This Lake Alive!

An Interdisciplinary Handbook for Teaching and Learning about the Lake Champlain Basin

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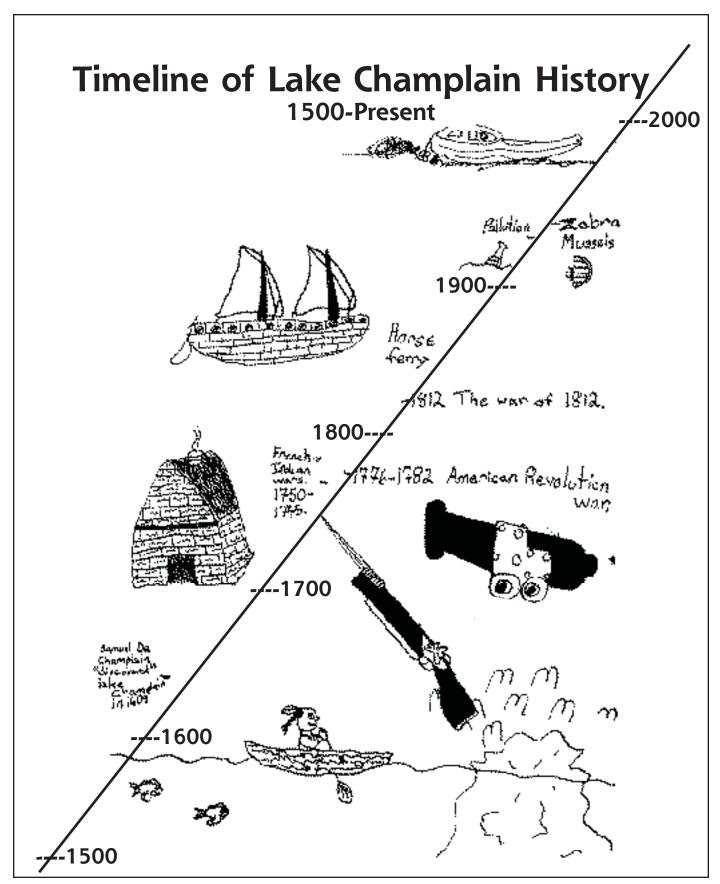
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This Lake Alive! 175



Artwork by Stuart McKenna, Grade 5, School Street School, Milton, Vermont.



Introduction

One of the hardest things to teach students is how the past is a dynamic, changing element in the human experience. Students tend to think of the present and the past as two separate, stagnant "chunks." The past contains everything from mastodons to horses-and-buggies, from black-and-white television to one-room schoolhouses. There is pre-Nintendo time and Nintendo time. Teaching kids about the complexity of the past and the progression of time within the past is an exciting challenge of the social sciences. Many history activities tend to accentuate the contrast between past and present without weaving the threads that connect us to the past or the different parts of the past to each other. Using a natural resource that's been around as long as the lake has is an exciting way to explore this complexity with young minds.

We also teach events in the past as if they were inextricably linked to one another in a predetermined chain of events. One of the more interesting things about studying the American Revolution is learning about the people who lived in these parts who remained loyal to the King of England. They didn't know that they were living in the future United States of America. When we study the development of technology, we seldom explore what people thought about these changes. When steam travel came to the lake, not everyone knew that it would become the dominant and relatively safe form of transportation. When an Abenaki man spoke in 1766 to the heads of white government, he spoke in a clear voice that outlined his people's claim to the land they had inhabited for thousands of years. He didn't know that the tides of history had changed and the influx of the white man would ignore his pleas. As we ponder the ecological issues that face Lake Champlain at the turn of the twentieth century, we don't know whether the solutions we are currently exploring will save our lake or not. We are living in the present and do not know what the future will bring. Every moment in the past has at one time been the present. Our task is to give children a chance to experience that past moment in all of its complexities, without our knowledge of the next event clouding the view.

I have outlined some activities designed to help kids understand how the lake, people and times changed. These activities span several time periods



and thus are different from the activities offered in the history section, which are designed for a specific time in history.

Also, some activities outlined in this chapter are discussed more fully in other chapters. For example, there are numerous writing activities in *Language Arts*; the ones here specifically relate to teaching about time.



Timelines

TEACHER NOTES and INFO

Timelines are an important activity to help students visually organize abstract historical information.

During your study, it is important to give as many visual representations as possible. Maybe because I'm a visual learner myself, I find these pictures critical to the understanding of history. For example, a trip to the Lake Champlain Maritime Museum, with its multitude of graphic displays, provides learners with "pictures" of the progression of history. If you can't get to the museum, provide as many visuals as possible with books, photos and bulletin boards. Notes on the Maritime Museum's slide show and lecture provide a basic chronology of dates that students will be using throughout the study. (See "Lake Champlain History," p. 196.)

It is helpful while making timelines to "talk the dates." Encourage students to make a true statement.

Examples:

• The first fort was built on Lake Champlain ____years after Samuel de Champlain sailed down the lake.

- Vermont became a state ____ years after the American Revolution.
- People have lived in this region for <u>years</u>.
- The *Phoenix* was discovered _____ years after it was sunk.

This also can be given as a formal homework assignment: Write down five historical facts in your thinkbooks.

There are a number of different kinds of timelines. One timeline that is not in this section is a nautical archeology activity called, "As Time Floats By." This activity employs a particular theme and can be adapted to many other topics. (See "As Time Floats By" in *Nautical Archeology*, p. 217.)

A few examples of using timelines to explore the passage of time follow.



You can also add other dates such as your birthday or the year students were born or other important dates in history!

This idea of using flagging tape came from Barry Doolan, who made a geologic timeline to share with his students.

Note: The blank timeline provided in this book runs from 1500– present. You could design your own blank timeline using any length of time.

Activity: Just Imagine! A Timeline of 12,000 Years

Make a timeline that shows human habitation over 12,000 years. The activity illustrates the contrast between the huge time of Native American habitation (12,000 years) and the 400 years of European settlement.

Get a section of flagging tape that is at least 45 feet long. The timeline will represent the time from 10,000 B.C. to the present day. Mark off segments of time in 100-year sections (i.e. 600–700 B.C.). Four inches = 100 years. Use a permanent marker. Mark the Paleo, Archaic and Woodland archeological periods. Mark Champlain's voyage in 1609.

Share the timeline with your students. Students can stand in a large circle and read sections of the tape and make observations as they discover what it shows. Discuss the huge changes that have happened in a very short period of time.

Activity: Time Flies: Make an Illustrated Timeline

Review important dates in the lake's history by putting "Lake Champlain History" (see p. 196) on an overhead projector. Students have copies of the worksheet and I fill in on the overhead as we discuss important events. The class can usually provide information as you go. Each student writes down the correct information on his or her copy.

I then hand out blank timelines (see p. 195). We transfer some of the basic information onto the timeline; again, I use the overhead. Then I turn the class loose to add dates that they choose. After students fill in information they can illustrate the timelines with historically accurate graphics.



Activity: Getting the Big Picture: Large Illustrated Timeline on Bulletin Board

U se as reference the "Date Chart" of information on the following page. Fill it in with your students. Discuss all the different pictures that help tell the story of a particular time in history. You may want to just focus on a particular theme such as technology.

Arrange dates 1500–2000 on the bulletin board. Assign each student the task of choosing one artifact, scene, happening, ship (the possibilities are endless) to illustrate and post in its correct location on the timeline. Depending on space and time, student work can be small (use blank index cards) or larger (use oak tag). If they are all the same size, they can be mounted and placed in a book after you take down your bulletin board.

Have some pictures photocopied and ready for students unable to find or make up their own. Students can also make little fact cards to decorate the timeline. This is a great task for students who have completed their illustration! Note: A wonderful book to read aloud and share with students is A RIVER RAN WILD by Lynne Cherry. The superb illustrations and story portray the passage of time on a river in Massachusetts; the story and details are similar to the tales our rivers tell.



Name: _____

Date Chart	Date Chart Lake Champlain			plain
Today	1800s	1600s & 1700s	1500s	Time
				Lake & Land
				Transportation
				Tools
				Work
				Food
				Homes
				Important Events



Activity: Hands-On Learning

TEACHER NOTES and INFO

Some museums have kits that contain artifacts that students can handle. An

example of a great one is "12,000 Years of History" from the Discovery Museum in Essex Junction, Vermont. It has some wonderful artifacts, tools and projectile points from Native American cultures. The kit also has a great slide show. If you can't get a kit, it is sometimes possible to find a private collector who will lend you some materials.

Note: There is a procedure for handling ancient objects. The Shelburne Museum recommends wearing white gloves.

Although we tend to think of artifacts as old things, you could adapt this activity to any object.

Example: a "what's-it?" activity with "mystery" modern boat artifacts. If you use modern objects, omit Question 4.

STUDENT ACTIVITY

Share some artifacts with the class and practice observation skills by using questions from the worksheet. Arrange students in small groups. Each group will have one artifact.

After each group has had an opportunity to discuss its artifact and complete the worksheet, have each group share its findings with the class.

Identifying Your Artifact

Group: _____

1. Observe your artifact.

Write three statements that describe your artifact.

2. Discuss how the artifact was made. What materials and tools were used? Write down how you think it was made.

3. Discuss how this artifact was used. Is there more than one possibility? Write down how you think it was used.

4. Discuss what you think is the modern counterpart to this artifact. How is this same task accomplished today? Compare and contrast the two artifacts. How are they different? How are they similar?



Activity: A Stitch in Time

TEACHER NOTES and INFO

This is an art project where students choose at least four dates, arrange the dates on a chosen quilt pattern, then draw scenes, artifacts or people that represent those dates.

STUDENT ACTIVITY

Give each student one square piece of paper (8" x 8" works fine). Explain the process of choosing a quilt pattern design that will divide their square into four sections. They will be choosing four dates to represent artistically on each section of their one square. You could choose to make squares on cloth and use permanent cloth markers or cloth paint.

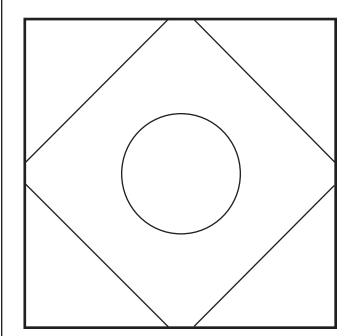
Display squares on a wall as a quilt of all the students' squares. Ruby Thibault suggests making some creative stitching to hold the quilt pieces together. If your squares are paper, you can use marker after your squares are fastened on the wall to "sew" them together. If they are cloth, you might want to learn some folk-art stitching patterns to finish off your quilt (or use fabric markers).

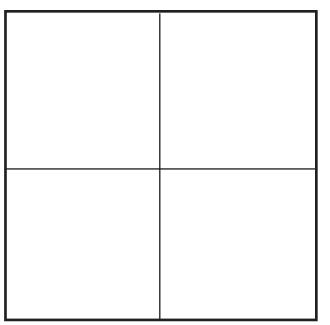
STUDENT HANDOUT - "Lake Champlain Time Quilt"



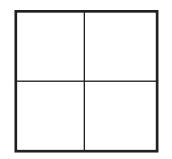
Lake Champlain Time Quilt

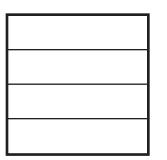
Decide on your quilt pattern.

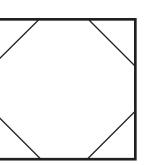


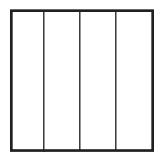


Your quilt square must be divided into 4 sections.









Each section will illustrate a different time period.

Label each section with a date.

Your quilt pattern could have more than four sections. A fifth (or sixth) section could include a poem on your quilt square!

You might choose to put a border on your quilt!





TEACHER NOTES and INFO

There are a number of drama opportunities in an interdisciplinary study. This technique is called "Freeze Frames." Students learn about one activity and have some time to practice their activity. At a certain point, the teacher calls "FREEZE" and the actors freeze in position. The scene is as if someone pushed the pause button on a VCR. After you practice a little you can let the actors "roll it" and continue the activity. The scene then becomes a play!

After you visit the Shelburne Museum and your students have experienced the nature of the jobs and happenings first hand, have them dramatize the last sailing of the Ti. Students in small groups will have time to learn more about their jobs and to plan the enactment. One highlight of this activity for me is that every year I find that two or three of my students' grandparents were at the dance on the last sailing.

The following areas are acted out:1. boiler room2. captain's deck3. purser's office4. kitchen

The performance can have a beginning, middle and end with a freeze at each point. Students need to decide on the beginning of their actions and the middle and the end.



The rest of the students could be given the following roles of characters:

• 3 girls from Burlington and their great-aunt. The girls want to be silly but the great-aunt holds a very careful guard on them.

• 2 older gentlemen who now are rather dignified and smoke cigars as they stroll on deck. They had worked as scullery mess boys in the summer of 1928 and reminisce.

• 2 shy boys who are very nervous about being at the dance and who spend most of the time watching the crew do their work.

Other Ideas

• You may want to think about doing a performance with all the actions happening simultaneously. A narrator could circulate and observe each action; other groups would continue silently and the scene that the narrator is speaking of could proceed with soundtrack.



• 2 girls from New York City who are very well-behaved but very incredulous at the view of Lake Champlain.

• 2–3 students may choose to be the character of a grandparent or someone who the students may have interviewed about the last sailing of the Ti.





Writing



TEACHER NOTES and INFO

There are endless ways to use writing to explore time on Lake

Champlain. Here are some ideas!

STUDENT ACTIVITY: My Favorite Time

Write about a time on Lake Champlain. Include as many details (from field trips and class work) about life on the lake as you can. You might begin, "My favorite time in history is...."

STUDENT ACTIVITY: Just One Place

Write about one place on the lake. Imagine a spot that you know. Describe the way that place changed through time. Make a three-part drawing to accompany your essay that shows three different times in history.

STUDENT ACTIVITY: Burlington Waterfront

Discuss how life changed on the lake on one spot: the Burlington waterfront.

1. Imagine the land at the mouth of the Winooski River and what it must have meant to the Abenaki. Picture lots of trees, maybe a small settlement on the land that is now Battery Park, perhaps a small group arriving on canoe from the larger settlement near the mouth of the Winooski River.

2. Read aloud this description of Burlington harbor in 1790 (from LAKE CHAMPLAIN: KEY TO LIBERTY):

"In 1790, Horace Loomis, one of the city's early citizens, took up residence in a log house on what is now Pearl Street....At this time only four buildings perched at the edge of the woods on the lake. A few logs fastened to the bank served as the first dock, but most lake men anchored in deeper water, rolling their barrels of molasses overboard and floating them to shore."

Note: You can use your local area. Contact the historical society for graphics that might help students envision the change over time.

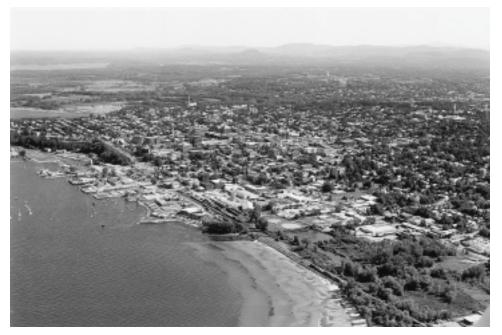
The Abenaki name for the Winooski River is the "Winozkitegok" or the "onion land river."



3. Show this painting of Burlington harbor c.1830 (available as poster from Shelburne Museum).



4. Show a slide or postcard of the present-day waterfront (taken from the ferry) or use this aerial photo.



5. Discuss the actual details of how this place has changed over time and the implications of those changes (i.e. jobs, ecology, population, technology, etc.).

6. Discuss what the waterfront might be like in 2050.

An intriguing look at Burlington in the 1800s is seen in THE BLACK BONNET by Louella Bryant. The story is about a runaway slave who passes through Burlington on her way to Canada.



STUDENT ACTIVITY: So Long, Sam

At the end of your Lake Champlain study, write a closing entry in your thinkbook as a letter to Samuel de Champlain, titled "So Long, Sam."

Brainstorm with kids what the lake looked like when Samuel de Champlain sailed down it in 1609. Discuss the changes that occurred after 1609. Have students write letters to Sam explaining some of the changes that they think are important.

Dear Sam,

Hi! I'm a student at Milton Jr. High. You probably haven't heard of a high school. A high school is a place where you learn, and they serve you really gross food with artificial ingredients.

A lot has changed since you were here in 1609, when you found Lake Champlain. Your nice clean lake that you knew is now a polluted lake. The once beautiful lakeside is now covered with houses and developments. I'd love to tell you more, but I really gotta go! Bye!

> AGFA, Debbie Clark, Grade 7, Milton

P.S. Write back if you have some spare time in the future.

STUDENT ACTIVITY: Old News

Create news stories from different time periods. After you have studied a certain time in the past, assign students the task of writing a "news story" from that time period.





Taking It Home

Interview someone

- 20 years old
- 40 years old

• 60 years old about one topic or one place on the lake. Write up your interviews. Add three illustrations that show

the different impressions these people had.



Activity: Trip Around Lake Champlain

TEACHER NOTES and INFO

Every year this major writing activity seems to change. It began with a geography focus and students had to include references to geographical features and places on their "trip." Some years it has been stories about historical events with a lot of time spent on sorting out the nuances of each historical period. In the last few years, I have incorporated more sciences into my study. Now the "history" story is an option but students can also choose an adventure story that includes a scientific or nautical discovery or an adventure that "tells a science story." Whatever way you structure it, writing a major story about the lake gives students the chance to retell the stories they have learned—and that's what learning is all about!

STUDENT ACTIVITY

1. Brainstorm information as a pre-writing activity. Use a blank grid for each historical period to develop information with your students. I use the overhead projector and through class discussion, we fill in the information. Use as your reference the completed grids on p. 193. This can be done as a class or in cooperative groups. After the work is completed, make posters with the information. Display them in the room for reference during writing time.

2. Discuss the importance of historically accurate information. I use the example of a sailor working on a sloop in the 1700s. What's wrong if he stops for a snack and eats Doritos?

3. Use the worksheet "Trip Around the Lake" as a story starter.

4. Use your writing process to complete final product.

5. Give students time to make illustrations and exceptional covers for their stories.

STUDENT HANDOUT - "Trip Around the Lake"

Other Ideas

• Some years there are students who want to explore the future of Lake Champlain! Use the grid to generate endless possibilities: hover craft, biosphere, underwater habitat, no zebra mussels!

• The grids can be made into a small booklet for students to use as a reference. Copy the grid page and cut into four sections so that each mini-page has a century's worth of story ideas!

Trip Around the Lake

In order to write a great trip around the lake, you must make some choices about what's going to be in your story!

1. WHEN will your story take place? 1500s? 1600s? 1700s? 1800s? 1900s? Maybe you will write about the future? Explain below WHEN your story will happen.

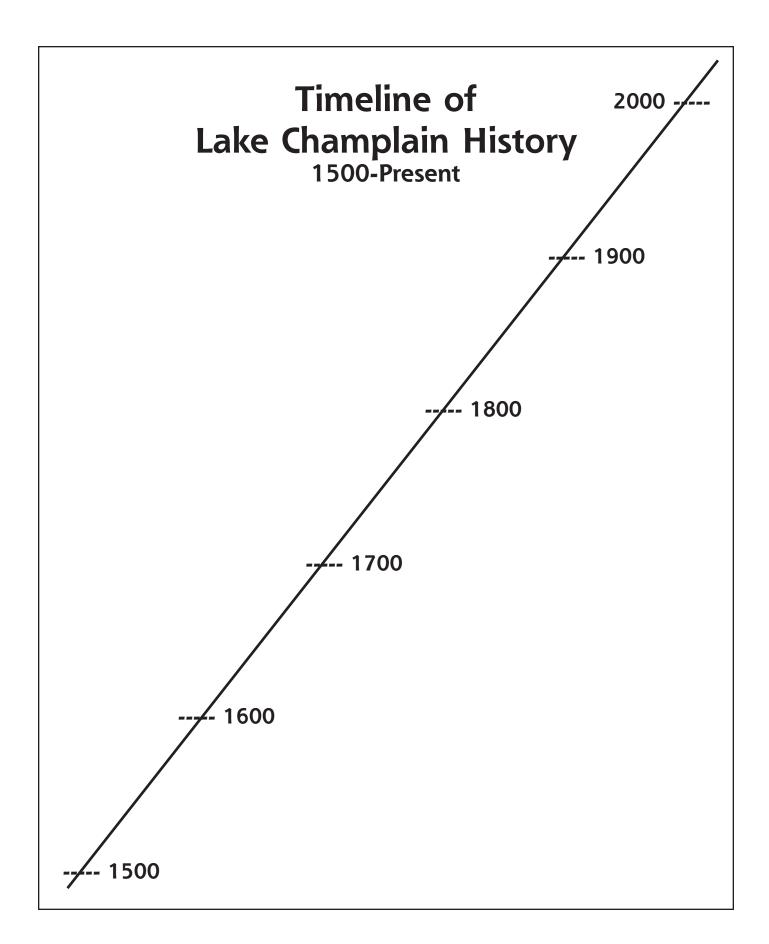
2. WHERE will your story happen? What details can you include from all the things we have seen? Describe below WHERE your story will happen.

3. Now the most fun! WHAT will happen in your story? Will it be a fishing story, a revolutionary battle, a canoe trip, a ferry boat ride, a swim, an underwater diving expedition? What can you think of? Describe below WHAT will happen in your story.

Great! You are ready to begin. Have a great trip!

If My Story Happens in the 1500s		If My Story Happens in the 1600s-1700s		
Transportation dugout canoe bark canoe small raft walking snowshoes	Tools/Weapons spear bow and arrow rock knife/tool arrowhead snares/traps	Transportation dugout canoe bark canoe raft bateau sailing ship schooner sloop wagon horse snowshoes	Tools/Weapons spear bow and arrow arrowhead musket/rifle ax adze cannon knife tomahawk swivel gun grape shot trare (snares	
Food corn/squash/beans fish game - venison/muskrat/rabbit berries nuts roots (gathering) Housing huts wigwam - made of wood, hide, bark longhouse cave lean-tos If My Story Happ	Things That Could Happen play a game, dance make a canoe make tools cook over a fire tell/hear stories - in a longhouse - around a fire build a shelter hunt, fish, trap see Champ Abenaki meet Iroquois c. 1609 - talk about "new tribe" of Europeans	Food corn/squash/beans fish game berries/nuts/roots/(gathering) flour molasses Housing wigwam longhouse cabin fort hut (shelter on boats)	traps/snares Things That Could Happer trap beaver Abenaki and Iroquois meet Europeans Europeans meet Abenaki and Iroquois clear land hunt explore build cabin French and Indian War American Revolution pens in the 1900s	
Transportation canoe sailing ships steamboat canal boat tug boat barge log raft snowshoes	Tools/Weapons rifles/musket plow cannon ax saw traps	Transportation canoe sailboat steamboat railroad ferry motorboat underwater diving car waterski windsurf jet ski kayak	Tools/Weapons rifle tractor/plow hammer chain saw	
Food grow your own food fish game supplies at general store trapping garden hunting Housing wigwam longhouse cabin larger houses (2 - 3 stories) brick houses	Things That Could Happen work in engine room - steamboat cut/transport lumber steamboat races War of 1812 visit Burlington - 3rd largest seaport in the world work in lighthouse travel on canal boat make snowshoes, birchbark canoes, ash splint and sweetgrass baskets	Food supermarkets pizza fish game Doritos ice cream gardens Housing brick cement large office buildings wood houses	Things That Could Happen fishing trips boat ride hunting discover wreck first/last ride of the Ti ride <i>Spirit of Ethan Allen</i> powwow canoe trip visit historical site find ancient artifact discover zebra mussel	

If My Story Happens in the		
Transportation	Tools/Weapons	
Food	Things That Could Happen	
Housing		



Lake Champlain History

1	wore the "original pavigators"						
1. 9	In 1609, "discovered" Lake Champlain.						
	For many years after that, both and						
у.							
4	wanted control of the Champlain Valley.						
	hey wanted the to build ships.						
	They built many on Lake Champlain to house their soldiers.						
0.	and fought the French and In-						
7	dian War, 1759–1763.						
1.	After the War ended, many people wanted to move to the land that is now Vermont. It						
0	was claimed by the colonies of and						
	One group that was angry about this was called						
	Before they settled this problem, the began.						
10.	Two important leaders during this conflict were and						
	They captured						
12.	The Battle of was important when Arnold escaped from						
	the British.						
13.	After the War, many people wanted to resettle the Champlain Valley. Because the roads						
	were bad, Lake Champlain was the						
14.	At first, people used and for transportation on						
	the lake.						
15.	In the 1790s, they used and						
16.	In 1809, the first was built on Lake Champlain (the world's						
	second).						
17.	In 1812, the United States fought the in the War of 1812.						
18.	In 1823, the Canal was finished.						
19.	In the 1830s, people used and						
20.	In the 1870s, was the third largest lumber port in the world!						