

MARITIME ARTIFICER'S APPRENTICE - VIRTUAL CLASSROOM PROGRAM



GRADES 4-12

PROGRAM OVERVIEW

Maritime Artificer's Apprentice explores the mechanical trades that built an American fleet on the Lake Champlain corridor in 1776, using tools and materials from around Atlantic World. This engaging 45-minute program incorporates history, science, geography, and math to discuss Ticonderoga's Revolutionary War naval history on Lake Champlain corridor and its role in the founding of our nation. Students will examine the maritime trades of sail-making, rigging, and naval carpentry and consider the importance of naval transport in supplying and defending this new nation.

PROGRAM GOALS

- * To educate students about the Revolutionary War naval story of Ticonderoga and Lake Champlain.
- * To excite students about the larger concepts of the American Revolution. Using high-quality reproductions of 18th century objects, students can virtually experience the skills needed to shape materials into vital components of naval vessels.
- * To involve students in the trades work that built and maintained boats.
- * To actively engage students in an inquiry-based learning process. This interactive program gives students the opportunity to provide input, ask questions, view objects, and examine tools and processes used to build the boats that served on Lake Champlain.

STUDENT STANDARDS:

C3 FRAMEWORK:

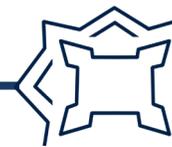
D2.Geo.2.3-5. Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their environmental characteristics.

D2.Geo.8.3-5. Explain how human settlements and movements relate to the locations and use of various natural resources.

D2.Eco.3.3-5. Identify examples of the variety of resources (human capital, physical capital, and natural resources) that are used to produce goods and services.

D2.Eco.4.3-5. Explain why individuals and businesses specialize and trade.

D2.His.2.3-5. Compare life in specific historical time periods to life today.



DIGITAL PLATFORMS

We provide a virtual classroom space on Zoom or Google Meet. To access this live program, we will send you a unique URL to distribute to your students or use on your classroom computer. A staff member will serve as program moderator during the program to assist with communication via chat and any technical issues.

PROGRAM OUTLINE

Introduction:

Costumed educators present the geography of Ticonderoga and the Lake Champlain corridor and highlight the importance of boats for transport. Program moderators display a map of Lake Champlain, Lake George, and the Hudson River to provide geographic context.

Building a Navy:

Presenters prime students to think about the materials and supplies needed to create a successful naval presence on the lake. Students construct a list of items such as wood, sails, artillery, etc. Presenters introduce Benedict Arnold as the commander of the American Fleet on Lake Champlain in 1776 and examine the supply return for one vessel, the *Galley Trumbull*.

Boat Materials:

Presenters discuss the various boat-building materials (tar, hemp, various woods, etc.), and have students consider the locations from where these supplies were sourced.

Building a Boat:

Using the *Galley Trumbull* as an example, presenters provide an overview of the process of building a ship, beginning with the hull and ending with ropes and sails.

Trades:

Presenters will demonstrate three integral maritime trades: (1) carpentry - cutting and shaping wood to turn it into useful timber, (2) sailmaking - folding, creasing and sewing cloth to harness wind power, and (3) rigging - twisting and knotting hemp to create durable rope for the ship.

NEXT GENERATION SCIENCE STANDARDS:

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.



Conclusion:

Students have time to ask questions and presenters provide a brief overview of the exciting events and demonstrations taking place on site and online at Fort Ticonderoga.

Additional Resources from Fort Ticonderoga can be found here:

<https://www.fortticonderoga.org/learn-and-explore/educators/>