Supplemental Information
For Teachers



The San Francisco Maritime National Park Association
in Partnership with the
San Francisco Maritime National Historical Park

Supplemental Information

Rowing Commands for our Longboat *Cutter J*

Each crew is responsible for properly handling our longboat, *Cutter J*. The Crews should be knowledgeable about the appropriate use of lines and small boat operating orders of the longboat.

The Captain or lead instructor may cancel rowing and do a dockside lesson; part of this decision depends on weather and tidal conditions.

What the Crews should know:

Vocabulary
Rowing Commands
Introduction to the Water Cycle
Parts of the boat (optional)

Rowing Orders:

You can have students sit in chairs in two rows, two chairs per row, and demonstrate these commands with their hands. This will set them up for success while rowing and can be a great morning or afternoon routine up to one week prior to your trip.

"**Out Oars**": Oars are shifted out to a horizontal position (parallel to the water).

"**Prepare to Give Way**": The crew bends over and extends their arms, lower than chest height, which sets the blade forward (the crew is facing aft so the bow is behind them); ready for the next command.

"**Give Way together**": Pulling the oar handle up (which lowers the blade into the water) pull toward the body and row, taking full strokes, keeping in unison with the first oarsman, known as the "stroke" oar.

"**Way Enough**": Stop rowing by pushing down on the handles which brings the blade out of the water; wait for the next command.

"**Prepare to Backwater**": Holding the oar handle close to your body at chest level, prepare to row in the opposite direction, pushing the handle away from you as you extend your arms.

"**Backwater together**": All hands keeping in unison with the "stroke" oar, push the handle away from you as you extend your arms.

"**Prepare to Hold Water**": Hold the oars, ready to dip the blade into the water.

"**Hold Water together**": Dip the oars into the water; this will act as a brake, so if there is any momentum be prepared for resistance.

"**Ship Oars**": Pull oars across the boat so they lay on the gun'l from port to starboard





SFMNPA is working toward building lesson plans to expand on topics learned on your field trip into the classroom.

In the meantime, please check out the amazing **NOAA Sea to Sky: Education resource database!**

Recommended PRE Lessons from the NOAA Database:

1. Ocean Dwellers- learn what lives in the ocean and how they get their energy.

   https://cdn.oceanservice.noaa.gov/oceanserviceprod/education/ocean-odyssey/ocean-odyssey-lesson01-ocean-dwellers.pdf

2. Crunching the numbers: How do scienctists use data collected at sea?

   https://noaateacheratsea.blog/wp-content/uploads/2018/10/tas-lp-2012-gillean-alicia-science-lesson-508.pdf

3. Ocean Food Webs – Food Matters
   https://cdn.oceanservice.noaa.gov/oceanserviceprod/education/ocean-odyssey/ocean-odyssey-lesson07-food-matters.pdf

4. Water Cycle Worksheets :
   https://www.education.com/worksheets/water+cycle/?gad_source=1&gclid=CjwKCAjw59q2BhBOEiwAKc0ijSkx9D5W5g7mdQE-vkKoOD7xe0Al66lvLohfD2GryZWnKKJgLnwe3xoC84wQAvD_BwE

Recommended Post Lessons from NOAA Database:

5. Dive deeper into Ocean Acidification with NOAA online module and Teacher Resources

   https://noaa.maps.arcgis.com/apps/MapSeries/index.html?appid=adec7620009d439c85109ab9aa1ea227

6. Climate Change Lessons Plans:
   https://sanctuaries.noaa.gov/education/teachers/climate-change/lesson-plans.html