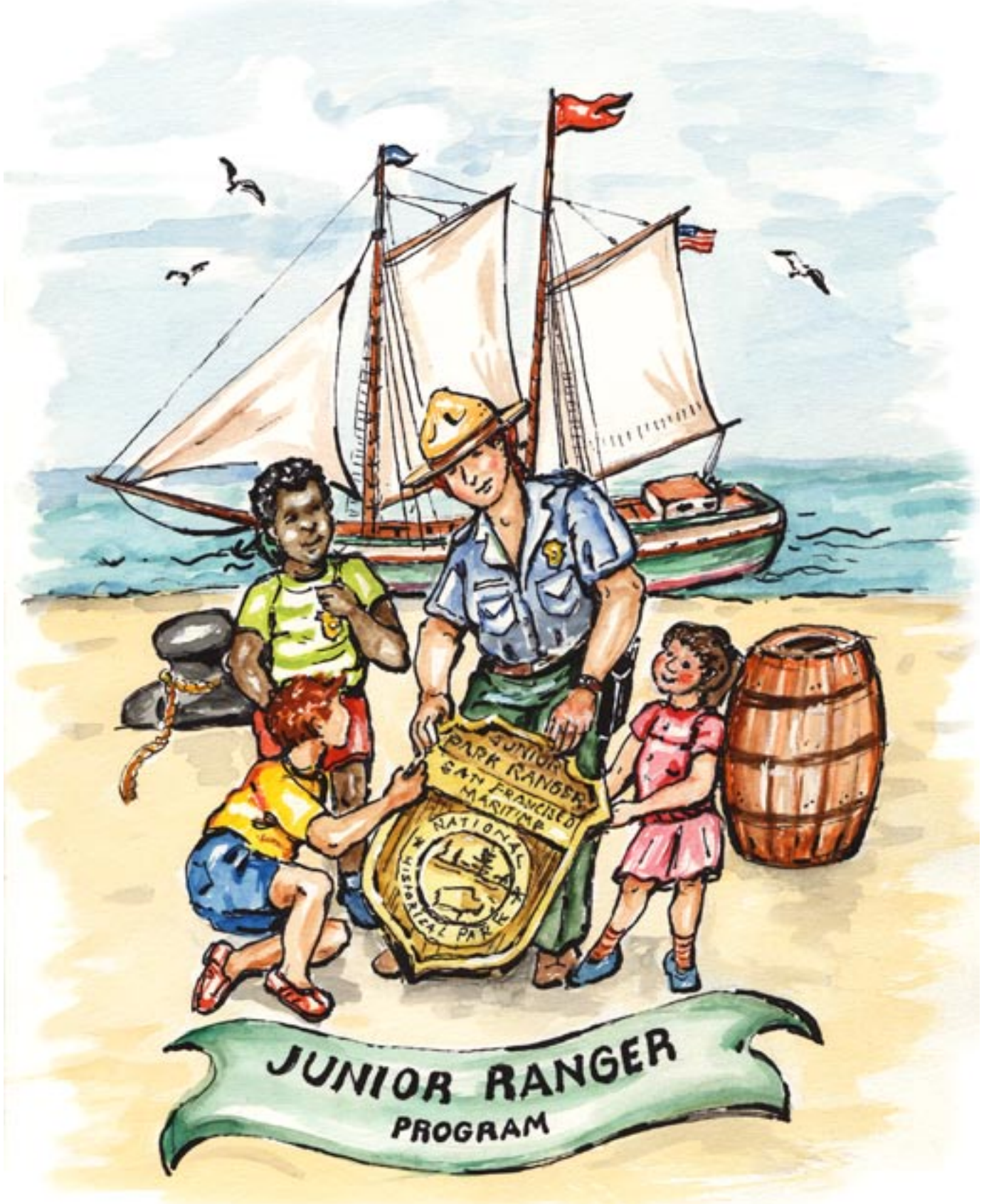


San Francisco Maritime

National Park Service
U.S. Department of the Interior

San Francisco Maritime
National Historical Park



San Francisco Maritime N.H.P. Junior Ranger Program

Welcome to San Francisco Maritime National Historical Park! This Junior Ranger activity book will guide you while you visit park, including the historic ships at Hyde Street Pier and the Visitor Center. The park's Maritime Museum is closed for restoration and will reopen in 2009.

To become a Junior Ranger

If you are **7 years old or younger**, complete Activities 1 through 5 in this book.

If you are **8 years old or older**, complete Activity 1 as well as any five of the activities numbered 4 through 13.

You may attend one ranger program in place of two activities.

Look for a list of our daily programs in the Visitor Center or by the ticket booth.

If you attend a ranger program, have the Park Ranger sign her or his name below:

Ranger's name: _____

Write down one thing you learned from the program: _____

When you have completed the activities, have a Park Ranger check your work. If everything's shipshape, he or she will sign your certificate, and award you with a Junior Ranger Badge.

When you get home, check out the National Park Service's Junior Ranger program on the web. Log on to the Web Ranger page at: <http://www.nps.gov/webrangers/> and learn more about the National Parks!



Activity 1: Our National Parks

National Parks are special places preserved especially for people just like you. Some of the more famous places in the National Park system include the Statue of Liberty in New York City, the Washington Monument in Washington, D.C., and Grand Canyon National Park in Arizona.

1. If you have visited a National Park before, write its name here:

2. By becoming a Junior Ranger, you become a "steward" or someone who helps take care of all National Parks, including this one. Junior Rangers also take care of the world around them by following the three R's: Reduce, Reuse, Recycle. Write down one way you and your family can **reduce** the amount of garbage you throw away. (Hint: Think about the last 2 "Rs": **Reuse** and **Recycle**.)

3. Have an adult help you take the Junior Ranger pledge:

As a Junior Ranger, I promise:

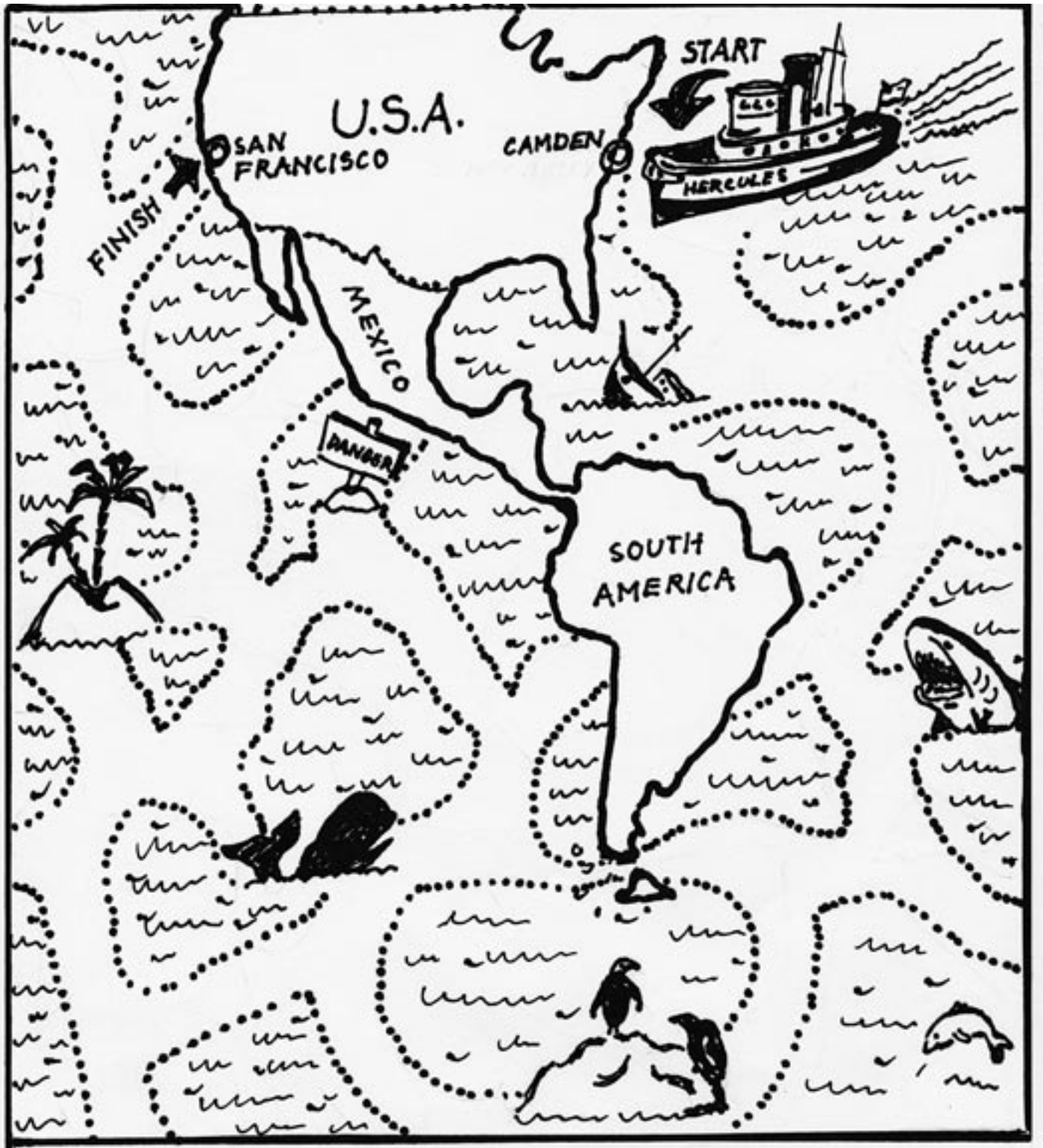
- * To learn about and protect our national parks.
- * To help keep San Francisco Maritime National Historical Park and other National Parks litter free.
- * To not feed wild animals and birds.
- * To remember the three Rs: Reduce, Reuse, Recycle.

Your Name _____

Your Age _____

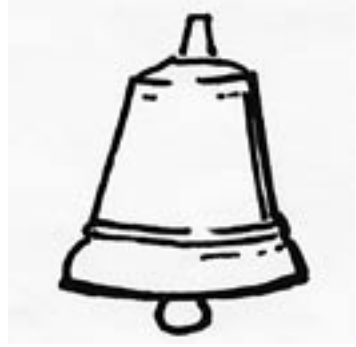
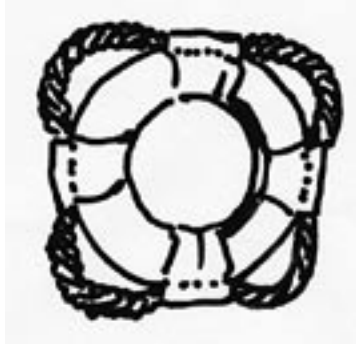
Activity 2: Tugboats are A-maze-ing!

Our steam tug Hercules was built in Camden, New Jersey but her home port is San Francisco, California. Can you help her find her way home?



Activity 3: Maritime Bingo
(Hyde Street Pier)

There are many things to see during your visit to Hyde Street Pier. Circle the items below when you find them. Find at least three in a row . . . or find them all!



Activity 4: Figureheads (Hyde Street Pier)

A figurehead is a sculpture, often hand carved, found on the front or the "bow" of a sailing ship. It can be a statue of a real person or a figure related to the ship's name. Look for the figurehead on the ship, Balclutha.

1. Imagine you had a ship of your own. What would you name it?

2. Draw your ship's figurehead in the space below:



Activity 5: Knots! (Hyde Street Pier)

Find the Knot Board located next to the San Francisco Bay Ark houseboat. Knots are used every day in many ways. You might have used a knot to tie your shoes today. If you were a sailor, you'd depend on knots to help you with many of your daily tasks.

1. In the space below, describe or draw two ways you or your family uses knots.

2. Choose any two knots to try. Write the names of the knots you picked below.



Activity 6: San Francisco Maritime N.H.P. Scavenger Hunt

Place each of the ten items listed below in its correct location on the park map by writing the number of the item in the appropriate space. Be sure to fill in all the blanks!



Where would you find:

1. The lens from a lighthouse
2. The place where the cable cars turn around
3. A house that floats
4. Hercules, the tug boat
5. The sailing ship that went around Cape Horn
6. The longest boat on the pier.
7. The Golden Gate Bridge
8. A building shaped like a ship

Activity 7: Maritime Detective (Hyde Street Pier)

While visiting Hyde Street Pier, you can be a history detective. Help us find our ships' place in history by reading the signs on the pier and then filling in the timeline below.

- _____ The Tubbs Ropeworks opens for business.
- 1873 The first year you could ride a cable car in San Francisco.
- 1885 Invention of the first automobile powered by an internal combustion engine.
- _____ Full-rigged ship Balclutha sails on her maiden voyage.
- _____ The ferryboat, Ukiah, is built. She is later re-named Eureka.
- 1891 The scow schooner, _____, starts her long career on the Bay.
- _____ The C.A. Thayer begins her career carrying lumber up and down the west coast.
- 1903 Wright Brothers fly their airplane.
- _____ Steam tug Hercules is built in Camden, New Jersey.
- 1914 Birthday of our paddle wheel tug, the _____
- 1937 Golden Gate Bridge opens.
- _____ Eppleton Hall retires from service.



Activity 8: Haul Away!
(Block and Tackle exhibit near entrance of Hyde Street Pier)

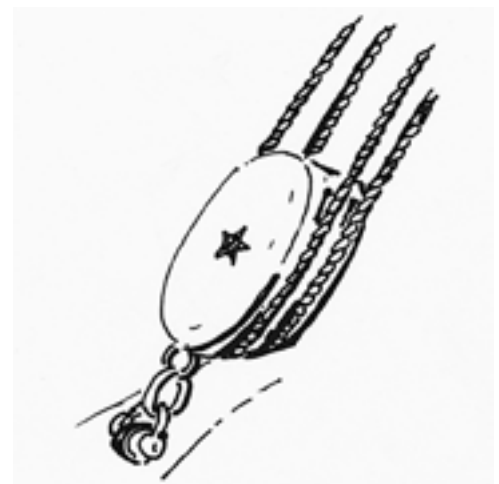
A block (pulley) and tackle (rope) system gives sailors a mechanical advantage, allowing them to lift heavy objects they could not lift alone. A block may contain one or more pulleys. The more pulleys you use, the easier it is to lift the load. However, adding pulleys means you must also increase the length of the rope or line attached to the load. You don't have to use as much force, but you have to reel in more line to get the job done.

1. Beginning on the left side, pull each line to raise a barrel. All the barrels weigh 20 pounds and yet each feels different to lift. Which barrel requires the most strength?

- a. Barrel #1 (on the left) b. Barrel #2 (in the middle) c. Barrel #3 (on the right)

2. The block and tackle attached to Barrel #2 (in the middle) has **two pulleys** and **twice** as much line as Barrel #1. When you lift Barrel #2, you only have to pull **half** as hard as you did to lift Barrel #1. Now examine the block and tackle attached to Barrel #3 (the one on the right). It has more pulleys (a total of four) and more line than either of the others. Compared to Barrels #1 and #2, would you expect it to take more or less strength to lift Barrel #3 off the ground?

- a. More strength b. Less strength



3. Name two ways sailors use block and tackle aboard ship.

Activity 9: The Shape of Ships
(Visitor Center)

You can identify different kinds of sailing ships by looking at their sails. The fore-and-aft sail is often triangular and is often found on pleasure boats, like this sloop:



Another type, called a square sail, is really rectangular. It hangs from a pole called a yard that crosses the mast at a right angle. Square sails can be found on historic ocean-going sailing ships like our Balclutha. This brig is an example of a ship with square sails:



In our Visitor Center, find an example of a schooner, a barkentine and a full-rigged ship and write the vessel's name to the right of the appropriate picture. You may find your examples from among the sailing ship models on display or in any paintings of ships you can find. There may be more than one example for each type of "rig."

Schooner

Two or more masts, fore-and-aft sails



Barkentine

Three or four masts: square sails on the first mast, fore-and-aft sails on the others.



Full-rigged ship

3 or more masts, all with square sails.



Activity 10: Pack your bag, we're going around the Horn!
(Hyde Street Pier: Balclutha sailing ship)

1. Watch the video aboard Balclutha about the voyage of the ship Peking around Cape Horn. Balclutha also traveled around Cape Horn. Imagine you are a sailor aboard either of these ships. What do you think would be the scariest part of the trip around Cape Horn?



2. What are the four most important items you would pack for the voyage around Cape Horn? Think about what the sailors aboard the Peking would have needed for their voyage.

1. _____

2. _____

3. _____

4. _____

Activity 11: Lighthouse Haiku
(Visitor Center)

Lighthouses help guide ships away from danger such as rocky coastlines and coral reefs. Each lighthouse has its own pattern of light flashes that identifies its location. Find the light or "lens" from the Farallon Islands lighthouse in the visitor center and explore the exhibits about it.

For this activity you will write a haiku poem about the lighthouse. Haiku is a traditional form of poetry that does not rhyme. Every haiku poem has three lines, each with a specific number of syllables or beats. The first and third lines have five syllables. The second line has seven syllables. Here's how a haiku poem looks:

Rocky coast, darkness
The light flashes one . . . two . . . three
Showing the way home.



You may choose any topic for your poem. For example, you might imagine you are the lighthouse and describe what you see. You might imagine you're a sailor seeing the lighthouse for the first time.

Write your poem here:

Activity 12: Menu Math
(Hyde Street Pier: Eureka Ferryboat)

Before the bridges were built, ferryboats carried people back and forth across the San Francisco Bay. Like many ferries, Eureka had a restaurant called a diner on board. Go up the stairs to the second level and find the room where the diner used to be. Look for the menu.

Now imagine it's 1940. You are taking a trip on Eureka and decide to have lunch. You have \$1.00 to spend (things didn't cost so much back then). What would you like to eat? Don't forget dessert!

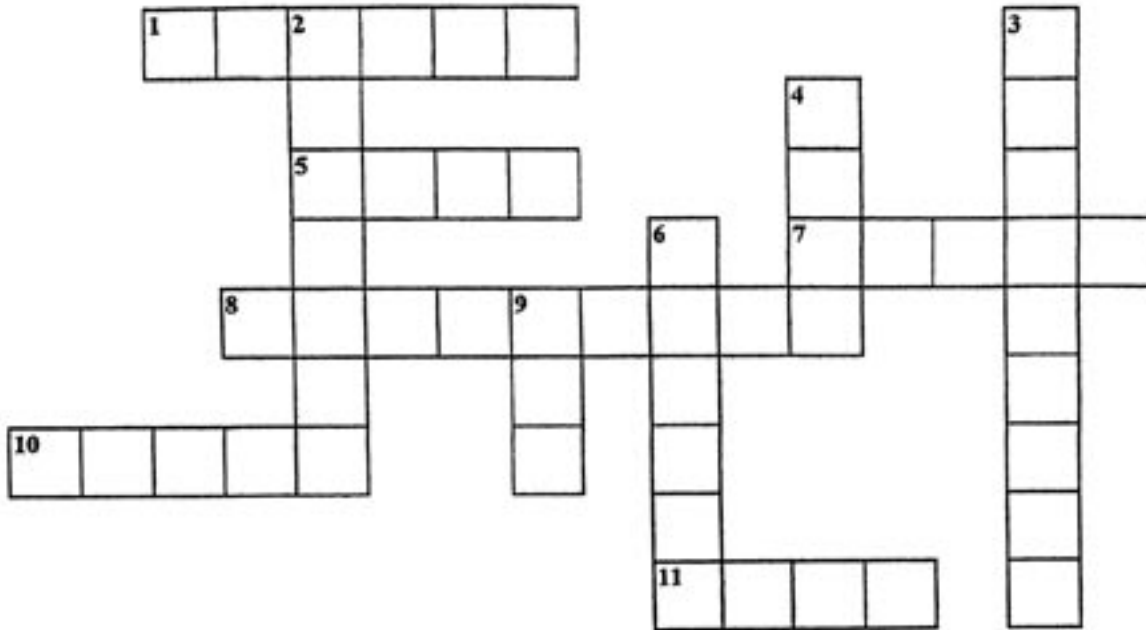
Menu Item	Price
_____	_____
_____	_____
_____	_____
_____	_____
	Subtotal _____
	Tax (look closely at the menu to find the tax) _____
	Total Spent _____

2. Bonus question! Math experts only! One dollar in 1940 equals about \$13.00 today. How much would your lunch on Eureka cost if you were buying it today? _____

If you need room to do the math, use the space below.

Activity 13: A Sailors' Crossword

Sailors have their own special language for different parts of the ship. Use this crossword to see if you can figure out the meaning of the words below.



Avast
Bow
Capstan
Fo'c'sle

Galley
Head
Lobscoupe
Port

Starboard
Stern
Yard

Across

1. Sailors sleep here.
5. The left side of the ship.
7. To sailors this word means "stop whatever you are doing."
8. The right side of the ship.
10. The back of the ship.
11. On a ship like Balclutha, this pole is attached to the mast and holds a sail.

Down

2. Sailors use this machine to raise the anchor or unload cargo.
3. A stew made of salted meat, vegetables and "hard tack" biscuits.
4. What sailors call the bathroom on a ship.
6. The cook works here.
9. The front of the ship.

Junior Ranger Certificate



This certifies that



has completed all the required activities and has earned the title

JUNIOR RANGER

At

**San Francisco Maritime
National Historical Park**



Junior Ranger's signature

Park Ranger's Signature

Date

