

LESSON N
GIVE ME A “C”
GIVE ME A “D”
GIVE ME THE C & D CANAL!!!

Standards:

Geography Standard One: Students will develop a personal geographic framework, or "mental map," and understand the uses of maps and other geo-graphics.

Geography Standard Two: Students will develop a knowledge of the ways humans modify and respond to the natural environment.

Geography Standard Four: Students will develop an understanding of the character and use of regions and the connections between and among them.

History Standard Four: Students will develop historical knowledge of major events and phenomena in world, United States, and Delaware history.

Objectives: 1) Students will estimate the distance from Baltimore to Philadelphia via the water route before the Chesapeake and Delaware Canal was built.

2) Students will explain how transportation and economic necessities dictated the building of a canal.

3) Students will choose the best location for constructing the canal and explain why it is the best choice.

4) Students will use a Toll Chart to estimate the cost of traveling through the C & D Canal.

Materials: 1) *Lesson N, Delaware Public Archives, Toll Chart, General Reference*

2) Map/Worksheet of the Delmarva Peninsula and surrounding area.

3) Worksheet for Toll Charges.

4) Ruler

5) 4 sheets of newsprint

6) 4 poster markers

Procedures: 1) Pass out the small map/worksheet of the Delmarva Peninsula and the surrounding area. Point out the two largest cities in the region at that time (early 19th century) - Baltimore and Philadelphia.

(Inform the students that these cities were the two most important commerce centers in the area. A commerce center is a place where goods and services are exchanged for money or other goods and services.)

- 2) Instruct the students to use their pencils to draw the quickest water route between these two cities. Using the scale, the students should estimate the number of miles they would have to travel by water to get from Philadelphia to Baltimore. The students may need rulers to help complete this task. Remember that the road system for the area was still in poor shape and needed much improvement.
- 3) Once students finish drawing their water route and estimating the distance, begin a discussion using the following questions:
What could be done to make this trip shorter and faster? (Look for some suggestions.) Many people had the idea to build a canal.

What is a canal? (A canal is a man-made waterway dug across land. Canals serve as a connector between two natural waterways.)

What was the purpose of this canal? (Cut hundreds of miles off the travel time between Philadelphia and Baltimore. Many people in Maryland and Pennsylvania, as well as Delaware, wanted to shorten the trip between these two major cities.)

- 4) Explain to students the process in constructing a canal. It may be helpful to draw a sketch on the board to illustrate this process. To build a canal, many men with shovels would dig a long ditch wide enough and deep enough that a boat could move through the canal once it was filled with water. When a canal was close to completion, the last dirt separating the canal from the natural water source was dug out and water would fill the canal.
- 5) Ask: Where should the canal be built? Hang 4 posters around the room each with the number 1, 2, 3 or 4 written on it. Instruct the students to look at their maps of the region again. Each map has the same numbers 1, 2, 3, and 4 written on it. These numbers are placed at different points on the Delmarva Peninsula. Ask the students what number they would choose for a location to build the canal. Have students stand by the poster with the number of their choice. Have the students in each group write down on the poster all the reasons for choosing that particular spot on the peninsula to build the canal. Then, have groups use the scale on their individual maps to measure the distance from Philadelphia to Baltimore for their number. Have groups share their reasons and total distance aloud. Have students write the total number

of miles for each position on the corresponding location number.

- 5) Inform the students that the canal was built at number 1. Construction began in 1824 and was completed in 1829. It runs 13.6 miles through Delaware and measures over 19 miles total. The C & D Canal shortened the trip between Philadelphia and Baltimore by three hundred miles. Four locks were needed to bring vessels through the canal. A lock in the canal raises and lowers the water level in a certain area of the canal in order for the ship to travel through the canal. The canal has been enlarged many times since it was built.

- 6) Pass out the toll chart for the C & D Canal. Inform the students that they will be taking a load of cargo through the canal. Vessels passing through the canal were charged according to the number and type of goods they were carrying. Give the students the worksheet with the list of materials that they will be carrying. The students will identify the item on the list, find the price, then add the items together to reach a total cost. Discuss.

- 7) When all the students have completed the exercise, conclude the lesson by asking the class if they believe something that was built so long ago (more than 170 years ago) is still being used today. Thumbs up for “yes” and thumbs down for “no”.(The answer is yes, the C & D Canal is still in use. During World War II it was used as a vital passageway to avoid the German submarines that patrolled the Atlantic Coast.) Then, have students respond to the following prompt: What is a canal? Why was the C & D Canal built?

BACKGROUND INFORMATION

During the first half of the nineteenth century, the United States was working to improve its transportation system. Along with new and improved roads, America began to build canals. Canals are man-made waterways that create a connection between two natural waterways. During this time period a canal was made by hand with men digging a long ditch that had the depth and width to handle the ships of the era. The ends of the canal were not dug out until all other sections were completed. When the ends were finally dug out, the water from the natural waterways would fill the canal.

Many people of this time period had dreamed of a faster water transportation route between Philadelphia and Baltimore - the two major seaports in the area. To shuttle between these two cities, a boat would have to sail around the southern tip of the Delmarva Peninsula. To dramatically reduce the time and distance, a canal was proposed between the Delaware River and the Chesapeake Bay.

In 1824, the construction of the Chesapeake and Delaware Canal began. The new route would shorten the distance between Philadelphia and Baltimore by three hundred

miles. Completed in 1829, the Canal was 19 miles long (13.6 miles through Delaware), ten feet deep, and thirty six feet wide. Originally, a set of four locks controlled the level of water needed for ships to pass through the Canal. The ships would be navigated through the Canal by mules towing the crafts by rope while walking along the north bank. Through the years, the Chesapeake and Delaware Canal has been enlarged to accommodate the increasing size and traffic of new ships and boats that use the Canal. It is still a vital link between Philadelphia and Baltimore.

During World War II, the Canal was important to the war effort because supply ships could make runs between the two port cities while avoiding the German submarines that lurked in the Atlantic Ocean close to America's eastern seaboard.

BACKGROUND FOR DOCUMENTS USED IN THIS LESSON

The document entitled "Tolls To Be Paid By Vessels Navigating The Chesapeake and Delaware Canal" was printed in 1831 and is the flipside of a document listing the regulations of the Canal. The document can be found in the General Reference Collection, folder #28, (Series Number 9270.1). This record was originally part of the collection at the Historical Society of Delaware and was donated to the Archives in 1951.

BACKGROUND FOR THE WORKSHEET

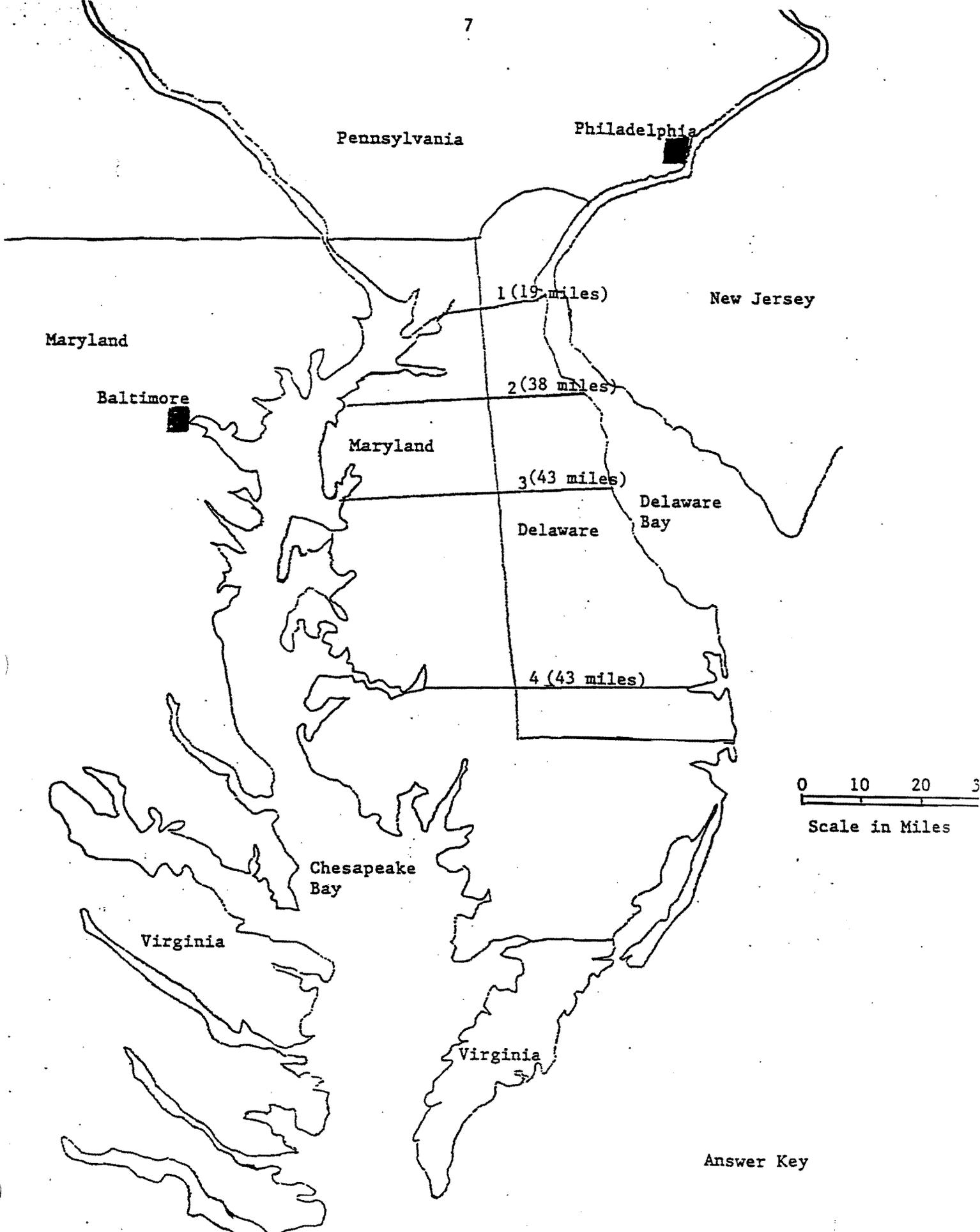
The worksheet will be used in conjunction with the primary source entitled "Tolls to be Paid by Vessels Navigating the Chesapeake and Delaware Canal". Ensure that the students understand that they will need to calculate the number of items with the prices given for each item. For example, the first item on the list is 300 pound of almonds. The toll chart lists almonds for 8 cents per 100 lbs. To reach a total cost for the almonds the student will need to multiply 8 by 3 to reach 24 cents. Like the toll chart, the worksheet lists D for dollar and C for cent.

LET'S USE THE CHESAPEAKE AND DELAWARE CANAL!!!

answer key

You are a Philadelphia Merchant who is shipping a boatload of food to Baltimore. Using the Chesapeake and Delaware Canal will reduce the time needed to reach Baltimore. Below is a list of goods aboard your ship. Add the cost of the items together to find the total cost of traveling through the Canal.

	D	C
300 lbs.(pounds) of Almonds		24
3 Barrels of Apples		12
200 lbs. of Bacon		10
5 Bushels of Beans		10
2 (Fat) Cattle		50
3 Boxes of Chocolate		6
1 Cask of Cheese		10
7 Barrels of Crackers and Biscuit		49
3 Barrels of Fish (Salted)		21
2 Boxes of Mustard		4
2 Bushels of Peaches (dried)		6
4 Barrels of Potatoes		20
2 Bushels of Turnips		1
Fee for Passing Through the Canal	4	
<u>TOTAL</u>	6	23



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	D	C
300 lbs.(pounds) of Almonds	_____	_____
3 Barrels of Apples	_____	_____
200 lbs. of Bacon	_____	_____
5 Bushels of Beans	_____	_____
2 (Fat) Cattle	_____	_____
3 Boxes of Chocolate	_____	_____
1 Cask of Cheese	_____	_____
7 Barrels of Crackers and Biscuit	_____	_____
3 Barrels of Fish (Salted)	_____	_____
2 Boxes of Mustard	_____	_____
2 Bushels of Peaches (dried)	_____	_____
4 Barrels of Potatoes	_____	_____
2 Bushels of Turnips	_____	_____
Fee for Passing Through the Canal	4	
<u>TOTAL</u>	_____	_____

