

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 shells. Look at the shells at the museum and learn more about their patterns and shapes.

- a. Choose one shell to study closely. What shape does it have? Can you find any patterns? Draw a picture of the shell you chose, and use it to compare that shell 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.
- c. Learn the terms *terminal growth*, *fibonacci sequence*, *golden ratio*, and *equiangular spiral*. Visit <http://www.goldenumber.net/nautilus-spiral-golden-ratio/> to learn more about how these things apply to shells. In your own words, describe how shells might be related to phi, but do not represent a golden rectangle.

Materials required: Notebook, pen/pencil

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

Teaching or learning notes:

Science

North America has a unique population of mammals, different than anywhere else in the world. Explore the mammals on our continent and learn more about them.

- a. Draw and/or write about one mammal of North America. 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 mammals. Identify three different animals, 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

Visit the “Becoming L.A.” exhibit and learn more about the history of Los Angeles.

- a. Choose one event from the history of Los Angeles and draw a picture or write a short paragraph about it. Why does that even interest you? Why is it important to the history of the area?
- b. Choose one period of time from the history of Los Angeles. Draw a timeline for that period and include details about specific events and the importance of that period to the area.
- c. Draw a complete time line for the Los Angeles area. Include periods, events, dates, people, and significance of events.

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 oldest specimens in the Museum are the meteorites in the Gem and Mineral Hall — 4.5 billion years.
- Some of the Crustacea Department's specimens come from puddles in the Mojave Desert when it rains. The crabs deposit eggs that dry out when the water evaporates from the puddles, and these eggs can remain dry for more than 100 years. When the rains come again, they hatch out, mature and mate (often within just hours or days), drop more eggs, and then die.
- The baby sperm whale on display in the Age of Mammals is the only baby fossil sperm whale ever mounted and displayed, anywhere.
- Zed, found during LACMA's parking lot construction, is the first complete, semi-articulated Columbian mammoth specimen. His discovery is the first time we've found complete mammoth tusks at Rancho La Brea.
- The largest natural object in the Museum's collections is the skull from a blue whale, measuring 18 feet in length and weighing 2,500 pounds.
- The focal point of the 1913 Building was, and is today, the rotunda, which measures 75 feet in diameter with three wings. The rotunda's walls are made of Italian marble, its floor of mosaic tile. Julia Bracken Wendt's "Three Muses" statue graces its center. The rotunda's dome is 58 feet in height, with a skylight 20 feet across, designed by the eminent Walter Horace Judson.

Natural History Museum of LA

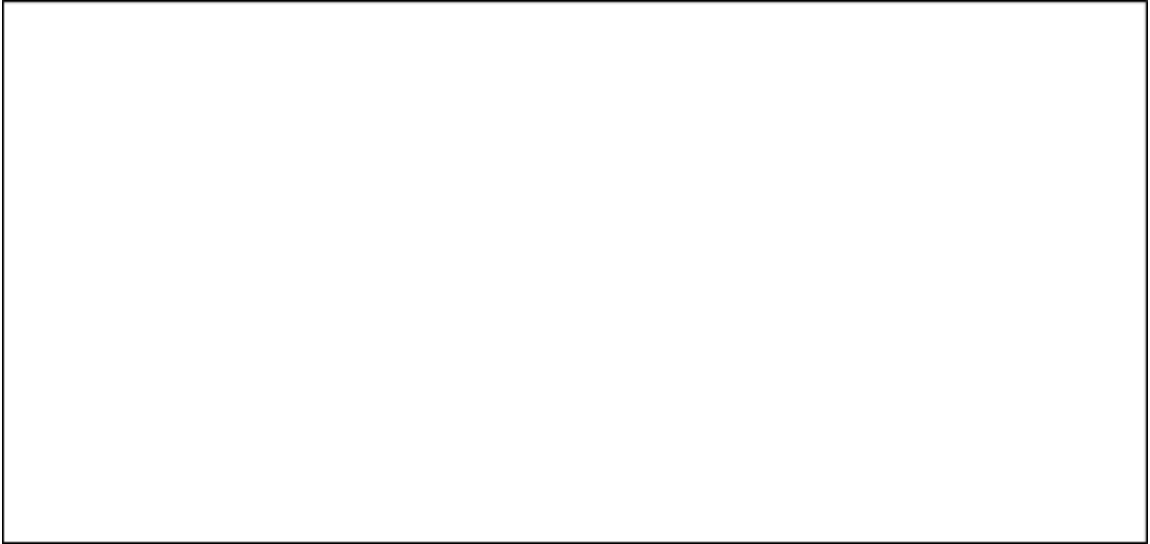
1. Draw a picture of your favorite exhibit at the museum.



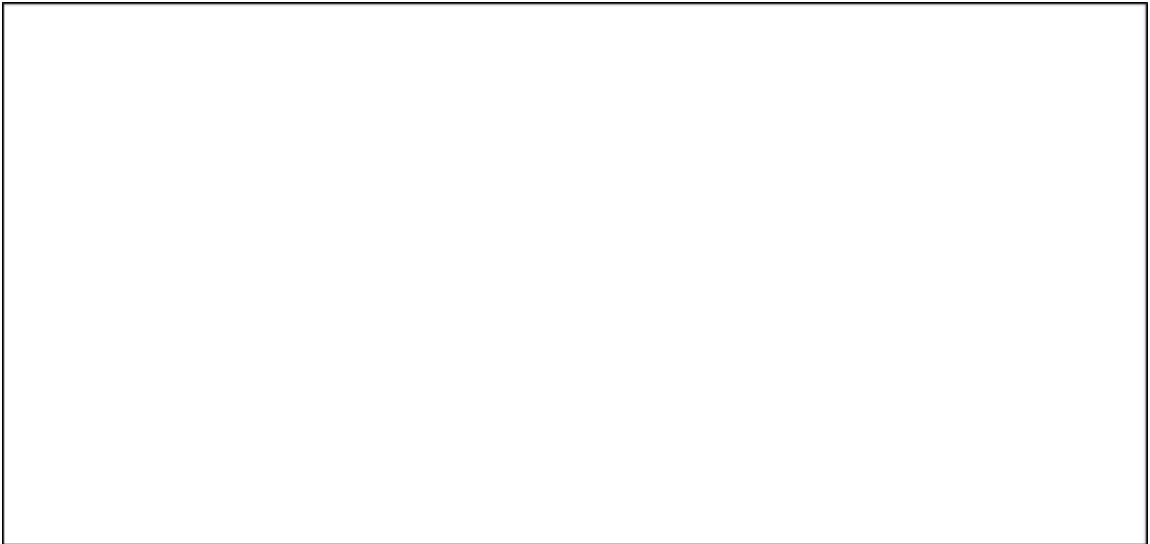
2. What is one thing you learned about gems?

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

4. Describe or draw a prehistoric animal.



5. Describe or draw your favorite plant from the gardens.



6. What is one thing you learned about insects?
