built the dam, under the direction of the mission padres. How would their knowledge of the area help them be successful in completing the dam? How would the padres knowledge be important to the project? How did both groups benefit from the venture? Write about your discoveries.

Materials required: Notebook, pen/pencil, smartphone (optional) Submission: A copy of your writings/drawings, and any pictures/videos

# FUN FACTS

- The Santa Barbara Botanical Gardens spreads over 78 acres and has over 1000 types of rare and indigenous plants.
- The Mission Dam and Aqueduct was built in 1807.
- The purpose of the Garden is to display California native plants in natural settings.
- There are approximately 5.7 mi of hiking trails within the garden.
- The Garden has a plant breeding program and is a preeminent plant research facility.
- On May 6, 2009, part of the Botanic Garden was burned in the Jesusita Fire, which burned much of the front country of the Santa Ynez Mountain range behind Santa Barbara. Garden displays have recovered and most of the buildings and equipment have been replaced through generous donations and gifts.
- Some of the rare and amazing plants located in this Botanic Garden are Canyon Pink, White Lanterns, Amethyst Bluff and De La Mina. (Can you find them??)

# Santa Barbara Botanical Gardens

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4. [	Draw or describe one example of a flowering plant.
5. [	Describe or draw one of the non-flowering plants you saw.
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6. t	tow do plants create energy?

BONUS:
Describe 3 things that gardeners do to take care of the gardens and
why they are important.
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