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Introduction:

Background Knowledge:
This unit should follow a unit on the Revolutionary War. Hudson whalers came to the Hudson River in search of a safe inland harbor to escape the turmoil of the Revolutionary War.

Overview:
Students will learn about the importance of whale products. They will investigate the early history of the city of Hudson, how it was planned and its pattern of growth. After one failure to thrive as a whaling port, in 1829 another group of whalers revived the industry and Hudson lived as a whaling port once again until 1844 when the last whaling voyage was made from the Hudson port.

Objectives:
- Students will activate a thought process around the industry of whaling and the planning and construction of a new city.
- Students will participate in an investigation of historic documents in order to uncover the history of the city of Hudson.
- Students view historic events through the eyes of those who were there, as shown in their art, writings, music, and artifacts.

Learning Standards:

Common Core State Standards for English Language Arts

Reading Standards for Informational Text

Key Ideas and Details
3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Craft and Structure
4. Determine the meaning of general academic and domain specific words or phrases in a text relevant to a grade level topic or subject area.
5. Describe the overall structure (e.g., chronology, comparison, cause/effect, and problem/solution) of events, ideas, concepts, or information in a text or part of a text.
6. Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

Integration of Knowledge and Ideas
7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on Web pages) and
explain how the information contributes to an understanding of the text in which it appears.

**Writing Standard**

*Production and Distribution of Writing*

3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
   a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.
   b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.
   c. Use a variety of transitional words and phrases to manage the sequence of events.
   d. Use concrete words and phrases and sensory details to convey experiences and events precisely.
   e. Provide a conclusion that follows from the narrated experiences or events.

*Research to Build and Present Knowledge*

7. Conduct short research projects that build knowledge through investigation of different aspects of a topic.

8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

*Responding to text*

11. Create and present a poem, narrative, play, art work, or literary review in response to a particular author or theme studied in class.

*Speaking & Listening*

1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade level topics and texts, building on others’ ideas and expressing their own clearly.
   a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
   b. Follow agreed-upon rules for discussions and carry out assigned roles.
   c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
   d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.
   e. Seek to understand and communicate with individuals from different perspectives and cultural backgrounds.

*Presentation of Knowledge and Ideas*

4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
5. Add audio recordings and visual displays to presentation when appropriate to enhance the development of main ideas or themes.

Language Standards

Vocabulary Acquisition and Use

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
   a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.
   b. Recognize and explain the meaning of common idioms, adages, and proverbs.
   c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).

6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

NYS Learning Standards for Social Studies

Standard 1 – History of the United States and New York

3. Study the major social, political, economic, cultural, and religious developments in New York State and United States history involves learning about the important roles and contributions of individuals and groups.

4. The skills of historical analysis include the ability to explain the significance of historical evidence; weight the importance, reliability, and validity of evidence; understand the concept of multiple causation; understand the importance of changing and competing interpretations of different historical developments.
Lesson 1 – The Valuable Whale

1. Introduce students to the whaling industry.
2. Discuss the importance of whale products. (Baleen, ivory, whale oil, sperm oil, spermaceti, and ambergris.)
3. Read and discuss the whale product advertisement.
4. Explain the two suborders of whales, baleen whales and toothed whales. See whale facts sheet.
5. Discuss the products that came from each of the suborders.
6. Construct a KWL chart. Compile a complete list of things that the students want to learn using the discussion questions to guide the conversation. (The chart should include information about whale products, whale hunting, geography, the planning of a new city, etc.)

Discussion Questions:

1. What do you know about whaling?
2. What do you want to learn about whaling?
3. Why were men whaling in the 18th and 19th centuries?
4. Do you think that whaling was an important profession?
5. How do you think they hunted the whales?
6. Where do you think they were hunting?
7. What do you think they needed?
# Articles Made of Whalebone

1. Whips  
2. Parasols  
3. Umbrella  
4. Dresses  
5. Corsets  
6. Corset Clasps  
7. Fishing Rods  
8. Boot Shanks  
9. Shoe Horns  
10. Bed Bottoms  
11. Carriage Slides  
12. Bows  
13. Busks  
14. Tongue Scrapers  
15. Pen Holders  
16. Paper Folders and Cutters  
17. Brushes  
18. Twisted Whip Handles  
19. All Bone Whips  
20. Policeman’s Club  
21. Whalebone Shavings for Beds  
22. Flue Brushes  
23. Brush Makers’ Bone  
24. Painters’ Graining Combs  
25. Whalebone Riding Whips  
26. Back Supporters  
27. Whalebone Rosettes  
28. Whalebone Canes  
29. Billiard Cushion Springs  
30. Gross Dress Bone  
31. Dress Bone in Boxes  
32. White Dress Bone  
33. Cap Makers’ Bone  
34. Hat Makers Bone  
35. Whalebone Hats  
36. Chair Seats  
37. Guards for Shopping Windows  
38. Ribbon Weavers’ Bone  
39. Suspender Makers’ Bone  
40. Neck Stock Makers’ Bone  
41. Bonnet Makers’ Shurs  
42. Ribbon Bone  
43. Probangs  
44. Plait Raisers  
45. Fishing Rod Tips  
46. Auding Rods for Nets  
47. Drill Bows  
48. Ferules  
49. Fore Arm Bones  
50. Caterpillar Brushes
**Whale Facts**

**Baleen Whales**

- Hairy slats are attached to the gum of the upper jaw called baleen plates.
- They do not have teeth.
- They have two blowholes whereas the toothed whale only has one blowhole.
- Baleen whales can grow up to 110 feet and weigh up to 420,000 pounds.
- The baleen plates act as strainers for the whale’s food.
- A baleen whale has a series of 200 to 300 plates in its upper jaw.
- The plates can range from 3 to 15 feet and varying widths
- They are made of keratin (the same material as human fingernails)
- Baleen whales feed in the Polar Regions in the summer and calve in the tropical regions in the winter.
- Baleen whales include: right whales, gray whales, fin back, blue whales humpbacks, brydes, sei, and minkes.
- The blue whale is the largest species of baleen whale and the largest animal to ever have existed.
- Baleen whales do not use echolocation.

**Toothed Whales**

- Toothed whales have teeth instead of baleen.
- Toothed whales include: beluga or white, bottlenose, narwal, pilot and sperm whales.
- Dolphins are toothed whales.
- The killer whale is really a dolphin.

**The Sperm whale is a toothed whale**

- The sperm whale was discovered by whalers in 1712.
- The sperm whale was a prized catch for whalers.
- The sperm whale contains a special liquid in the spermaceti organ located in the head of the whale called spermaceti.
- The blubber of the sperm whale produced high quality oil.
- The lower jaw of the sperm whale contains 20 to 30 teeth.
- The upper jaw has no teeth.
- The teeth of the sperm whale are up to 30 inches.
- Grow up to 50 to 60 feet.
- They weigh 40 to 50 tons.
- Sperm whales use echolocation.
Lesson 2 – A Safe Inland Harbor

1. Explain that New England was the leading area in the whaling industry. The turmoil in the Atlantic Ocean as a result of the Revolutionary War changed everything for New England whalers. They formed a group of proprietors and set out in search of a safe inland harbor to begin their new whaling company.

2. Read and discuss The Proprietors an excerpt from History of the City of Hudson by Anna R. Bradbury.

3. Examine the Map of Claverack Landing 1774.

4. Compare the map of Claverack landing 1774 to the detail of the Hudson section of the Penfield Map, 1799.

5. Wrap-up the lesson with a discussion of the timeline.
The Rule of the Proprietors 1783-1810

In 1774 the Continental Congress suspended commercial trade with the mother country; she retaliated by preying upon our commerce with all her boundless resources. None of our industries suffered more than the whale fisheries, our New England whalers being driven from the sea. Nantucket was at that time the largest whaling station in the world, and would suffer a rapid decline.

By 1783 a number of New Englanders set out, determined to make a settlement somewhere on the Hudson River. Natives of Nantucket, Seth and Thomas Jenkins left Providence, Rhode Island, where Thomas was engaged in a mercantile business, in search of a new settlement. They brought 100,000 dollars. They looked at land in New York and Poughkeepsie before they decided to purchase “Claverack Landing”. They found the river navigable for vessels of any depth, and the natural beauty of the location, combined with the fact that it was in a thriving, thickly settled farming population made it seem in every way desirable. Claverack Landing contained only a few stores, wharves and a canoe ferry.

In the autumn of 1783 Seth Jenkins and John Alsop were the first to arrive at the “landing”. Seth Jenkins family consisted of his wife (Dinah Folger), four children, Robert the oldest, age eleven years old, and Dinah Coffin, mother of Dinah Folger. His house was the first to be built, and while building his family lived aboard the ship. By spring of 1784 other proprietors followed with their families, bringing with them several vessels and in some cases the frames of buildings prepared in Nantucket, for erection upon their arrival.

In a few short years, the quiet post Revolutionary War settlement with few dwellings became a bustling river port city and a regional commercial center with whale ships and merchant vessels loading and unloading. The growth of Hudson is illustrated by population figures from the Bureau of the Census. The U.S. Census began in 1790 and has been conducted every ten years since.

Anna R. Bradbury, History of the City of Hudson
A map of Claverack Landing “taken in the year 1774.” Nine years before the proprietor arrived. (Courtesy of the office of the Columbia County Clerk.)
In city streets were laid out in a grid pattern
In 1789 he built a windmill for grinding flour on the top of the hill above what is now Prospect Hill (originally Windmill Hill). It was a two-story octagonal building with wings that rose seventy-five feet above the ground. The wind mill could be seen for miles.
A small stream that flowed into the North Bay helped to power the series of mills that cropped up there.
The South Bay's northern shores were filled with an assortment of businesses. There were tanneries, asheries, and ship yards.
The Middle Ground Flats located in the river between Esperanza (Athens) and the city of Hudson had a canal dug through it for a canoe ferry that traveled between Esperanza and Hudson.
**Whaling Timeline**

1690 – Ichabod Paddock of Long Island brought to Nantucket to teaching whaling.

1712 – First sperm whale captured.

1740 – 50 whaling ships sail from Nantucket; 40 -50 ton burden


1766 – British Parliament places duty on whale oil shipped to Britain.

1767 – Nantucket whalers and families move to Cape Sable, Nova Scotia

1775-76 – Nantucket Quakers move to North Carolina to join other Quakers in Greensboro.

1783 - Several whaling businesses, shaken by the destruction of the war, relocate their operations from Newport, Providence, and Nantucket to Hudson, NY, which is more than 100 miles from the open ocean. A group of proprietor called the “Nantucket Navigators” purchase Claverack Landing. Ten families, no more than 150 people lived at Claverack Landing.

1784 – Claverack Landing was the second most active port in New York State.

November 14, 1784 – To honor the river and its discoverer, the Proprietors change the name of their settlement from Claverack Landing to Hudson.

1785 – The city of Hudson was chartered.

1785 - The cities first newspaper the Hudson Weekly Gazette was published on April 7.

1786 – According to an article in the New York Journal the population of Hudson was more than 1,500 people.

1790 – Hudson was named as a port of entry.

1790 – The first whalers made it around Cape Horn, South America for the Pacific.
1793 – War between France and England, ships seized.

1795-1811 – Costal blockades.

1812 – War between the United States and Britain.

1815 – Hudson ceases to be a port of entry.

1829-30 – A new group of whalers form, calling themselves the “Hudson Whaling Co.”

1830 – The “Hudson Whaling Company’s” first ship “George A. Bennett” leaves Hudson

1844 – Last ship out of Hudson sails.
Lesson 3 – A planned city

1. Discuss the planning of the new city. If you have the ability to show a website to the class, go to http://www.whalingmuseum.org/interactives/adventure.html otherwise discuss what is needed to establish a new port.
2. Compare the images of the map of Claverack Landing and the map of the city laid out in a grid pattern.
3. Look at the population chart, and discuss the growth. Why did the population grow so quickly?
4. Tell students that a surveyor was hired to draw the plan for the city.
5. Some of the first families came to the city with frames of houses prepared in New England ready for construction.
6. In order for the city to be successful the proprietors had to recruit people with different skills to come to the city and perform different jobs. In order to make the city function properly.
7. Distribute glossary of artisan roles.
8. Assign each student a role in the community.
9. Discuss the images From Harpers, New Monthly Magazine, June to November, 1860
10. They should research the job and present their role in the community to the other students.

Discussion questions:

What was required to start a new city?
What is in the city today?
What are the things that are important to us?
What do you think they needed in 1783?
What was required to start a whaling company?
What kind of problems do you think faced the proprietors of the city?
How do you think those problems were handled?
How was a whale caught?
How was the oil made?
What is baleen?
Population Growth Chart

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<th>1783</th>
<th>1790</th>
<th>1800</th>
<th>1810</th>
<th>1820</th>
<th>1830</th>
<th>1840</th>
<th>1850</th>
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<tbody>
<tr>
<td>Hudson’s Population</td>
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<td>2,584</td>
<td>3,664</td>
<td>4,048</td>
<td>5,310</td>
<td>5,392</td>
<td>5,672</td>
<td>6,286</td>
</tr>
</tbody>
</table>
**Glossary**

**baker** – bakers made “ship biscuits” (hardtack) that would keep for the long voyage.

**blacksmith** – a smith who forges iron

**carpenter** – a skilled craftsperson who performs carpentry. Carpenters work with wood to construct, install and maintain buildings, furniture and other objects.

**carter** – carters were hired in great numbers to haul things to the ship and unload upon the ship upon return from the voyage.

**chandler** – a maker or seller of tallow, wax candles and usually soap.

**cooper** – A maker of wooden barrels or casks for storing whale oil and supplies

**crew** – the people who work on a ship

**green hand or greenie** – an inexperienced seaman

**harpooner, or boatsteerer** - so called because after the striking of the whale with his harpoon he trades places with the mate and steers the whaleboat.

**miller** – somebody who owns, manages, or operates a mill

**proprietor** - the owner of a commercial enterprise or establishment such as a store, hotel, or restaurant
ropewalk - a long covered walk, building, or room where ropes are manufactured

sailmaker - a person or company that cuts, assembles, and sews sails and canvas parts for boats

shipbuilder – One who designs or builds ships. Shipbuilding is the construction of ship. It normally takes place in a specialized facility known as a shipyard. Shipbuilders are also known as shipwrights.

ship chandler – a retail dealer in provisions of supplies or equipment of a ship

surveyor – one whose occupation is surveying land

schoolteacher- a teacher in a school

Whaling Captain – the commander of a ship. A captain of a whaling ship also acted as judge, doctor and clergy.

officers - the master or any of the mates of a merchant or passenger ship

tanner – one that tans leather and hides
Caulkers, Harpers, New Monthly Magazine, June to November, 1860
Oil-Fillers, Harpers, New Monthly Magazine, June to November, 1860
Gauging Oil, Harpers, New Monthly Magazine, June to November, 1860
Packing Whalebone, Harpers, New Monthly Magazine, June to November, 1860
The Cook and the Pilot, Harpers, New Monthly Magazine, June to November, 1860
Lesson 4 – Growth of a New City

1. The success of the new city is illustrated in an account from an obscure English traveler, John Lambert.
2. Distribute John Lambert’s account of the city of Hudson in November 1807.
3. Read and discuss.
In the evening we arrived in Hudson. This town is of modern construction, and like Troy, consists of one very long street. The houses are of wood or brick, many of them built with taste, and all spacious and commodious. Shops and warehouses are numerous, and there are several large inns, from which I conceived that a considerable trade was carried on between this town and the interior.

It has the appearance of a thriving settlement, and its situation is elevated and advantageous for commerce. There are several large brick warehouses near the wharves for the reception of goods, and the great many small vessels sail continually between this town and New York. Ship-building is carried on here, and a vessel of three or four hundred tons was just ready for launching. Several other vessels of that size were also in the harbor.

- John Lambert, an English traveler, arrived in Hudson from Albany in November 1807

Vocabulary
Advantageous – useful or beneficial
Commodious – roomy, pleasantly spacious
Conceived - to form an idea or concept of something in your mind
Warehouses - a large building in which goods, raw materials, or commodities are stored
Wharf - a structure built alongside or out into the water as a landing place for boats and ships, sometimes with a protective covering or enclosure

1. How did John Lambert know that trade was carried on between this town and the interior?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. What were the clues that told John Lambert that Hudson was a thriving settlement?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Lesson 5 - Voyages

Part 1

1. Discuss the months of planning it requires to “fit out” a ship.
2. Allow students to work in small groups to brainstorm a “list of provisions”.
3. Come back together as a group and make a list of provisions by collecting ideas from the students.
4. Discuss the ideas as you compile a list and ask questions to generate more ideas.

Part 2

1. A unique language developed onboard the whaling ships. Discuss the importance of language and communication. Discuss the unique language students may use in the 21st century.
2. Present a scenario to students. Explain that they are time travelers and they suddenly find themselves on the deck of a whaling ship with the ship’s captain yelling at them. He says, “Hey greenhorn, go to the blubber room and load up some bible leaves. Then bring them to the ‘try works’ and help Thomas ‘try out’ the oil.” Would they know what to do?
3. Discuss possible answers and tell the students that in order to understand this phrase they must learn the unique language of whalers.
4. Distribute the student copy of the terms and phrases sheet.
http://www.salariya.com/web_books/whaling/aboard/aboard.html
6. Most of the terms on the terms and phrases sheet are defined in the book. Instruct students to find the meaning of the terms and phrases in the text and record them on their copy as they go along. (Use teacher copy to guide students.)
Whaling Term and Phrases

“there she blows” -

“look out” –

“Nantucket sleigh ride” -

Gunwale –

provisions –

“chimney’s afire” -

“blanket pieces” -

“flensing” -

“cutting stage” -
“blubber hook”-

blubber room-

“trying-out”-

try works-

“fin out”-

Scrimshaw –

spermaceti –

baleen –

“pulling teeth”–

horse pieces-
bible leaves-

stove –

hoved down -

“Limey”-

crow’s nest –

“fitting out”-

greenhorn-

“Cutting in”-

Tools for “cutting in”

bone spade

cutting spade-

head spade
boarding knife

gaff
**Whaling Term and Phrases**

“**there she blows**”- The lookout on a ship cries out from the crow’s nest “there she blows” when he has spotted a whale’s spout. A whale’s spout is the spray of moist warm air released from the whale's blowhole when it surface’s to breathe.

“**look out**” – Members of the crew alternate shifts as the “look out” for whale.

“**Nantucket sleigh ride**”- after a whale is harpooned, the whaleboat is dragged behind the boat at speeds of up to 23 mph.

**Gunwale** - the top edge of a boat's sides that forms a ledge around the whole boat above the deck.

**provisions** – supplies for a journey.

“**chimney’s afire**”- The heavily bleeding whale exhales a fountain of blood and water.

“**blanket pieces**”- a long strip of blubber cut from the body of a whale.

“**flensing**”- to strip the skin or blubber from a whale or seal.

“**cutting stage**”- heavy plank attached to the ship by chains. Flencers work from it.
“blubber hook”- a large hook attacked with ropes and chains to a system of pulleys used to raise the large blanket pieces of blubber on to the whaling ship.

blubber room- a room on the ship where the blubber is stored as the crew works at boiling it down into oil in the “try works” on deck.

“trying-out”- boiling the blubber into oil

try works- a brick stove that is used for “trying out”- boiling whale blubber into oil.

“fin out”- the term used after a whale has been harpooned and has turned to its side dead.

scrimshaw – intricate designs carved into whale teeth or bone.

blubber – a layer of fatty skin that protects animals like whales and seals from the cold.

spermaceti – a waxy liquid that is unique to the sperm whale. It is found in the case, a compartment in the head of a sperm whale.

Blowhole - a nostril in the top of the head of a whale, dolphin, or similar sea mammal that allows the exchange of air from the lungs.

baleen - plates that grow in the mouths of some whales. They filter the krill and small fish that whales feed on.

“pulling teeth”– rope and pulleys are used to pull teeth from the whale’s jawbone.
horse pieces - sections of blubber

bible leaves - thin slices that are cut into horse pieces

stove – when a ship has been turned on its side, it may be caused by a wreck or done for the purpose of repairing or cleaning of the bottom of the ship.

hoved down – cleaning the bottom of the ship

“Limey”- name for sailors who drank lime juice to prevent scurvy

crow’s nest – a small platform high on the mast where a crew member looked out for whale for 2 hour shifts.

“fitting out”- the months of planning and purchasing before a voyage.

greenhorn- a man on his first voyage

“Cutting in”- “flensing” or cutting away the blubber

Tools for “cutting in”

bone spade

cutting spade- metal spade with an attached wooden handle was used to cut large strips of blubber, called blanket pieces, off of the whale.

head spade

boarding knife

gaff
**Ship Chandler Supply**

**turpentine** – a colorless, flammable, strong-smelling oil. Use: Paint solvent, in medicine.

**tar** – a thick black liquid obtained through the destructive distillation of an organic substance such as wood or coal

**pitch (resin)** – a dark sticky substance obtained from tar and used in the building trades, especially for waterproofing roofs

**linseed oil** – oil obtained from the seeds of the flax plants. Use: as a binder of linoleum, paints, inks

**whale oil** – a yellowish oil manufactured by rendering the blubber of whales. Use: formerly, lamp fuel, soap, candles.

**tallow** – a hard fatty substance extracted from the fat of sheep and cattle. Use: candles and soap.

**lard** – white, slightly soft, pork fat. Use: cooking, in ointments and perfumes.

**varnish** – a clear sticky liquid used for covering wood or other surfaces. It forms a shiny transparent surface that gives protection.

**twine** – string or cord made from threads or strands that have been twisted together

**rope** – a strong cord made by twisting together strands of hemp or other fibers or wire
**cordage** – ropes or cords collectively, especially the lines and rigging of a ship

**hemp** - a tough fiber made from the stem of an Asian plant. Use: canvas, rope, paper, cloth.

**oakum** – hemp or jute fibers, especially from old ropes unraveled and soaked in tar. Use: formerly, sealant for gaps between the planks in a wooden boat’s hull.

**brooms** – a brush with a head of twigs or bristles attached to a long thin handle, used for sweeping indoors or outdoors

**mops** – a long-handled tool for washing or polishing floors, with a head consisting of a large sponge or a thick mass of absorbent threads or fabric strips

**galley supplies** – supplies for the kitchen of a ship

Leather goods – an item or part of an item that is made from the processed hide of animals with the fur or feathers removed

**paper** – a thin material consisting of flat sheets made from pulped wood, cloth, or fiber

**Tools:**
hatchet – a small short-handled ax that can be used with one hand

**ax** – a tool consisting of a flat heavy metal head with a sharpened edge attached to a long handle, used to chop wood or fell trees

**hammer** – a hand tool consisting of a shaft with a metal head at right angles to it, used mainly for driving in nails and beating metal
chisel – a tool for cutting and shaping wood or stone, consisting of a straight flat beveled blade with a sharp square cut bottom edge inserted in a handle. The chisel is often held in one hand and struck with a hammer or mallet, but is also used freehand.

planes - a tool with an adjustable metal blade at an angle, for smoothing and leveling wood

lantern - a portable case with transparent or translucent sides that protects and holds a lamp

nails - a strong metal pin with a flat head and a pointed end that is hammered into wood or masonry and used to fasten objects together or hang something on

spikes - a sharply pointed piece of metal or wood, especially one of a number along the top of a railing, fence, or wall

boat hook - a long pole with a hook on one end, used for pulling or pushing boats, rafts, or logs, or for picking up items from the water

caulking iron – a tool used to apply the material used to make a boat watertight by filling in its seams or to stop up the cracks or gaps in something

marlinspike - a pointed metal tool used to separate strands of rope that are being spliced

Sailor and Captain Nautical Instruments:

barometer - an instrument measuring changes in atmospheric pressure, used in weather forecasting
chronometer - a piece of equipment that measures time accurately

compass - a device for finding directions, usually with a magnetized needle that automatically swings to magnetic north

octant – a sextant having an arc equal to one-eighth of a circle, a 45-degree arc

quadrants - an instrument with a movable sighting mechanism attached to a 90-degree arc, formerly used in astronomy and navigation to measure the angles and altitudes of stars

quintants – a sextant having an arc equal to on-fifth of a circle

sextant - a navigational instrument incorporating a telescope and an angular scale that is used to work out latitude and longitude. An astronomical object is viewed through the telescope and its angular distance above the horizon is read off the scale. The data is then used to calculate the viewer's position. A 60-degree arc.

telescope - a device for making distant objects appear nearer and larger by means of compound lenses or concave mirrors

spyglass - a telescope that is small enough to be held in the hand
Whale Ship.—The fine ship America, destined for a voyage of three years in the Pacific, leaves us this day. The America is nearly 800 tons burden, and as well found as any ship that ever sailed on such a voyage. Her crew consists of thirty persons officers and men. The officers are men experienced in the whale fishery, and the crew are stout, athletic young men, generally natives of this city and of good moral character. Young men who are much respected in society. Such has been the anxiety to obtain births in this ship that sixty dollars have been offered to any one who would relinquish his chance, and refused. Our citizens have generally made a liberal donation of books for the use of the crew, which we have no doubt will be made good use of. With such a crew, in a ship so excellently equipped, we may anticipate a successful and profitable voyage.

Ship Letter.—Since the first of April thirty-one thousand six hundred ship letters have been received at the post office in this city; a greater number than is usually received in three months.—N. Y. Paper.
TUESDAY, MAY 26, 1830.

We were much gratified with our visit on board the Alexander Mansfield, one of our whale ships, on beholding the excellent style in which she is fitted up for the voyage. This vessel is now ready for sea, and will probably take her departure the last of the week. It is truly a pleasing sight, to again behold 130 miles from the Ocean, a ship equipped for whaling, with her boats swinging by her sides, or laid snugly over her quarter deck.

The company have been very fortunate in the selection of the officers necessary to command in the several stations about a whale ship. They appear to be men well acquainted with the business in which they are engaged; and with that hardy, determined, and enterprising spirit characteristic of American seamen, they possess the urbanity and politeness of gentlemen, which has obtained for them the good will of our citizens, and their best wishes for their success.

If the company are as fortunate in obtaining a crew as they have been in the selection of their officers, we are persuaded that all that man can do, will be done in returning the Mansfield, at an early day to this city, deeply laden with a valuable cargo.

While on this subject, we would suggest to our citizens who may have books that they could conveniently spare, the propriety of sending them on board the Mansfield, and thus supply a library for the amusement and instruction of those who may be engaged on board, to occupy their leisure moments.

TUESDAY, JUNE 1, 1830.

Hudson River Bank.—The books for the stock of the Hudson River Bank were open three days last week according to public notice. About seventy thousand dollars were subscribed. The books will again be opened for subscriptions a week from to-morrow, and there is no doubt but that the stock will be all taken up and the Bank go into immediate operation.

The whale Ship Alexander Mansfield, took her departure yesterday morning, and was towed down by the steam Boat Legislator. She sailed under a salute from the other ship, the America, and three cheers from the citizens.
Shipping News

Hudson Gazette, October, 1831. It gives us pleasure to state that another whale ship has been purchased by our enterprising citizens for the whale fishery. She is called the Henry Astor, and is of 365 tons burthen. She is designated for the sperm fishery, and we understand will be ready for sea in about six weeks. The fifth ship now owned by our citizens.

Hudson Gazette, September 7. We now have lying at our wharves three as fine ships as ever sailed the ocean, the America of about 500 tons and the Martha of 360 tons and the ship Helvetia of 330 tons. The America is ready for sea, on a three years voyage in the Pacific, commanded be Captain Folger, and is expected to take her departure Monday but not until the last of the week. The Martha will relay in about a fortnight and the Helvetia nearly at the same time. (Poughkeepsie Telegraph, September 11, 1833)

Hudson Gazette, September 10. On Wednesday last the whale ship America left this city on her way to the Pacific on her departure on her second voyage. We cannot refrain from drawing a comparison between the spirit and the enterprise which now actuates our citizens and the apathy which existed 5 years ago, when it was first proposed to enter into the whaling business. At that time when the subject was mentioned no money was to be found, few men willing to embark in the business and those unwilling to risk much, by lint of perseverance the projectors of the scheme succeeded in drawing a few together and the Mansfield which is considered to be unseaworthy was purchased for $2000. This small beginning produced an itching in others to own whale stock and ship has followed ship until 11 fine substantial vessels belong to this city. Now instead of the old exclaim there is no money the difficulty is to find ships and fit them out as fast as they are wanted. Scarcely is one ship purchased and brought to the dock before money is raised for another. A person who has not visited for 5 to 6 years would hardly know the place from the docks on the river to the eastern extremities of the city, it has almost entirely metamorphosed and the new buildings now going up and the old ones modernizing and
improvements exhibited indications of increasing wealth and prosperity. (Poughkeepsie Telegraph, September 25, 1833)

One of the vessels of the Hudson Whaling Company, the *Alexander Manfield* arrived in New York, week before last with 1500 barrels of whale and 50 barrels of sperm oil on board. The *Alexander Manfield* has been out for two years. (Poughkeepsie Telegraph, September 11, 1833)

The Hudson Whaleship *Huron* arrival at that place on Tuesday the 3rd, having on board 1250 barrels of sperm oil. (Poughkeepsie Telegraph, May 11, 1836)

*Hudson Gazette*. By the arrival at New York of the whale ship John Wells, Capt. Russel, 80 days from Talcuhana with 2500 barrels of whale oil and 437 barrels of sperm to the Newark Whaling Company, We Learn that *Martha*, Capt Riddel, and *Helvetia*, Capt. Cottle of this city, was at that port, the former from home, soon, with 1500 barrels, and the latter with 2300 barrels of sperm and 200 whale, going to cruise 15 days off Massafuero, and then bound home. (Poughkeepsie Telegraph, March 8, 1837)

*Hudson gazette*. The whaleship *Helvetia*, Capt. Cottle from the Pacific arrived in New York on Saturday Last with cargo of 2400 barrels sperm and 150 barrels whale oil and some whale bone. This is the second successful voyage Capt. Cottle has made from this city, the first in the *America*, when he brought home 3300 barrels of sperm with the *Helvetia* as full as she can hold cargo worth $70,000. (Poughkeepsie Telegraph, March 29, 1837)

*Catskill Record*. Our Hudson neighbors bid fair to rival their Nantucket cousins in whaling Enterprise. Two ships have recently sailed, the *Henry Astor*, for the Pacific in quest for sperm oil, and the *Martha*, for the South Atlantic and Indian Ocean, for the Right whale. They are both owned by the Hudson Whaling Company. We wish they short voyage and full cargo. (Poughkeepsie Telegraph, December 14, 1831)
The Hudson Whaling Company has been extremely fortunate in its undertaking, the ship *Alexander Mansfield* has arrived in New York with a cargo of 2200 barrels of oil taken in a short voyage of 8 months. (Poughkeepsie Telegraph, March 7, 1832)

Hudson, N.Y., April 25th, 1837. The whale ship *Martha*, Capt. Riddle, came up to this city on last Thursday having on board 1400 barrels of sperm oil worth 40,000. (Poughkeepsie Telegraph, May 3, 1837)

The Fifth Whale Ship. The whale ship *Alexander Mansfield* arrived in New York on Saturday of the Hudson Whaling Company. This is the fifth whale ship belonging in Hudson arriving in the spring. (Rep. and Advertiser) (Poughkeepsie Telegraph, May 3, 1837)

A Hudson Whale Ship Ashore. We find the following item of bad news under the marine head of the New York papers:* Disaster. The whale ship *George Clinton*, of Hudson, Capt. Barret, Master, from the Pacific Ocean, with a full cargo of sperm oil bound to this port went ashore on the night of Thursday last, in a thick fog, at Little Egg Harbor. When boarded, no person was found on board, the captain and crew having previously left her. We cannot obtain further particulars. (Poughkeepsie Telegraph, January 31, 1838) 1,450 barrels of sperm oil were saved. No other George Clinton appears in later whaling lists.

The Hudson Codfish Company’s schooner *General Warren* has just arrived in Hudson from the banks with a full cargo of fish valued at from $5000 to $6000. She will be immediately dispatched on a mackerel fishing voyage. (Poughkeepsie Telegraph, September 19, 1838)
Make Ship biscuits

2 Cups Flour
1 Cup Water
Salt (3-4 Pinches)

Mixing Bowl
Rolling Pin
Cookie Sheet

- Mix all ingredients together. Make sure you add enough flour so that the dough is no longer sticky, but be careful not to make it too dry. Knead the dough a few times. During the war, hardtack was about an inch thick, so when you are rolling the dough, aim for this thickness. It is easiest to roll the dough directly on an ungreased cookie sheet.
- Bake at 350 degrees for about 30 minutes.
- Remove the dough from the oven, cut the large square into smaller three-by-three inch squares. Poke 16 evenly spaced holes in each square. Flip, return to the oven and bake for another 30 minutes. Turn off the oven and allow the hardtack to cool in the oven with the door closed. Allow to completely cool, and then enjoy!
Lesson 6 – Catching, Cutting & “Trying Out”

1. Preset the classroom with inquiry stations for students to explore. If this is a new activity for your students you may want to do one or more station as a group. Demonstrate the inquiry thought process using the list of inquiry questions. (A list of the inquiry questions should be posted and/or distributed to the students as a reference)
2. Distribute inquiry recording sheets.
3. Instruct students to examine the images at each station thoroughly and to record all of their observations. (Assign a set time requirement for each station.)
4. Call the group together to share observations and ideas. Organize the ideas collectively and construct an organized list.

Discussion questions:

What can we learn about whaling from the images that you examined?
What do you think the artist of the time wanted people to know about the whaling industry?
How would you feel about becoming a sailor on a whaling ship in the early 19th century?
Blanket Pieces
Flensing the Whale
Cutting Bible Leaves
Barreling the Oil
Emptying the Case
Lesson 7 – Oil & Candle Works

1. Discuss the difference between baleen whales and toothed whales.
2. Discuss the value of the products produced by the most valuable toothed whale the sperm whale.
3. Examine the image of the Messrs. Barnard, Curtiss & Co. Oil and Candle Works.
4. Ask students to use visual thinking skills to read the image. Spend some time examining and discussing the details in the image.
5. Read the text from the Rural Repository and compare and contrast their ideas about the ideas about the image to the text from the Rural Repository.
A sperm oil and candle factory in Hudson circa 1841. Engraving by Throop in the Rural Repository.
Collection of the Columbia County Historical Society, Kinderhook, New York.
The oil works

The above beautiful view of this extensive establishment, located on Water Street, north of railroad depot, is taken from a situation south of the building, which is situated in the southern part of our city, and is one of the numerous improvements which have recently been made in that part of the city.

The building seen on the right is connected with the factory, but the upper part is connected as a sail loft; both buildings front on Water Street. The buildings on the left are also connected with main building, and are used to store the oil received from the ships. In reviewing the plate some of our citizen will perceive that the characters on it have been correctly and rather humorously delineated.

About two years ago the old buildings were destroyed by fire, and proprietors have since erected this tasteful and substantial edifice. It is built of brick and is a fire-proof building.

The works are owned and under the immediate charge of Messrs. Barnard, Curtiss & Co. who have long been known to our citizens as enterprising and indefatigable managers of a part of the whale fishery enterprise in this place, which has been conducted here with much success for over ten years past.

The manufacturing of sperm oil and candles is carried on here in as extensive a manner as it is in any other part of the country. The machinery used in the works is all new, and consequently of the best kind.

One of the company’s ships has recently arrived, having brought home a full cargo of oil, and a noble crew who embarked with her, have now returned with glad hearts and athletic forms, to meet their friends and kindred, after an absence of about twenty months.
Lesson 8 – Writing Wrap-ups

1. Discuss the length of time a whaling ship might be out to sea. They could be at sea years. See the shipping news.
2. Ask students to consider some concerns they might have and being away for so long or having a loved one away from home for so long.
3. Explain the mail system used by sailors in the 18th and 19th centuries.
4. Assign students to write letters to a loved one at home or on a ship.
5. Students should think about all of the elements of the life of a whaler that they have learned about.

Writings should include:

Stories about hunting for whale
Leisure time activities, scrimshaw, music, gams, and storytelling
Health issues aboard a ship or at home, injuries, disease, and nutrition
Food, stocking the ship, both at home and at other ports
Location at sea, geographic location, latitude and longitude
Weather at sea
Events of the day
Things that they have seen at new ports
Updates from home about the progression of the city
News of the proprietors and the planning of the city (from the proprietor’s minutes)
News about children growing at home while a family member is away

Additional writing extension activities:

- Students write poems about whaling.
- Students create propaganda posters to persuade men to sign on as crew members of a whaling ship.
- Students create propaganda posters to persuade men not to sign on as crew members of a whaling ship.
- Students create advertisements for whale products.
Teacher’s Resources

- Web book based on the print publication “Avoid Sailing on a 19th-Century Whaling Ship” produced by the Salariya Book Company
  http://www.salariya.com/web_books/whaling/aboard/aboard.html

- New Bedford Whaling Museum
  http://www.whalingmuseum.org

- Martha’s Vineyard Museum
  http://www.girlonawhaleship.org

- American Experience, Into the Deep: America, Whaling and the World
  http://www.pbs.org/wgbh/amERICANexperience/films/whaling

- The History of whale oil
  http://www.petroleumhistory.org/OilHistory/pages/Whale/whale.html

- Whale Populations 1790-1924
  http://www.pbs.org/wgbh/amERICANexperience/features/image/whaling-populations/

- Maps of whaling ports
  http://www.pbs.org/wgbh/amERICANexperience/features/map/whaling-ports/

- Blue Whale Interactive
  http://animals.nationalgeographic.com/animals/blue-whale-interactive/

- Sperm Whales

- Timeline of the History of Whaling in America
  http://www.pbs.org/wgbh/amERICANexperience/features/timeline/timeline-whaling/
• Smithsonian’s collection of advertisements, tools and other objects  
  http://americanhistory.si.edu/onthewater/exhibition/3_7.html

• Whalemen’s Shipping List  http://nmdl.org/wsl/wsllindex.cfm

• Hudson River Maritime Museum  
  http://www.ulster.net/~hrmm/hudsonny/hudson_whalers.htm

• Whaling Fleets of the Hudson River  
  http://www.ulster.net/~hrmm/diglib/carmer/chapter15.html

• A summary of Juddah Paddock’s narrative, A Big Adventure Story.  
  http://www.ulster.net/~hrmm/diglib/carmer/chapter15-1.html

• Historic Hudson River Towns  
  http://www.hudsonriver.com/halfmoonpress/stories/0697whal.htm

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