San Diego Maritime Museum Project Kit #1

Congratulations! You're going to the San Diego Maritime 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

The Maritime Museum inspires the imagination. What would it have been like to travel on a ship during her commission? Or even just visit as a guest? What would it have been like to work on the ship? What sort of events happened on board? Can you imagine any controversy, or excitement, or maybe just a peaceful stroll on a quiet day? Use your surroundings and your imagination to create a piece of fictional writing.

a. Draw a storybook or write a short story with illustrations inspired by the an exhibit or ship at the museum.
b. Write a short story inspired by your visit to the Maritime Museum, 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 to the Museum.

Materials required: Notebook, pen/pencil
Submission: A copy of your writings/drawing, and any pictures/videos

Teaching or learning notes:

Applied Math

The engineering and design of the ships at the Museum are absolutely stunning. Everywhere you look there is visual math. Notice the geometry in the designs, the accuracy of the engineering, and all the application of math all around you. Everyone who worked on the ship had to be proficient in math. Find applications for mathematical thinking and calculation all around you.

a. Go on a shape hunt. Draw and label the shapes you find. Also, draw a representation of at least two patterns you find.
b. Look closer at one aspect of a ship. It can be anything: living quarters design, general layout, ship engineering, power equipment, etc. Detail the math it would take to create it. Try to identify at least one part of your chosen area which would require math or skill beyond your current understanding. What could you do to learn that skill?
c. Math is everywhere. Imagine you are one of the engineers working on a ship. Describe your project and what you would need to know and do to complete it. Choose at least one application of math that you see, estimate measurements, and use calculations to show how the engineer designed and created that element.

Materials required: Notebook, pen/pencil, calculator or smartphone (optional)
Submission: Your calculations, estimations, and conclusions, and any pictures/videos

Teaching or learning notes:

Science

From buoyancy to engines, engineering and science are critical to a ship's function.

a. What makes a ship float? Draw a picture and/or write about the phenomenon.
b. Investigate one of the main engineering features of the ship. What was it used for? Why is it important? Is it still working now? Why, or why not?
c. Create your own ship design complete with the basic engineering required for it to work properly. Build a model or draw a picture of our completed ship, and explain its major engineering components as well as your ideas behind your design.

Materials required: Notebook, pen/pencil
Submission: A copy of your drawings, diagrams, or designs, and any pictures/videos

Teaching or learning notes:

Social Studies

The Maritime Museum is full of vibrant history!

a. Write or draw about the one of the ships at the Museum and what it might have looked like during its building phase.
b. Choose one historical event that was influential to the history of one of the ships and detail its timeline and its significance to the ship.
c. Create a scaled timeline of events for one of the ships at the Museum. Include as many events as you can, with brief details on each one. Include a summary of how the ship's rich history has led it to be the attraction it is today.

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

Teaching or learning notes:

Fun Facts

- Established in 1948, the Maritime Museum of San Diego keeps one of the largest collections of historic sea vessels in the United States.

The Maritime Museum of San Diego has *many* wonderful ships in its collection. Here are some quick *fun facts* of our favorites!

- The **Star of India** is an original ship that was built in 1863 in the Isle of Man. It was a cargo ship that regularly sailed between Great Britain, India, and New Zealand, and then later used as a salmon hauler between Alaska and California. It was officially retired from work in 1926, restored in 1962-63, and now is the oldest and fully functioning iron-hulled merchant ship in the world. It still sets sail regularly!
- The **Berkeley** is the main "building" of the Maritime Museum of San Diego and is an original ferryboat that was built in 1898. The Berkeley was a ferrier boat that was commissioned to work in the San Francisco Bay, to ferry people from San Francisco to Oakland. In the famous 1906 earthquake in San Francisco, the Berkeley was used to transport injured and destitute refugees from San Francisco to Oakland for help and assistance. The *Berkeley* currently hosts the museum's MacMullin Library and Research Archives on board.
- The **Pilot** is a native boat to San Diego and the city's first powered pilot boat. Built in 1914, the Pilot served as the San Diego Bay's official pilot boat for 82 years. During World War II, however, the Pilot was commissioned by the Coast Guard as a pilot and patrol boat for a 6-month service.
- If you're a fan of the maritime movie *Master and Commander: The Far Side of the World* and of Disney's *Pirates of the Caribbean: On Stranger Tides*, then you'll have to spend extra time on the **HMS *Surprise***. Built in 1970, the HMS *Surprise* is a replica of a Royal Navy frigate and was used in both films (in *Pirates of the Caribbean*, it was labeled the HMS *Providence*).
- Commissioned in 1968, the **USS *Dolphin*** was the United States Navy's last operational diesel-electric deep-diving submarine. The USS *Dolphin* was used as a research and development vehicle and is capable of holding 12 tons of research and test equipment. The Maritime Museum of San Diego only recently acquired the USS *Dolphin*, as it was decommissioned in September, 2007.

San Diego Maritime Museum

1. Draw a picture of your favorite part of the museum.

2. Describe your favorite part and why you love it.

3. What is buoyancy and why is it important to ships?

4. Draw or describe one ship you saw.

5. Describe or draw one example of engineering you saw.

6. How do ships with sails work?

BONUS:

Ocean travel has been incredibly important to the history of mankind. Choose one of the ships to learn more about and detail its history.