



Lesson: Shipbuilding in New Hampshire

(To follow Amplify CKLA 2, Knowledge 5, Lesson 5)

At a Glance

In this lesson, students expand on their growing knowledge of the War of 1812 by learning about New Hampshire's major contribution to the war effort: shipbuilding at the Portsmouth Naval Shipyard.

Primary Focus Objectives

- Students will analyze historical images to gather details about New Hampshire's shipbuilding industry.
- Students will analyze a map of New Hampshire's seacoast and identify features that made it ideal for the development of the Portsmouth Naval Shipyard.
- Students will write about why New Hampshire was a good place to build ships.

Formative Assessment

- Shipbuilding paragraph

Standards

CCSS.ELA-LITERACY.SL.2.2

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media

CCSS.ELA-LITERACY.RI.2.3

Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

Materials

- [NH State Seal](#)
- Vocabulary Card: Shipyard
- Focus Text: Shipbuilding Sort, construction paper, [Seacoast Map](#), "Shipyard on the Seacoast" worksheet
- "Build a Paragraph" worksheet
- Craft materials: chenille stems or plastic drinking straws, Styrofoam flat, quart-size milk cartons or other small cardboard cartons, fabric scraps, string, glue.

Time Needed

Two 30-40 minute class sessions

Learning Activity

1. **Notice and Wonder: NH State Seal.** Project the New Hampshire State Seal. Explain to students that this is an official symbol of New Hampshire. It is placed on government documents, in government buildings, and is even incorporated into our state flag. Give students time to look at this symbol and discuss what they notice and wonder about it. Guide discussion so that students focus on the ship at the center of the image. (*10 minutes*)
2. **Vocabulary Card: Shipyard.** Project the Vocabulary Card. Ask students why they think a big place to build ships would be needed. If you have a timeline in the classroom, point to the year 1800 and tell students that is when the U.S. Navy purchased land off the coast of Portsmouth, New Hampshire, to build a shipyard. (*5 minutes*)



3. **Focus Text: Shipbuilding Sort and map analysis.** Ask students to sort the images with matching captions and then glue the pairs in order on a large piece of construction paper. Then, project "Seacoast Map" and conduct a guided discussion to help students identify the different features on the map that indicate why it was a good idea to build a shipyard off the coast of Portsmouth. Or, distribute the "Shipyard on the Seacoast" worksheet and support students as they complete it. *(20 minutes)*
4. **Build a Paragraph.** Distribute the worksheet and direct students to read and select the correct statements and organize them to write their own paragraph. *(20 minutes)*
5. **Shipbuilding Simulation.** Gather craft materials and arrange in stations around the room. Allow students to move through each station at their own pace to simulate the process of building a ship. See Educator Rationale and Answer Guide for details. *(25 minutes)*



Educator Rationale and Answer Guide

Connection to Amplify

This lesson builds on the topic of waterways and their importance during the War of 1812 that students learned about in Amplify Grade 2, Knowledge 5, Lesson 5. Students connect to state history by investigating how New Hampshire's tradition of shipbuilding contributed to the war effort and the development of the U.S. Navy. The Portsmouth Naval Shipyard was established in 1800 and though its first warship wasn't finished until 1814, boat- and shipbuilding had been an essential industry throughout New Hampshire's colonial history. The activities in this lesson develop students' historical thinking and writing skills through the analysis of historical images and maps, reading non-fiction text, and organizing a paragraph of correct statements. An optional simulation provides an opportunity for kinesthetic learning connections.

Notice and Wonder: NH State Seal

Discuss the importance of boats and ships long ago. New Hampshire's shipbuilding industry began with the first English settlers, who needed boats for fishing and then shipping the dried fish back to Europe. The state seal features an image of the *Raleigh*, one of the first warships built for the new U.S. Navy. It was built in Portsmouth in 1776, where the deep waters of the Piscataqua River created a harbor that opened into the Atlantic Ocean. Moose on the Loose, Unit 3, Learn It! "[New Hampshire's Early Industries](#)" has more detail about shipbuilding in the 17th and 18th centuries.

Vocabulary Card: Shipyard

Shipyards were necessary to bring lots of workers together to build bigger and stronger ships. The first official U.S. naval shipyard was established on an island in the river between New Hampshire and Maine in 1800. The first warship was completed in 1814 and used in battle against the British. Today, the Portsmouth Naval Shipyard builds and repairs submarines.

Focus Text: Shipbuilding Sort

Read through the sentences as best supports student needs. Pairs are: A. Cutting Trees, B. Moving Trees, C. Floating Trees, D. Cutting Planks, E. Making Masts, F. Building Ships

Seacoast map analysis



Ensure that students observe the number of rivers that converge at the Piscataqua, which then leads out to the Atlantic Ocean. This means there were many pathways for lumber to travel to the shipyard. The shape of the coastline creates a protected harbor. The star marks where the Portsmouth Naval Yard is located.

This is a good place to pause if dividing the lesson across two class sessions.



Build a Paragraph

The false sentences are: Palm trees were harvested from New Hampshire's forests; Ships were easy to build; Portsmouth was far away from the coast. Combinations of the remaining sentences will vary. Students can use the sails to write their name, a title, and draw an illustration for their paragraph.

**Shipbuilding
Simulation**

Set up a forest station by poking chenille stems or drinking straws of varying sizes into a flat piece of Styrofoam. Set up a moving station on a table with small plastic animals (cows or oxen) and a slope down to the floor made of blue-colored poster board, plastic, or another rigid surface to represent water. Create a shipyard station at the base of the slope with remaining materials. As students finish their paragraphs, invite students to move through the stations, selecting two "masts" for their ship, moving them with the oxen along a "Mast Road" to the river, and then letting the "masts" "float" down the river to the shipyard where they can assemble a ship using their masts and the remaining materials.



New Hampshire State Seal





SHIPYARD

PART OF SPEECH: noun

DEFINITION: A place where ships are built and repaired

HOW TO USE IT: Wood from New Hampshire's forests was used at **shipyards** to build warships for the Navy.



Shipbuilding Sort: Captions

Read about the process of building ships in New Hampshire long ago. Then, cut out the captions. Pair each caption with the image that matches it. Glue your pairs in order on a larger piece of paper.

Cutting Down Trees People cut down big white pine trees in a forest.

Moving the Trees The pine trees were pulled by big animals called oxen. They pulled the trees on a special path called a "Mast Road" to a river.

Floating the Trees The trees were put into the river. They floated to a place called the Portsmouth Naval Shipyard in the deep water of the Piscataqua River.

Making Planks At the shipyard, the trees were cut into flat pieces called planks.

Making Masts Some trees stayed as big trunks to be used as masts for ships. Masts are tall poles that hold the sails.

Building Ships The planks and masts were used to build big ships.

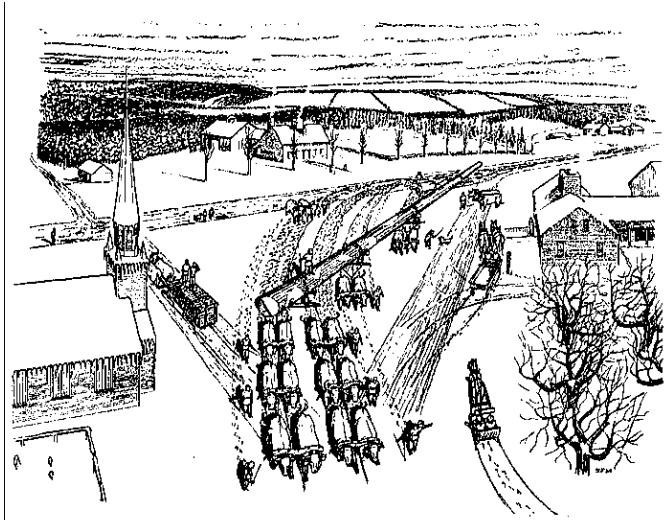


Shipbuilding Sort: Images

A.



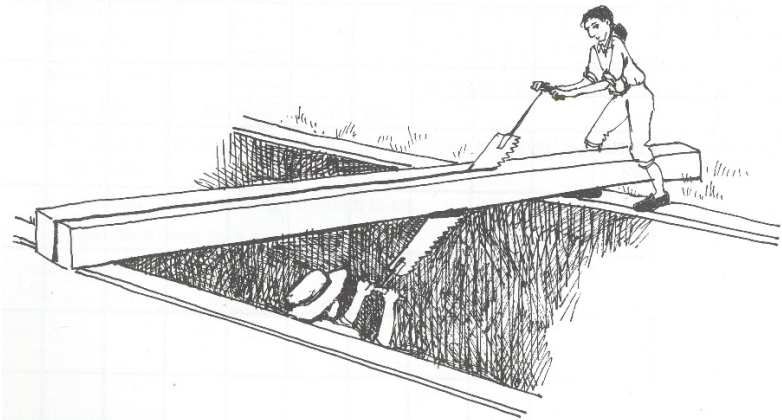
B.



C.

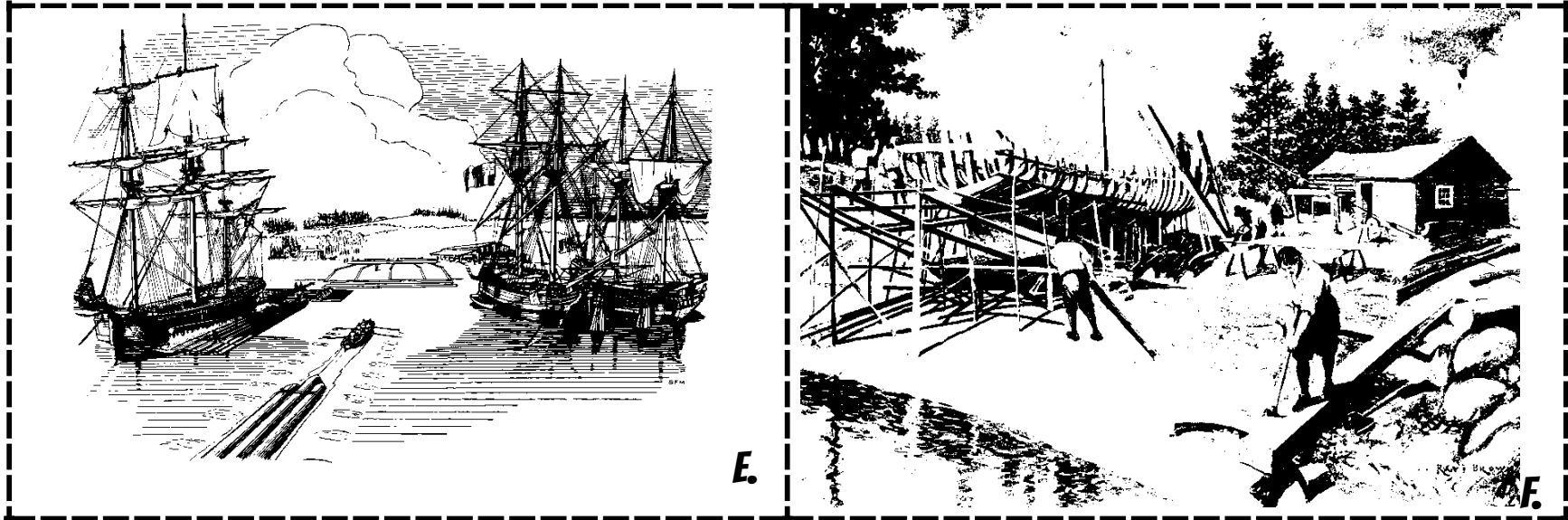


D.





Shipbuilding Sort: Images





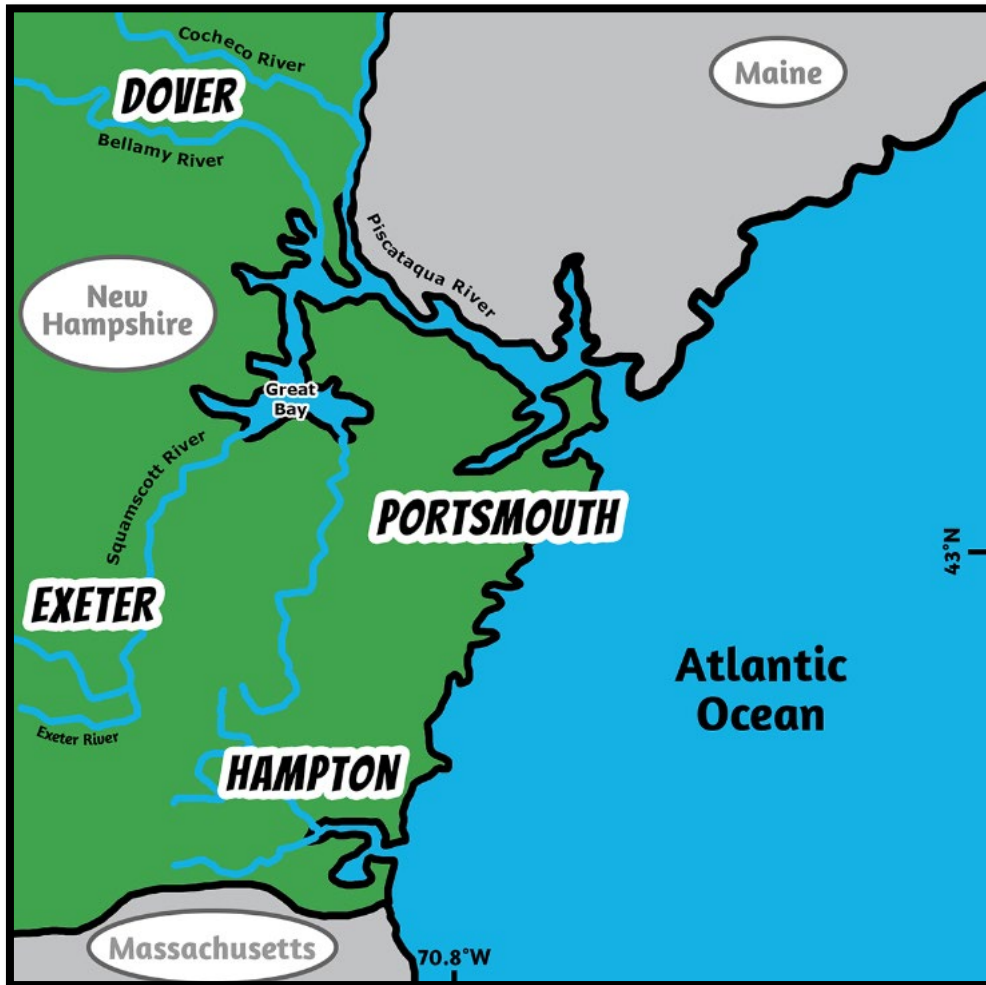
Seacoast Map





Shipyard on the Seacoast

Use the map of New Hampshire's seacoast to complete the tasks.



1. Underline the labels for the five rivers on the map.
2. Underline the label for the ocean on the map.
3. Draw a large circle around the area where the Piscataqua River divides New Hampshire and Maine.

Challenge: The U.S. Navy wanted to build a place to fix and build ships. They needed this **shipyard** to be in a safe spot, near rivers so wood could be delivered, but also close to the Atlantic Ocean. Draw a star on the map where you think the shipyard should be.



Build a Paragraph

Circle the sentences that are **true** about shipbuilding in New Hampshire. Choose three of the true sentences to write your own paragraph about why Portsmouth was a good place for the U.S. Navy's shipyard.

People in New Hampshire have been making ships for a long time.

Portsmouth was far away from the coast of New Hampshire.

Portsmouth was a busy town with a deep harbor in the Piscataqua River.

The Piscataqua River opens into the Atlantic Ocean.

New Hampshire's forests provided plenty of wood for building ships.

Ships were easy to build.

Palm trees were harvested from New Hampshire's forests.

Ships were important for transporting people and cargo.

Ships were also important for ocean battles during wars.

