

## Part I: Thematic Primary Source Set

Goal: Demonstrate how primary sources can support at least one teaching strategy.

Topic/Big Idea: Inventions

Grade Level and Subject Area: 8th Grade Science

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## Part II: Classroom Activity Plan

**Goal:** Create primary source-based activities that help students engage in learning, develop critical thinking skills, and construct knowledge.

**Essential/Investigative Question:** What are the benefits and drawbacks of the inventions of transportation?

**Objective(s):** Students will discuss inventions of transportation, how they have changed, and identify both drawbacks and benefits of each mode of transportation.

**Standard(s) Addressed:**

- SCI.8.S8.A.1.2- Identify and explain the impacts of applying scientific, environmental, or technological knowledge to address solutions to practical problems.
- SCI.8.S8.A.1.3 - Identify and analyze evidence that certain variables may have caused measurable changes in natural or human-made systems.
- SCI.8.S8.D.1.3-Describe the potential impact of human-made processes on changes to Earth's resources and how they affect everyday life.

**Procedure:**

1. Putting students in groups of three, assign each group one picture.
2. Each group will use the Library of Congress Analyzing Photographs and Prints handout to analyze the picture.
3. Groups with the same picture will get together to share information and answer the following questions:
  - a. Who was this means of transportation mostly created for and why?
  - b. What may have led to the need for this or similar types of transportation?
  - c. What materials were used to create this type of transportation?
  - d. What energy sources are used to allow this means of transportation to run?
4. A spokesperson from each group will present their findings.
5. On sticky notes, students will list two advantages and two disadvantages of each means of transportation and post them on a poster board with each picture.
6. The class will discuss the advantages and disadvantages of each presented form of transportation and then transportation as a whole, focusing on materials needed, energy used, and technological advances.
7. Using the Top Hat method, students will write a compare/contrast paper on any two forms of transportation or on the advancement of transportation (materials, energy and societal impact) in a past time period or in the future.

