

LESSON PLAN:

Make a Canal Boat

DESCRIPTION:

This craft will allow students to create an Erie Canal boat that they will test to see if it floats! This project will encourage creativity as there are many way to complete it, and students will come up with many ingenious ways to create their very own boat.

Grade Level: 4th grade

Activity Length:

Construction: 45 minutes

Testing: 10 minutes

MATERIALS:

- Aluminum foil
- Bin filled with water
- Construction paper
- Craft sticks or toothpicks
- Drinking straw
- Felt sheets
- Foam sheets
- Glue
- Paper
- Scissors
- String
- Tape

Note: This is a list of suggested materials, but the project can be completed without all items or with replacement materials.

DEVELOPMENT SUBJECT AREAS:

Art

- VA: CR 1.2.3.PK-5
- VA: PR 5.PK-5

Science

- 3-5ETS1-1-2-3
- 5-ESS3-1.2-ESS2-3
- K-2ETS1-1.2.3
- K-ESS3-3

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Teacher Procedure

► DIRECTIONS

Step 1: Have students identify the challenge. "I have to create a boat with the provided materials."

Step 2: Distribute the canal boat templates and sketch paper to students. Have students sketch their boat design using the templates of canal boats to guide them.

Step 3: Have students select items from the materials list and have students trace their boat design on the materials of their choosing. Students assemble their boats and may use as many different types of material as they would like.

Step 4: Once the boats are completed instruct students to bring them to test in a bin of water.

Step 5: If the boat floats....SUCCESS! If the boat sinks or students would like to make changes, allow time for adjustments to be made to boat designs.

BONUS STEP: Once each student has successfully built their boat, add coins, marbles, or paper clips one-by-one to see how much "cargo" it can hold.

► VOCABULARY

Durham boat: A large wooden, flat-bottomed, double-ended cargo boat.

Erie Canal: A human-made waterway built across Upstate New York.

Enlarged Erie Canal Boat: A "working boat" which carried goods and people on the Erie Canal after it was enlarged in the mid-1800s.

Packet boat: Passenger boats used on the Erie Canal which traveled on advertised routes and schedules.

► ERIE CANAL BOATS

Durham Boat



Buffalo Maritime Center



New York State Library

Packet Boat

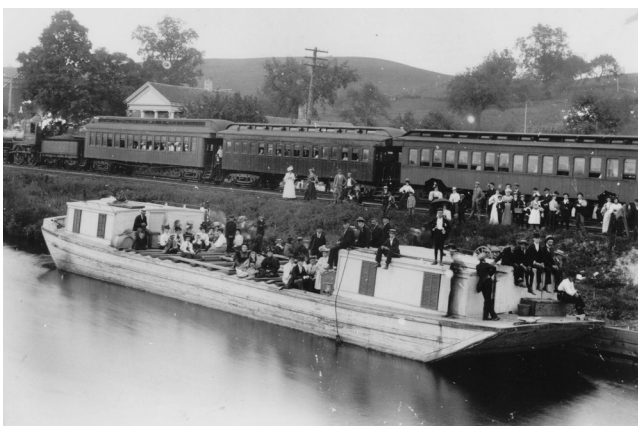


Keith Boas

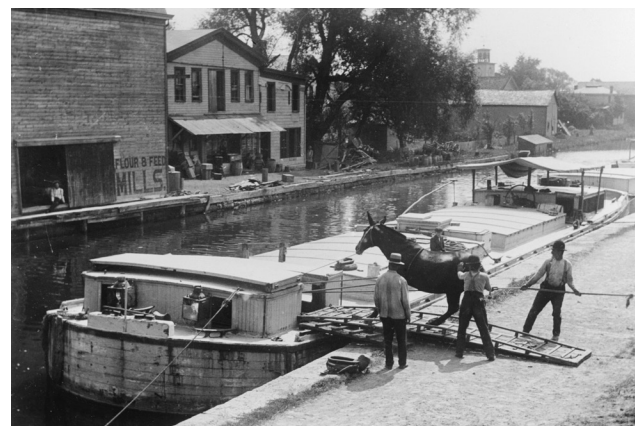


Fort Hunter Canal Society

Enlarged Erie Canal Boat

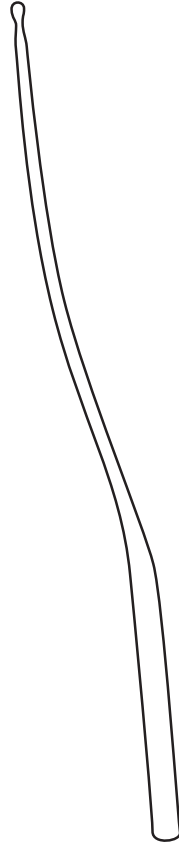
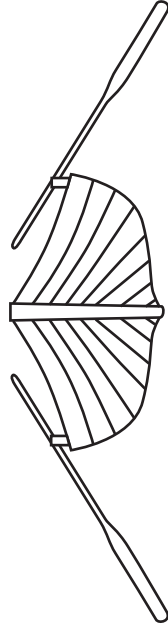
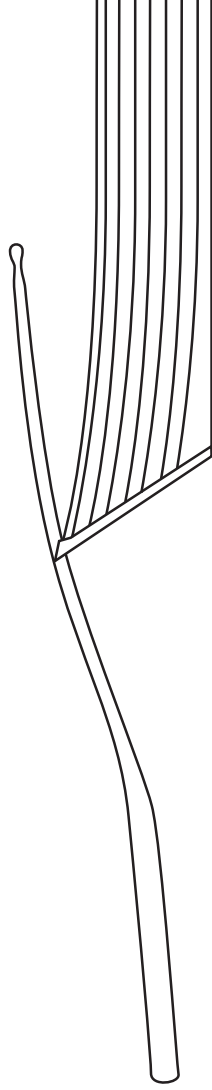
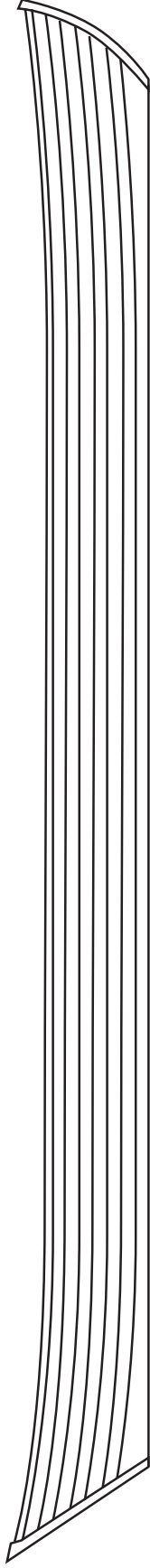
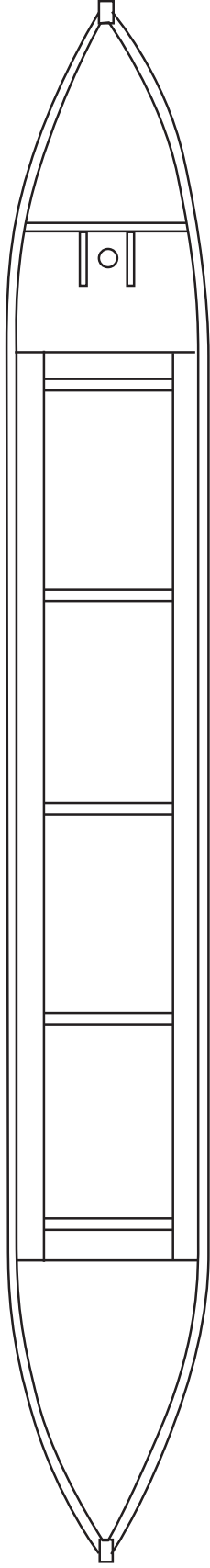


Canal Society of New York State

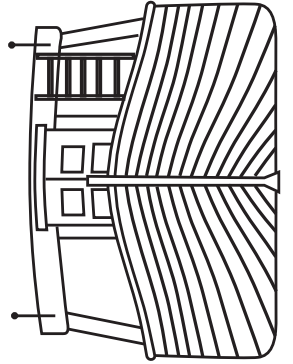
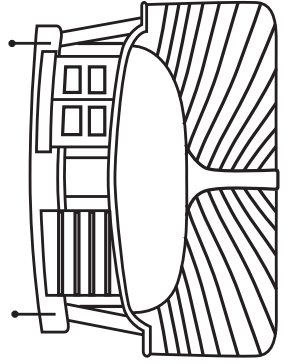
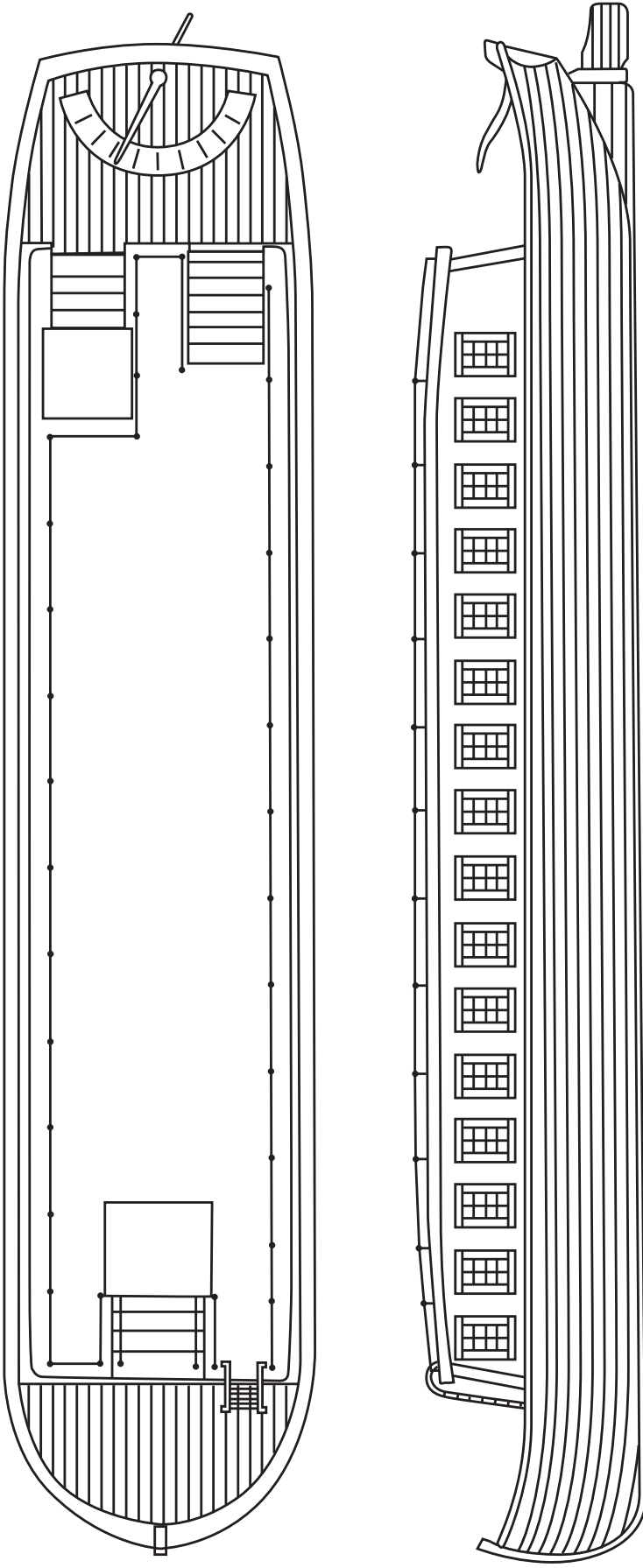


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► DURHAM BOAT



▲ **PACKET BOAT**



► **ENLARGED ERIE CANAL BOAT**

