Lesson Title: Transportation: A Change Over Time

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Lesson Description: This lesson gives students the opportunity to look at transportation as it changes over time. Students will analyze material to determine why transportation was important and why the design and materials were an integral part.

Grade Level: 4-5

Standard: History Standard Two: Students will gather, examine, and analyze historical data.

End of Cluster Expectations (Benchmarks): 4-5 Benchmarks: Students will examine historical materials relating to a particular region, society, or theme; chronologically arrange them, and analyze change over time.

Essential Question: How does transportation change over time?

Assessment: Constructed Response

Benchmark Statement: This assessment should give evidence of the student’s ability to arrange historical documents in chronological order and describe the reasons why the construction of bridges has changed.
Prompt: Why has the design or materials used to construct the bridges changed over time? Explain your answer with evidence from the photographs.

Rubric:
2 – This response gives a valid reason of design or materials with an accurate and relevant evidence from the photographs.
1 – This response gives a valid reason with inaccurate, irrelevant, or no evidence.
0 – Inaccurate response.

Sample Response:
2- Bridge A shows a bridge made of stone. Bridge B shows a moveable bridge. The design may have changed because of boats that could easily pass under the moveable bridge.
1- Steel is stronger than stone.

Assessment: Constructed Response

Benchmark Statement: This assessment should give evidence of the student’s ability to determine why roads have changed over time.
This primary source is a taxicab fare schedule that shows how much passengers were charged in Washington, D.C. in 1892.

How might a modern taxicab fare schedule be different?

a. A modern taxicab schedule shows that more people took taxis.
b. A modern taxicab schedule shows the fare would be cheaper today.
c. A modern taxicab schedule might show that travel would be faster today.
d. A modern taxicab schedule shows that people would take the bus in 1892.

Answer: c
Objective(s):
- Students will be able to explain some types of transportation used throughout history.
- Students will be able to discuss the reasons why transportation has developed.
- Students will be able to chronologically arrange transportation by analyzing pictures and documents that are related to it and explain why it has changed over time.

Prior Knowledge and Skills: Students should be familiar with primary and secondary sources.

Time to Complete: 2 days, 45 minutes

Materials/resources needed:
- Construction paper (1 for each group of 3-4 students)
- 1 Marker for each group
- Tape
- Group Handout 1- Train from late 1850s Stopped in Felton, Delaware
- Group Handout 2- 1859 crossed the Nanticoke River; wood railroad bridge
- Group Handout 3- 1885 railroad bridge that overlooks Red Clay Creek
- Group Handout 4- 1950 steam locomotive
- Group Handout 5- Electric locomotive from 1935
  (It may be beneficial to place Group Handouts on tag board and laminate)
  (If you have more than 25 students it may be beneficial to make 2 copies of each group handout)
- Overhead transparency (1 for each group)
- 1 Transparency marker for each group
- Overhead projector
- Visual 1- Delaware map from 1819 (transparency)
- Visual 2- Map of Railroad system post 1856 (transparency)
- White board, chalkboard or chart paper
- Handout 1- Peninsular Rail Road Line
- Visual 3- Street car
- Visual 4- horse and buggy
- Visual 5- dirt road
- Visual 6- truck
- Visual 7- yacht
  (It may be beneficial to place visuals on tag board and laminate)
  (If you have more than 25 students it may be beneficial to make 2 copies of each group handout)
- Notebook paper

Procedure Steps:
Students should be in groups of three to four students.
1. Have students brainstorm types of transportation that has been used throughout history.
   Pass out a piece of construction paper and a marker to each group. Students write the list
on the construction paper. Ask students to look at their list and arrange the list in order from early history to present day on the other side of the construction paper.

2. Have each group tape their transportation list on the board or around the room. Go over each list. Ask students what may be missing from some of the group’s lists (students may say that some groups are missing a type of transportation, there may be discrepancies in order). Ask students what are the similarities of the lists (types of transportation may be the same, the order may be similar). Ask students to name some of the differences they may see from the lists (the order may not be the same, types of transportation). Ask students if there is anything else that catches their attention from the lists.

3. Give each group a picture of a train and/or railroad (Group Handouts 1,2,3,4 and 5). Have the groups list what they see from the pictures. To guide students you may want to ask: What materials did the designers use to make the railroad or train? What do you think the train or railroad was used for? When do you think this train or railroad was made and why (1700s, 1800s, 1900s). The students should write what they think on an overhead transparency.

Description of Group Handouts 1-5

Group Handout 1- Dated late 1850s; locomotive that made stops in Felton, Delaware one of the many towns that grew with the railroad.
Group Handout 2- Dated 1859; wood girder railroad bridge
Group Handout 3- Dated 1885; Railroad bridge over Red Clay Creek
Group Handout 4- Dated 1950; steam locomotive
Group Handout 5- Dated 1935; Electric locomotive- electric locomotives were faster than steam locomotives and were cheaper to operate.

4. Allow each group to come to the overhead, show their picture, and review their overhead with the class. After each group has reviewed their picture and overhead, allow one member from each group to come up with their railroad or train picture and begin to arrange themselves in order of time. The students now become a human time line. The other students may direct their classmates as to where they should stand.

5. After the human timeline is completed, discuss with the students the reasons why they arranged their classmates in that order. Ask: Why did you arrange your classmates in this order? (students may respond with the materials that were used such as wood then steel; the way the picture looks- it may look old or worn to the students; the way the people are dressed in the picture) Why might the designers of the railroads and trains use the materials they did to construct them? (Students may respond that is all they had available at the time; they were the best products for the time period; they wanted it to withstand the weather or elements). Why do you think the designs of the railroads and trains change? (Students may respond the trains became bigger; the trains became faster, the materials were becoming better to build with; the trains may have had to carry more people or goods)
DAY 2

Arrange the handouts in the order the students had on from the human timeline.

6. Ask students why they think trains were an important part in history. (Students should see that trains helped people get from place to place quicker; Students should realize that the trains served to transport goods and services; Lead students to see that trains allowed for the developments of towns and cities because people could get to places easier; and that it also allowed for people to visit places that were too far by foot or horse etc)

7. Show the Delaware map from 1819 (Visual 1). Let the students know that this is a map of Delaware from 1819. Ask students what they see on this map (flat land, not as many towns as we have now; no roads etc).

8. Place the map of a railroad system (Philadelphia, Baltimore, Wilmington) (Visual 2) next to the 1819 map. Tell the students that this is a map of a railroad system that ran through Wilmington, Baltimore and Philadelphia. Draw a picture of a T-chart on the board or chart paper or transparency. Label one side of the T-chart as 1819 map of Delaware and the other side as Map of Railroad System (See Example below). Ask students to tell some of the differences they may see in the two maps. Place the differences on the T-chart under the appropriate heading. (Railroad system goes through various places; Runs by …; stops in …the map from 1819 shows no railroads or roads at all)

<table>
<thead>
<tr>
<th>1819 map of Delaware</th>
<th>Map of Railroad System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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9. Pass out a copy of Peninsular Rail Road Line (Handout 1). Allow students a moment to look at and think about what they are seeing. Have students tell the class the types of things that are interesting to them from this handout (title, headlines, bold items, times, cities etc). Ask students why this document may be important (students may respond it gave a schedule; it told people when to get to the train station; it allowed people to visit other places). Ask students to look at the subtitle “CHANGE OF HOURS. On and After Monday, January 5th, 1863”. Ask students why they think there had to be a change in the schedule (Students may respond: more people riding the trains; more places to go; towns might have been developed after trains came through town).
10. Ask students to look around the class at their lists of transportation. Ask students if there are other types of transportation that may have been excluded (Students may have missed roads, bridges, boats etc). Show students some pictures of transportation throughout time (visuals 3, 4, 5, 6 and 7) street car, horse drawn buggy, and dirt road, truck and yacht. Place them on the board or around the class so that students may easily see them. Ask students to choose one of the pictures and list on their notebook paper what has changed in design and materials in comparison to then and now. Give students about 7-10 minutes to complete this.

Closure: Discuss with students the pictures they have chosen. What were the materials used in the pictures? What materials do you think we might use now? Why do they think the designs have changed from these pictures?

Assessment: Administer the assessment.

Citations:


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Broadsides, leaflets, and pamphlets from America and Europe

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Delaware Department of Transportation
Pictures of bridges, roads, trains, and railroads


Historic photos and illustrations in this book are from the collection of the Delaware Department of Transportation, unless otherwise noted. Most contemporary bridges photos were taken in 1988 or 1997 during field inspections. Original graphics were prepared by Joe Macasek of MacGraphics, Morristown, New Jersey. Photos courtesy of the Delaware State Archives, Dover:
Delaware Public Archives
Delaware maps: Delaware map from 1819 and Map of Railroad System; street car; yacht; truck
http://www.state.de.us/sos/dpa/

The maps can also be found in the Delaware Public Archives’ education kit entitled “Teaching Delaware History with Primary Sources.” This kit has been distributed to elementary schools throughout the state. In addition, the kit can be found at most Learning Resource Centers throughout the state.
Typical county roads on June 21, 1935. All of the state’s remaining county roads were taken over by the state highway department on July 1, 1935 with the goal of improving them for all-weather use.

Visual 5
This motor truck was manufactured for the Delaware Safety Council in 1924. The Council, founded in 1918/1919 by Irenee du Pont, was shifting its focus from workplace to traffic safety in the 1920s (Motor Trucks; folder 1, photo 1)
Visual 7

During the late 1920s and through much of the 1930s, Jackson & Sharp concentrated on building pleasure craft. Seen here is the *Nimrif*, a power yacht built for F. V. Deslodge, Sr., in 1934.

(Ships; Pleasure Craft—Power; folder 5, photo 15)
Street Car: This photo of a Wilmington City Railway Company street car, manufactured in 1895, was taken at the intersection of Delaware Avenue and DuPont Street in Wilmington, Delaware.

(Street Cars—Domestic; folder 2, photo 22)
Group Handout 2
Group Handout 5