

Congratulations! You're going to the Natural History Museum! 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**

Language doesn't have to be written. Many cultures use art to express themselves and communicate to one another. Explore the museum's collection of art and sculpture.

- a. Choose one piece. Draw a picture of it and discuss or write about what you think it did or could communicate.
- b. Choose one piece. Write a short story with it as the centerpiece. What was the significance of the piece and how did it help people communicate?
- c. Compare and contrast two pieces. What do their similarities say about the similarities in the way people communicate? What are their differences and why are they important? What are ways or times that these pieces might have been used? Write a short essay with useful details.

Materials required: Notebook, pen/pencil

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

Teaching or learning notes:

### **Applied Math**

Nature uses math to design stunning and wonderful creations, like skulls. Look at the skulls at the museum and learn more about their patterns and shapes.

- a. Choose one skull to study closely. What shape does it have? Can you find any patterns? Draw a picture of the skull you chose, and use it to compare that skull to others in the collection.
- 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. What shapes and patterns are similar among the skulls? Which are unique?
- c. Learn the terms *frontal*, *parietal*, *temporal*, *occipital*, *zygomatic*, *ethmoid*, *maxilla*, and *mandible*. These bones are common to all skulls. Identify each of these bones on at least 5 different skulls from different genres. Draw a picture of one of the skulls and label the bones. Write a brief paragraph about how the shapes and patterns of the skull are useful to the animal.

Materials required: Notebook, pen/pencil

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

Teaching or learning notes:

## **Science**

Southern California has a unique population of animals and plants, different than anywhere else in the world. Explore the Coast to Cactus in Southern California exhibit.

- a. Draw and/or write about one mammal of Southern California. Include where it lives and what it eats.
- 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 and animals. Identify three different animals or 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

Teaching or learning notes:

## **Social Studies**

Water is critical to the survival of any civilization. Visit the “Water: A California Story” exhibit and learn more about the way California gets and uses its water.

- a. Where does California get its water? Why does that matter? Discuss these issues and then draw a map showing where the water comes from and where it goes.
- b. Does California have an endless supply of water? Where does it come from? What sorts of things threaten our water source? Draw a map showing where the water comes from and draw and label some of the threats.
- c. Draw a map of California’s water supply including some of its threats. Write a brief essay describing these threats in more detail and things we can do to protect our water supply.

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

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

Teaching or learning notes:

# FUN FACTS

- The Society of Natural History was founded in 1874 as the San Diego Society of Natural History. It is the third oldest scientific institution west of the Mississippi and the oldest in Southern California.
- In 1917, the Society purchased a vacant Balboa Park building from the 1915 Panama-California Exposition. Here the Society moved its growing collections and library to create the San Diego Natural History Museum.
- The Society was notified on March 5, 1943, that the U. S. Navy wished to take over the Natural History Museum for hospital use at once. The Natural History Museum became the infectious diseases ward. Some renovation took place in the facility, including the addition of an elevator designed to handle hospital gurneys and a nurses' station between floors. Both features remain in use today.
- The San Diego Zooarchaeology Laboratory identifies faunal assemblages from archaeological sites in San Diego County, the western United States, and the ancient Near East, referencing the San Diego Natural History Museum's scientific collections. Founded in 2010, the SDZL collections include over 46,000 bird specimens and 22,650 mammals. With 7,000 complete bird skeletons, and over 1,400 partial skeletons, the collections contain 90% of bird families worldwide, represented by 1,605 species. Over 1,000 complete mammal skeletons and 20,000 skulls are currently housed, and the collections continue to grow.

# San Diego Natural History Museum

1. Draw a picture of your favorite exhibit at the museum.



2. What is one thing you learned about minerals?

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3. What is one thing you learned about prehistoric animals?

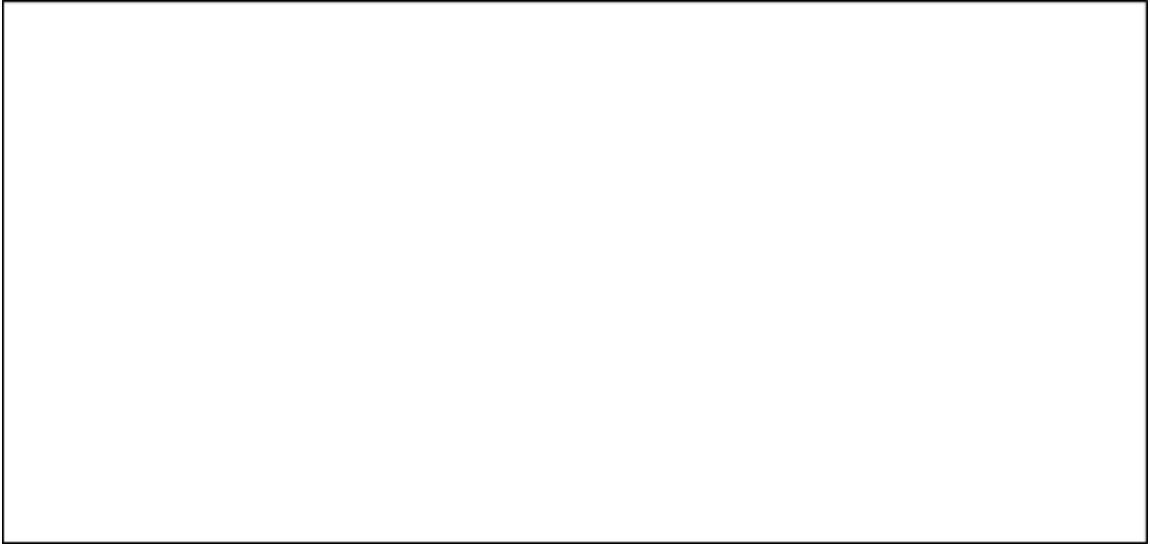
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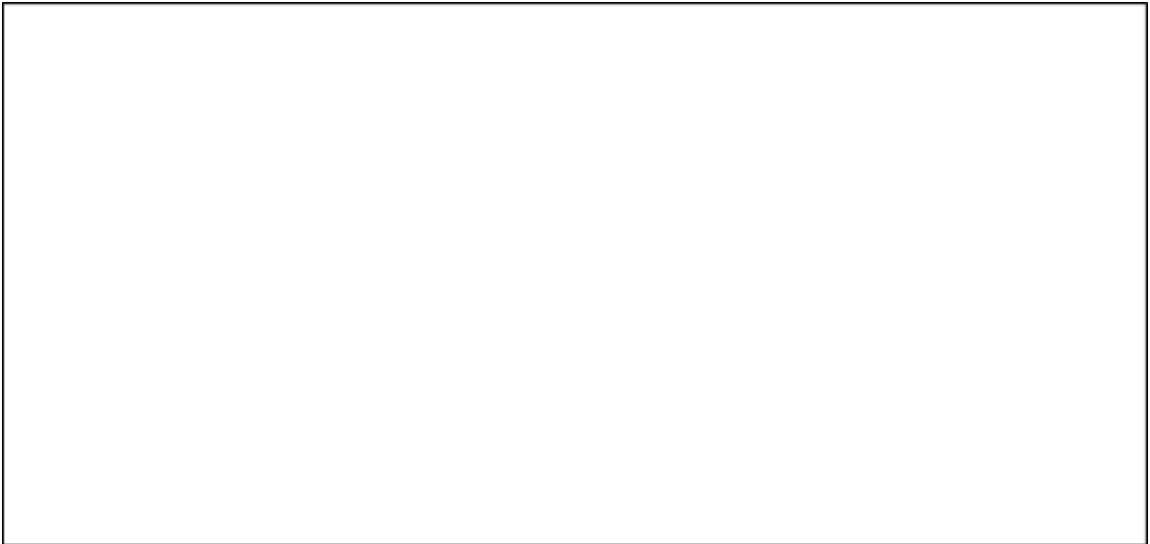
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4. Describe or draw a prehistoric animal.



5. Describe or draw your favorite plant that you saw.



6. What is one thing you learned about water?

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