

OHIO CANALS



Teacher Overview

The Ohio region was a vast wilderness when settlers first arrived following the passage of the Northwest Ordinance in 1787. Just seventeen years after statehood, the population in Ohio had grown to over half a million residents. Agriculture quickly became the main industry in Ohio, but the young state was still in need of reliable transportation routes to get goods to market. Roads at the time were prone to flooding, and were often rocky, craggy, and dangerous to travel. The National Road was still being constructed, and did not reach the northern regions of the state. Farmers and merchants needed cheap, easy methods of transporting their goods. Canals had the potential to provide this transportation and open up new markets in other regions, specifically the northeast, for Ohio goods and products.

In 1817, New York State began building a canal connecting the Hudson River to Lake Erie. When the Erie Canal in New York was completed, it connected the Atlantic Ocean, the Hudson River, and Lake Erie. Thousands used the new transportation system to migrate to Ohio where cities along Lake Erie, namely Cleveland and Toledo, experienced a boom in both population and commerce.

With the success of the Erie Canal, Ohio leaders were convinced that though an enormous endeavor, the investment would pay off. An Ohio canal route to Lake Erie would allow goods to be shipped to the northernmost regions of the state, and provide a route for Ohio goods to eastern markets via the Hudson River and New York canal system. Shortly after, in 1822, the Ohio legislature approved and created an Ohio Canal Commission. Construction on Ohio's canal system began on July 4, 1825, with the construction of the Ohio and Erie Canal. Just weeks later, work began on the Miami and Erie Canal.

Canal construction was difficult and labor intensive — workers had to dig hundreds of miles of trenches and then line them with sandstone. Canal locks, made of sandstone and wood, also had to be built. Canal construction employed thousands of workers and provided livelihoods to many recent immigrants such as the Irish. Workers labored from sunrise to sunset and were paid 30 cents an hour — a decent wage to a laborer of the 1820s.

Once construction was completed, Ohio's canal system included nearly one thousand miles of canal and feeder lines. The Ohio and Erie Canal was completed in 1833, and connected Portsmouth and Cleveland. The Miami and Erie Canal was completed later in 1845, and connected Cincinnati and Toledo, Ohio.

A number of towns sprang up around the canal depots, becoming busy hubs of commerce during the canal era. Most canals remained in operation until the end of the nineteenth century, allowing Ohio commerce to prosper. However, use of the canals began to decline in the 1850s with the increasing popularity of the railroads — many of the canal towns declined as well. Railroads could deliver both goods and people to their destinations much more quickly than canal boats, which were pulled by mule and averaged only four miles per hour. Though more expensive than the canal transport system, railroads soon became the favored mode of transportation.

Video Synopsis

In this *Our Ohio* heritage segment, the hosts visit *Roscoe Village* to learn how canals changed Ohio. The hosts take a ride on the *Monticello III* to see what the canals were like, and talk to experts on what life was like during the canal era.

Learning Objectives

Students will examine maps and primary sources to determine canal routes and how the use of the canals affected the lives of early Ohioans. Students will also complete a visual organizer comparing transportation in the early 1800s to today.





Ohio Academic Content Standards

Grade

3

Benchmark: History

3. Describe changes in the community over time including changes in:
 - f. transportation

Benchmark: Geography

8. Identify systems of transportation used to move people and products and systems of communication used to move ideas from place to place.

Benchmark: Social Studies Skills and Methods

1. Obtain information about local issues from a variety of sources including:
 - a. maps
 - g. documents

Grade

4

Benchmark: History

5. Explain how canals and railroads changed settlement patterns in Ohio and Ohio's economic and political status in the United States.

Benchmark: Geography

4. Use maps to identify the location of major physical and human features in Ohio including:
 - a. Lake Erie
 - b. Rivers
 - c. Major cities

Grade

5

Benchmark: History

6. Growth: Explain the impact of settlement, Industrialization, and transportation on the expansion of the United States.

Benchmark: People in Societies

5. Interaction: Compare reasons for immigration to North America with the reality immigrants experienced upon arrival.

Benchmark: Social Studies Skills and Methods

3. Differentiate between primary and secondary sources.

Materials

- ☐ DVD player
- ☐ Television
- ☐ Elmo Overhead Projector
- ☐ United States Map
- ☐ Ohio Map

Teacher Vocabulary

canal	lock	sandstone	port
merchant	agriculture	bill of lading	
immigrant	migrant	primary source	

Procedure

ACTIVITY A: Ohio Canal Lines

1. Start by showing students a map of the United States. Have them locate the state of Ohio on the map.
2. Next, show students a map of Ohio. Ask students to brainstorm how people would have transported products over long distances before the invention of the car and railroad.
3. Direct students to look at Lake Erie, and the Ohio River on **Map A** using an overhead projector. Describe how the Ohio River, with links to the Mississippi and other rivers provided transportation during the 1820s. Ask students to think about, and offer examples of, how people living far away from rivers in Ohio would have transported their products.

After the students have finished brainstorming, write their answers on the board. Write the word canal on the board and explain to them how the canal system was developed in Ohio based on the information in the overview.

4. View the *Our Ohio* video segment, "Ohio Canals."
5. Pass out **Worksheet A** and the accompanying map (**Map A**) of Ohio canals and have students complete the worksheet. Students can work individually, or in groups. (This activity can also be done as a class using an overhead Elmo projector.)

ACTIVITY B: Canal Bill of Lading

1. Write the words "Primary Source" on the board and describe to the class what primary sources are. Next, ask students to give some examples of different types of primary sources (letters, maps, photographs, etc.) and write the examples on the board.
2. Describe how we can learn things about the past by examining primary sources; for example, we came to know about Anne Frank and her life because of the diary she left behind.
3. Pass out **Worksheet B** and the accompanying primary source document. Students can work individually or in groups to analyze the document and complete the document based questions regarding merchandise sent via canal boat. Students will also refer to **Map A** to complete the questions. (This activity can also be done with the class using an overhead projector.)



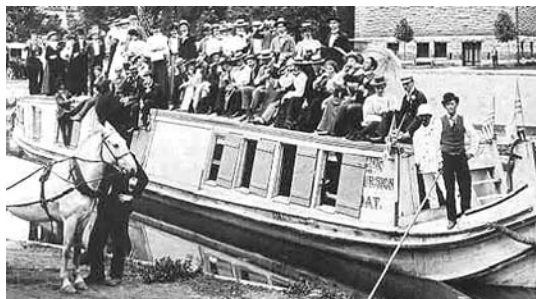
Procedure

ACTIVITY C: Coming to America, Getting to Ohio

1. Write the word **immigrant** on the board. Explain to the class that immigrants are people who come to a new country to live. Ask students what reasons people might have for leaving their home to travel hundreds or even thousands of miles to come and live in a totally new place (opportunity, work, land, escape persecution, war, etc.). Write these responses on the board. Next, remind students that all newcomers to North America were at one time immigrants.
2. Write the word **migrant** on the board. Explain to students that migrants are people who move from one region to another within a country or state. Many more people began to both migrate and immigrate to Ohio during and after the canals were built. Ask student to offer reasons for why this might be. (Migrants and immigrants both came to work on the canal construction in Ohio, especially the Irish for example. Also, canals made it easier to travel to and within Ohio.)
3. Pass out **Worksheet C** and have students analyze the primary source document and complete the document based questions. Use the Elmo to project **Map A**, or give to students as a handout. (This activity can also be done with the class using an overhead projector.)

ACTIVITY D: Transportation Then and Now

1. Begin by asking students about the different types of transportation that existed during the 1840s. How did people and products travel from place to place? (Walking, stagecoach, horseback, canals, railroad, steam ship, etc.) and write these modes of transportation on the board. Next think about modern transportation for both people and goods and ask students to name modes of transportation used today.
2. Next, use an Elmo overhead projector to project the graphic organizer in **Worksheet D**. Look at the table as a class, and have students figure out what mode of transportation people or products would have used to get to their destination in both the mid-nineteenth century and today. Refer to the modes of transportation written on the board. Explain to the students that railroad routes in Ohio were not completed until the 1850s. Project **Map A**; or pass out as a handout to help answer the questions.
3. Now, compare the similarities and differences, and ask students to think about advantages and disadvantages for both. For example, though cars are quicker than taking a canal boat, they also have harmful effects on the environment. (This activity can also be completed as a handout.)





Answer Key

WORKSHEET A

Ohio Canal Lines

1. Miami & Erie and Ohio & Erie Canals
2. Cincinnati and Toledo; Portsmouth and Cleveland
3. Columbus; Yes
4. (Answer will vary by region; teacher must determine based on location)
5. Transport products; Transport people; Travel long distances (Other answers may be acceptable)
6. Inexpensive; Large amounts of goods could be shipped, i.e. equivalent to load capacity of modern day semi truck (other answers may be acceptable)
7. Slow; Canals freeze in the winter

WORKSHEET B

Canal Bill of Lading

1. Primary Source
2. September 18, 1847
3. Canal Operating Company
4. Agricultural products: corn, flaxseed
5. They made a living by selling the crops they farmed
6. Miami & Erie Canal
7. Ohio & Erie Canal
8. The Muskingum River

WORKSHEET C

Coming to America, Getting to Ohio

1. Primary Source
2. Because travel became: easier, faster, more direct, cheaper (all possible answers)
3. November 13, 1840
4. Tom lives in Ireland. Edward wants Tom to come to America.
5. Possible answers: work; opportunity; to be with his family
6. Steamship, steamer boat, canal boat
7. Seven weeks

8. Atlantic Ocean
9. Hudson River; Lake Erie
10. Railroad

WORKSHEET D

Transportation Then and Now

1. **Then:** by horse, stagecoach
Now: car, bus
Compare: car/bus is faster; horse, stagecoach less damage to the environment; stagecoach could carry a small group of people just like a car
2. **Then:** canal boat
Now: semi truck; railroad
Compare: can carry equally large loads; semi is faster; truck contributes to pollution; railroads run on tracks; boats go on water
3. **Then:** canal boat; steam boat
Now: moving van; plane
Compare: canal boat could carry more passengers than moving van; van and planes are much faster than boats; boats travel on water, vans travel on land; planes travel in the air
4. **Then:** stagecoach; horse
Now: car; bus
Compare: car/bus is faster; horse, stagecoach less damage to environment; stagecoach could carry a small group of people just like a car
5. **Then:** boat
Now: boat; plane
Compare: we still use boats today to transport cargo; planes are faster than boats; planes can't carry as much as boats
6. **Then:** walking
Now: school bus
Compare: bus is faster, but takes fuel, the boy who walked to school was getting exercise versus the boy who rode the bus



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Ohio Canals Map A



Key

-  Canal Line
-  City
-  Capital



A Passenger Boat on the Ohio Canal - 1830

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WORKSHEET A Ohio Canal Lines

NAME: _____ DATE: _____

Instructions: Look closely at the map of Ohio's canals to answer the questions below.

1. Look at the map and find the two canals lines. What are their names?

2. Which cities does each of the canals connect?

3. Find the capital of Ohio and circle it on the map; Does the capital have a canal stop?

4. Find the city you live in and circle it on the map, if your city is not listed, find the city closest to your own. Does your city have access to a canal route?

5. List three reasons why Ohioans needed canals:

1. _____

2. _____

3. _____

6. List two advantages of using the canals to travel or to ship goods:

1. _____

2. _____

7. Name two things that were not advantages when using canals to travel or ship goods:

1. _____

2. _____

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WORKSHEET B

Canal Bill of Lading

NAME: _____

DATE: _____

Instructions: Below is an example of a bill of lading for shipping merchandise.
Canal operators issued bills of lading to customers sending goods by canal boat.
Read the bill of lading carefully, and then answer the following questions on **page 9**.

Lafayette 18 September 1847

Shipped in good order by M.W. Earheart on board the good canal boat, Palestine, whereof Stevenson is Master; the following articles marked, numbered, and consigned as below, and which are to be delivered in like good order to the consignees with dispatch.

In witness whereof, the Master of said boat has affirmed unto three bills of lading of this tenor and date, one of being accomplished, the other to stand void.

<i>Marks</i>	<i>BBLs. [barrel]</i>	<i>Owners</i>	<i>Care Of</i>	<i>Consignee</i>
<i>From:</i>				
<i>Brown & Wright, Oneida</i>	<i>Fifteen Hundred bushel shell corn (1500).....</i>			<i>8400 pounds</i>
<i>New York</i>	<i>Freight 9 cents per bushel</i>			
<i>For Hoddard and Main,</i>	<i>Thirty pieces flaxseed</i>			
<i>Toledo, Ohio</i>	<i>One dollar each</i>			<i>13.185</i>
<i>Beat Metrick & Dell M</i>	<i>One piece and ten bbls [barrel] flaxseed</i>			
<i>New York</i>	<i>Freight, fifty six cents per bbl [barrel]</i>			
	<i>On deck at owners risk.....</i>			<i>2322</i>



(Center for Archival Collections, Bowling Green University)

Find the original document at: <http://worlddmc.ohiolink.edu>



WORKSHEET B

Canal Bill of Lading

NAME: _____

DATE: _____

1. Is this a primary or secondary source?

2. When was this bill issued?

3. What type of company issued this the bill?

4. What things were being shipped, and where were they being sent?

5. What can the types of things being shipped tell you about how the person who produced them made a living?

6. Find Toledo, Ohio on the map of the Ohio canal system (**Map A**).

On which of the two canal lines would the goods listed on the bill of lading have been sent?

7. Imagine you are a wheat farmer in Zanesville, Ohio.

Which canal line would you have used to ship your crop to Cleveland, Ohio?

8. In order to ship his wheat, the Zanesville farmer would first have to send his wheat up which river, that feeds into the canal?



WORKSHEET C

Coming to America, Getting to Ohio

NAME: _____

DATE: _____

Below is a portion of a letter written by an Ohio resident to a relative.
Read the letter, to help answer the questions on **page 11**.

1840

Nov 13

East Liverpool Columbia County State of Ohio

Dear Tom

I have at length taken up my pen to write to you. I would have wrote sooner but as we thought you had some inclination of coming to America...you would likely do well in any of the large cities such as New York, Philadelphia, or Pittsburg... Pittsburg is not the cleanest part of America...there is a family in Pittsburg of the name Everson...they have a son...he says if you would come here there is no doubt but you would do well...he works at a foundry and gets a deal of money....

If you should come...go first cabin passenger or in one of the steamers and be careful if you come, when you get to New York....our stay in New York was short but we put up with it...as it was near the Hudson river.....this river we came up in steamboat to Albany and then we took the canal boat to Buffalo and crossed Lake Erie in another steamboat and then in a canal boat...18 miles from East Liverpool Ohio and this part we came by land as it was Saturday evening and wished to complete our journey which we did on Sunday morning after a journey of 7 weeks... if we had taken the Philadelphia route we would have been here much sooner as it is some hundred miles nearer....but if you come...you had better go on railroad to Philadelphia and then come out to Pittsburg

*Sarah & Edward Martin
East Liverpool Ohio*

Nov 17

*Mr. Thomas Bissell
Organist Monaghan
Ireland*

1840



Find the original document at:
<http://worldddmc.ohiolink.edu>

(Ohio Historical Society)



WORKSHEET C

Coming to America, Getting to Ohio

NAME: _____

DATE: _____

1. Is this letter a primary or secondary source?

2. After the Erie Canal connecting the Hudson River in New York to Lake Erie was completed, the number of people living in Ohio increased. Why might this be?

3. When was this letter written?

4. Why is Edward writing to Tom, and where does Tom live?

5. What reason might Tom have for moving to America?

6. Edward describes his travel from New York to Ohio in his letter to Tom. Edward mainly traveled by water. What types of boats did Edward's family travel on?

7. How many weeks did Edward's journey last?

8. If Tom were to travel from Ireland to East Liverpool, Ohio, what ocean would he have to sail across?

9. Tom would be able to walk to East Liverpool once he arrives in Ohio on the canal boat, but first, Tom must get to the Ohio & Erie Canal. Tom will arrive in New York after his ocean voyage. Look at **Map A** to determine what river and what lake Tom must first travel in order to get to the Ohio & Erie Canal.

River: _____

Lake: _____

10. East Liverpool, Ohio is very close to Pittsburg, Pennsylvania. Edward tells Tom about a faster way to get to East Liverpool if he goes to Philadelphia first. What does Edward tell Tom he should take, a canal or railroad?

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WORKSHEET D

Transportation Then and Now

NAME: _____

DATE: _____

Think about transportation in the mid 1800s and transportation now. The first railroads connecting places in Ohio were not completed until the 1850s. Think about how people and goods were transported long distances, and then think about how we transported them then, without the help of railroads, and how we transport them today and write your answers in the boxes. Finally, compare transportation then and now, think about how they might be different and how they are similar, and write your answer in the box.

What's Going Where:	Transportation Then (1840)	Transportation Now (Today)	Compare
Person traveling from Cincinnati to Toledo in winter			
Farmer shipping corn from Cincinnati to Toledo			
Family migrating from New York to Ohio			
Person traveling from Columbus to Cincinnati			
Cargo being sent to Europe from New York			
Boy going one mile to school			