

Third Grade

DISCOVER AMERICA

Course 18 - Teacher Guide



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Third Grade

Teacher Guide



Key Themes

- Creative Liberty
- Community
- Teamwork
- Risk-taking and Experimentation

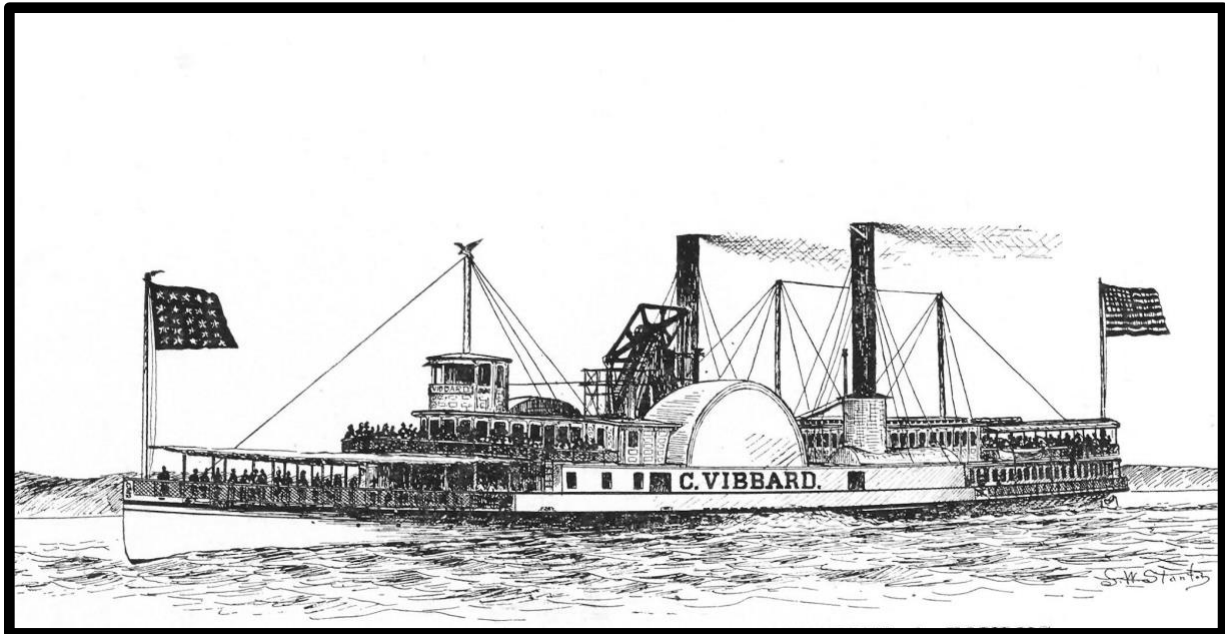
Core Values

- Community
- Life
- Liberty

Learning Objectives

Students will be able to:

- Explain the importance of creative liberty.
- Identify the value of a community that supports innovation.
- Experiment with new ideas and materials in innovative ways.



Fulton's Steamboat - Third Grade

Key Terms

- 01 **inventor:(maker):** a person who creates a process or device that can improve Circumstances.
- 02 **visionary:(dreamer):** a person who creatively thinks about the future.
- 03 **river transportation:(boat)** a boat or ship that moves up and down rivers.
- 04 **efficient:(able)** working in a well-organized way.
- 05 **engineer:(construct)** to design items that will solve problems and make products more accessible.
- 05 **steam engine:** an engine that uses steam to generate power.
- 06 **innovation:(develop)** a new method, idea, or product that helps the community.
- 07 **community:** a group living in an area with similar interests, ideas, attitudes, and goals.

Fulton's Steamboat - Third Grade

Introduction

TELL Students

Begin by asking students about their favorite toys or devices. Continue the conversation by explaining that electronic devices, bicycles, sports equipment, art supplies, and even playground equipment all started as creative ideas. Innovators wanted to make life more enjoyable or easier for themselves and others.

You can expand the discussion by mentioning that those who come up with new ideas or improve existing products are often called visionaries. Visionaries have the ability to see the bigger picture and make a significant impact on the lives of many people. Tell students that some of them may even become visionaries for their generation.

Make a list of items that students enjoy using in the classroom (computers, tablets, fidgets, smartboard, games). As you create the list, guide students to understand that an inventor created the items. Explain that someone had a vision for the item and had to work creatively to make the item a reality.

ASK Students

- What is creativity?
- What is liberty?

- What is creative liberty?
- What is innovation?
- What is a visionary?
- How do you become a visionary?
- Why are visionaries important?

WATCH

Star Spangled Adventures Cartoon Ep. 18: America Moves

<please insert QR code to the video>

Fulton's Steamboat

Lesson Guide

TELL Students

Please read the following passage to learn more about an important inventor and visionary: Robert Fulton. After the American colonies gained independence from Great Britain in 1776, many people from the United States started moving to different places. They explored new lands further south and west. This was exciting, but traveling was difficult and slow.

Today, if we want to visit our families or friends who live far away, we can easily use cars, buses, airplanes, or other ways to travel. But back in the early 1800s, that wasn't the case.

In the 1800s, people didn't have many options for transportation. They had to rely on horse-drawn carriages, wagons, or even boats for travel, especially when moving goods from one place to another. [Stock Image Wagon].

Thankfully, there were creative people like Robert Fulton. He was born in 1765. He started as a jewelry apprentice but later became interested in painting and art. He went to Europe to study art and even had the remarkable opportunity to paint a portrait of Benjamin Franklin, who was really famous at that time. However, his paintings didn't bring in much money.

ASK Students

- What did Robert Fulton want to do when he was a child?

(allow students to respond)

TELL Students

While he was in Europe, Robert Fulton began exploring other interests, especially new inventions. One thing he got interested in was engineering, which uses science, math, and design to solve problems and make things better. He wanted to find ways to improve transportation on canals and ships. [Stock Image Canal].

In 1797, Robert Fulton started working on a submarine called the Nautilus. He wanted to sell it to the French Navy, but they weren't interested. However, he caught the attention of Robert Livingston, a lawyer from New York who had been involved in writing the Declaration of Independence. [Stock Image Nautilus].

Show Video: Engineering a Steamboat (3rd Grade) on Vimeo. [need link]

Both Fulton and Livingston had a big idea: They wanted to use steam to power boats. There was already a steamboat built in 1787, but it was too expensive to operate. Fulton and Livingston dreamt of making an affordable steamboat for everyone who needed to travel on rivers.

With Livingston's help, Robert Fulton brought an English steam engine to America and used it in a steamboat he had designed. He used his art skills to draw detailed plans for his steamboat, which was unusual at that time.

ASK Students

- What were Robert Fulton and Robert Livingston able to do when they worked together?

(allow students to respond)

TELL Students

In 1806, Fulton returned to America and built, "The North River Steamboat of Clermont." On August 17, 1807, it was time for the steamboat's first trip from New York to Albany. This was a risky test because steam engines were still new and could explode. [Stock Image Steamboat].

The trip had a few problems at first, but Fulton managed to fix them, and the steamboat traveled from New York City to Albany in 32 hours. That might seem like a long time today, but it was a big deal back then!

ASK Students

- How did Robert Fulton and Robert Livingston persevere? What encouraged them to keep going when things were difficult?

(allow students to respond)

TELL Students

Less than a month later, the steamboat, the Clermont, started carrying passengers for a one-way trip costing \$7. It helped transport goods up and down the Hudson River and created new industries.

Thanks to Robert Fulton and others like him, America grew, and people found new ways to make a living by moving their products to sell. Fulton's journey from being a jewelry apprentice to an artist and then an inventor of the first commercial steamboat shows that with creativity, ambition, and determination, we can overcome challenges and make the world a better place. You, too, can approach problems creatively and use your curiosity to find solutions and make the world better for everyone.

ASK Students

- What is something in your home or school that needs to be improved? What can you do to make improvements?

(allow students to respond)

ASK Students

- How did the steamboat change the way people traveled?
How did it improve life?

(allow students to respond)

ASK Students

- Why is it important to have the freedom, or liberty, to be creative?

(allow students to respond)

Brainstorming Worksheet: Creativity and Efficiency

Read the following claim and reasons. Determine if the reasons support the claim. Explain your thinking.

Claim: It was crucial for Robert Fulton and Robert Livingston to develop an affordable steamboat for communities along the Mississippi River.

Reasons:

1. Using affordable materials to build the steamboat allowed boat owners to make a profit.
2. Traveling by steamboat made community members happy because they were able to profit from the steamboat.
3. Faster transportation allowed families and friends to visit and spend more quality time together.

Which reasons support the claim? Explain.

Which reasons do not support the claim? Explain.

Your Turn: How would you spend money when creating a new invention? Why would you want to save as much money as possible?

Make Your Claim:

State your Reasons:

1. _____
2. _____
3. _____
4. _____

Why is spending and saving money important?

Fulton's Steamboat - Third Grade

Third Grade Assessment

Read the questions and answers to students and allow time for them to mark their answer.

Part 1: The following statements are True or False. Students will circle True if they think the statement is true. Students will circle False if they think the statement is false.

1. Robert Fulton started as an apprentice artist. Being an artist was his passion.
(True, False)
2. Before the steamboat, it was difficult to travel along rivers. (True, False)
3. Robert Livingston did not support Robert Fulton. (True, False)
4. Robert Fulton began his engineering career studying shipbuilding. He designed a submarine named the Nautilus that he tried to sell to Napoleon and the French Navy. However, the British Navy purchased his invention.
(True, False)
5. Robert Fulton's first successful steamboat in America was called the Hudson.
(True, False)

Part 2: The following questions are multiple choice. Students will circle the answer they think is correct.

6. Who was Robert Fulton's business partner?
 - A. George Washington
 - B. Benjamin Franklin
 - C. Andrew Jackson
 - D. Robert Livingston

7. What was the name of the first steamboat that sailed up the Hudson River?

- A. Beaufort
- B. Clairevoyant
- C. the Clermont
- D. Bellview

Answer Key

Third Grade Assessment- Answer Key

1. Robert Fulton started as an apprentice artist. Being an artist was his true passion. (True, False)
2. Before the steamboat, it was difficult to travel along rivers. (True, False)
3. Robert Livingston did not support Robert Fulton. (True, False)
4. Robert Fulton began his engineering career studying shipbuilding. He designed a submarine named the Nautilus that he tried to sell to Napoleon and the French Navy. However, the British Navy purchased his invention. . (True, False)
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Resource List

"Studying the past makes it possible for us to understand the human story across time." (NCSS, 1921)

"Knowledge and understanding of the past enable us to analyze the causes and consequences of events and developments and to place these in the context of the institutions, values, and beliefs of the periods in which they took place." (NCSS, 1921)

"The study of people, places, and environments enables us to understand the relationship between human populations and the physical world." (NCSS, 1921)

"Questions related to identity and development, which are important in psychology, sociology, and anthropology, are central to understanding who we are." (NCSS, 1921)

"The study of individual development and identity will help students to describe factors important to the development of personal identity." (NCSS, 1921)

1 <https://www.sam.usace.army.mil/Portals/46/docs/recreation/OP-CO/montgomery/pdfs/10thand11th/ahistoryofsteamboats.pdf>

2 <https://education.nationalgeographic.org/resource/steamboat>

3 <http://www.southernlancasterhistory.org/robert-fulton-birthplace>

4 https://www.pbs.org/wgbh/theymadeamerica/whomade/fulton_hi.html

5 <http://www.southernlancasterhistory.org/robert-fulton-birthplace>

6 <https://lemelson.mit.edu/resources/robert-fulton>

7 https://www.pbs.org/wgbh/theymadeamerica/whomade/fulton_hi.html

8 <https://www.sam.usace.army.mil/Portals/46/docs/recreation/OP-CO/montgomery/pdfs/10thand11th/ahistoryofsteamboats.pdf>

9 <https://lemelson.mit.edu/resources/robert-fulton>

- 10 <https://www.nytimes.com/1987/11/17/opinion/l-why-fulton-achieved-steamboat-success-003087.html>
- 11 <http://www.southernlancasterhistory.org/robert-fulton-birthplace>
- 12 <https://lemelson.mit.edu/resources/robert-fulton>
- 13 <https://www.nytimes.com/1987/11/17/opinion/l-why-fulton-achieved-steamboat-success-003087.html>
- 14 <https://www.sam.usace.army.mil/Portals/46/docs/recreation/OP-CO/montgomery/pdfs/10thand11th/ahistoryofsteamboats.pdf>
- 15 <http://www.eyewitnesstohistory.com/fulton.htm>
- 16 <https://education.nationalgeographic.org/resource/steamboat>
- 17 <https://lemelson.mit.edu/resources/robert-fulton>
- 18 <https://www.sam.usace.army.mil/Portals/46/docs/recreation/OP-CO/montgomery/pdfs/10thand11th/ahistoryofsteamboats.pdf>

Notes