



LESSON: GO WITH THE FLOW ON THE AMOSKEAG CANAL

(To follow Amplify CKLA 2, Knowledge 7: Westward Expansion, Lesson 3: Journal of a 12-year-old on the Erie Canal)

At a Glance

In this lesson, students extend their knowledge of the Erie Canal by reading non-fiction entries and analyzing historic documents related to the Amoskeag Canal in Manchester, New Hampshire. If time allows, students can build their own model canal.

Primary Focus Objectives

- Students will analyze a painting for evidence of how waterways were used in 19th-century New Hampshire.
- Students read non-fiction texts about canals in New Hampshire and identify the main idea of paragraphs.
- Students will analyze a map of Manchester and explain how canals helped people use the Merrimack River at that location.
- Students will experiment with simple materials to demonstrate how a canal works.

Formative Assessment

- Reading Reflection
- Canal Cartoon
- Optional Mason's Challenge: Canal Model

Standards

CCSS.ELA-LITERACY.SL.2.2

Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

CCSS.ELA-LITERACY.W.2.2

Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

CCSS.ELA-LITERACY.RI.2.3

Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedure.

Materials

- Image: [Merrimack River at Concord](#)
- Vocabulary Cards: canal and navigable
- Focus Text: [Unit 7: Building a State, Learn It! "A Transportation Network," p. 10](#)
- Reading Reflection worksheet
- Focus Text Facts: The Amoskeag Canal
- Map: [The Merrimack River at Manchester](#)
- Canal Cartoons
- Video: [Canal Lock Demonstration](#)
- Sand trays and sand, plastic wrap or cellophane, craft sticks, small cardboard boxes for buildings and boats

Learning Activity

1. **Analyze the painting.** Guide a whole-group discussion of what students notice and wonder as they look at a painting of people using the Merrimack River near Concord in the 19th century. (5 minutes)



2. **Discuss the Vocabulary Cards.** Project or display the Vocabulary Card and ask students to share what they know about the word “canal.” Ask them why they think people build their own waterways when rivers may be nearby. What do they think canals are used for? Continue the discussion with the word “navigable” and relate it to its more familiar variation, “navigate.” Help students connect the two words: canals make rivers navigable. *(5 minutes)*
3. **Complete the Reading Reflection.** Explore the Focus Text as a whole group. Provide students with the worksheet and support them as they identify the main idea in each paragraph. *(15 minutes)*
4. **Read the Focus Text Facts.** Support students as they read a non-fiction text about the Amoskeag Canal. *(10 minutes)*
5. **Examine the map and create cartoons.** Project the map “Merrimack River at Manchester.” After a brief discussion of what students notice and wonder, help students locate the canals. Have students create short cartoons explaining how the canals helped goods move along the river at that point. *(20 minutes)*
6. **Mason’s Challenge: Build a canal model.** Watch the video from the National Parks Service to see how a canal similar to the Amoskeag Canal works. Then, provide small groups materials and instructions to create simple canal models. Provide students with a set of canal labels and challenge them to place them at the correct locations in their model. *(40 minutes)*



EDUCATOR RATIONALE AND ANSWER GUIDE

Connection to Amplify

This lesson extends and reinforces the learning goals in Amplify CKLA 2, Unit 7: Westward Expansion, Lesson 3: Journal of a 12-Year-Old on the Erie Canal. Students discover that New Hampshire also depended on canals for a brief time as its textile industry grew and the transportation of goods along the Merrimack River increased. Students use their background knowledge of transportation systems to analyze historic paintings and maps. They add to this background knowledge by reading and responding to non-fiction texts about canals in New Hampshire. If time allows, students apply their understanding of the purpose of canals to the creation of a simple 3-D model using classroom materials.

Analyze the painting

This painting of the Merrimack River near the state capital, Concord, shows a very different view of how the river was used 150 years ago. Help students identify the features of the landscape and the different vessels on the water, and then promote discussion of who and what would be traveling along that river and why. Ask them to think about what they have already learned. What were the challenges of traveling by river? What made it better than walking along a road with a cart or riding in a wagon?

Complete the Reading Reflection

The Reading Reflection worksheet has paragraphs adapted from text featured on [Unit 7: Building a State, Learn It! "A Transportation Network," p. 10](#) pages. If time allows, consider exploring the Learn It! page as a whole group and then have students complete the worksheet independently. Main ideas: Paragraph 1: "People long ago traveled on rivers in New Hampshire;" paragraph 2: "It was hard to travel on rivers;" paragraph 3: "Canals made it easier to travel on rivers."

Read Focus Text Facts

This Focus Text Facts page provides more detail about the use of the Amoskeag Canal. You may wish to read these as a whole group or in reading groups. It will provide important context prior to viewing the map of the Merrimack River at Manchester.

Examine the map

This map from 1885 shows how the Amoskeag Canal provided a waterway alongside the Amoskeag Falls. Guide a whole group analysis of a projection of the map. Ensure that students notice where the river and the canals are located as well as the grid of streets and the depiction of buildings. Help students locate where the canals begin. Ask them to describe what they notice about the river at that point and why it was a good place to begin digging the canals. Connect student discussion to information in the Reading Reflection and Focus Text Facts.

Create Canal Cartoons

Distribute the Canal Cartoon worksheets and support students as they draw and write a short three-part cartoon to explain how a canal helps move goods and people on a river.

Build a canal model

If time allows, help students work in small groups to build their own simple models of canals. Watch the video from the National Parks Service that shows how a canal with locks works. The canal in the video is the same design as the Amoskeag Canal. Then, project the map of the Merrimack River at Manchester so students can refer to it while they build. Provide students with the materials suggested above to make the models in sand trays. When students are finished, they should cut out the Canal Labels and place them to indicate important features of their model.

Merrimack River at Concord



Source: New Hampshire Historical Society



CANAL

Part of speech: noun

Definition: A waterway built by people.

How to use it: The boats used the **canal** to deliver goods to the factory.



NAVIGABLE

Part of speech: adjective

Definition: easy to move through

How to use it: The river was not **navigable** because it had many twists, turns, and waterfalls.



READING REFLECTION: CANALS IN NEW HAMPSHIRE

TEXT

MAIN IDEA

New Hampshire is full of rivers. In fact, there are over 40,000 miles of rivers in the state. For thousands of years, the Abenaki used New Hampshire's rivers like highways because it was faster to travel by water in canoes than it was to travel by land on foot or horseback.

Many of these rivers were not navigable. They have waterfalls that boats can't get around. And not all of the rivers are connected either, so sometimes it's hard to get from one part of the state to another part of the state by water.

Around 1800, people in New Hampshire started to build canals to make it easier to travel on the state's rivers. Some canals helped boats go around waterfalls, while other canals linked rivers and lakes together. The most important canals were on the Merrimack River.

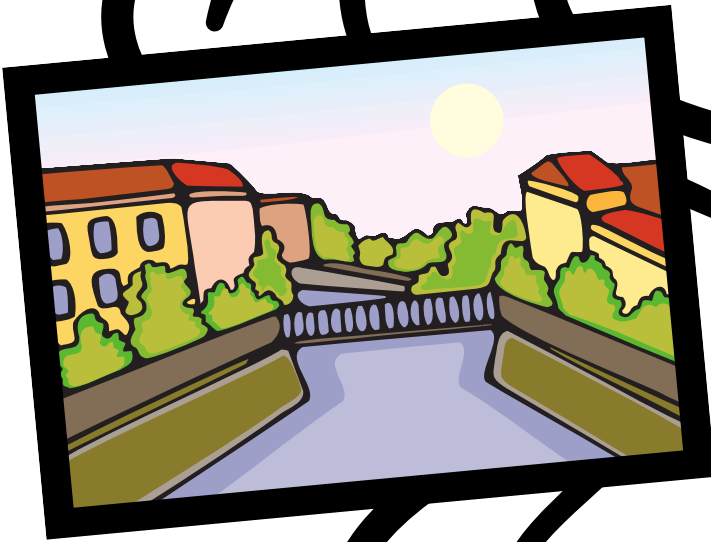


THE AMOSKEAG CANAL

Samuel Blodget was a timber merchant who lived in New Hampshire over 200 years ago. He decided to build a canal off the Merrimack River so that boats could get around the rapids of the Amoskeag Falls. The canal made it easier to move logs down the river.



Blodget's canal moved water from the river inland. Boats moved along the canal into a lock. Gates closed behind the boat and the water level lowered inside the lock. Now the boat could continue along the next part of the canal and then out to the Merrimack River.



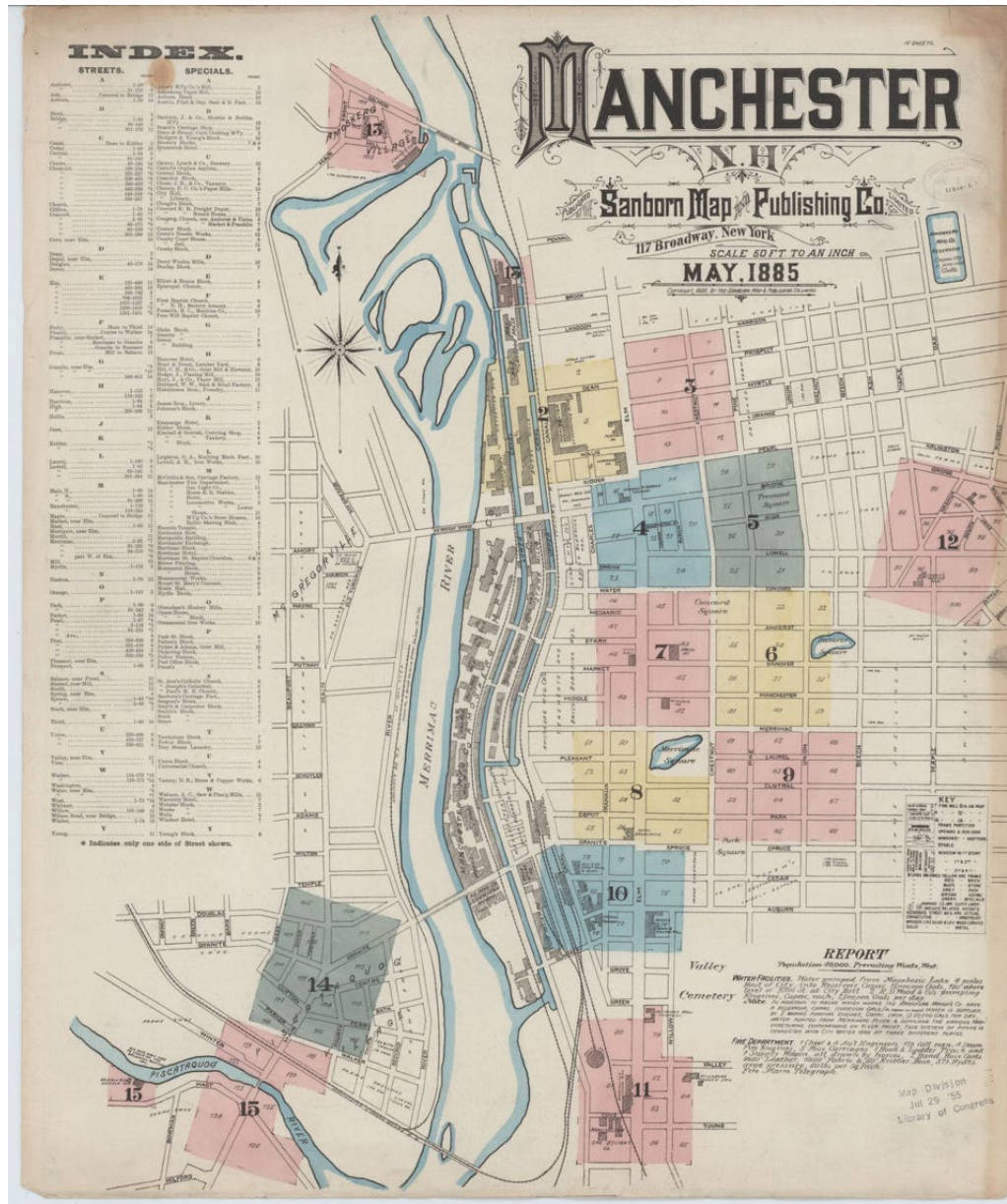
The canal got a new name in 1815. Called the Amoskeag Canal, it was used to move goods around the Amoskeag Falls for another 40 years. Then railroads became the faster way to move goods and people. So, the canal's water was used to power the mills making cloth at the Amoskeag Manufacturing Company.



MASON'S CHALLENGE

Create a model of a canal with locks with dish tub of damp sand, craft sticks, cardboard, and plastic wrap. After you line your river and canal trenches with plastic wrap, you can fill your model with water to see how the canal redirects the river. Build locks and a small boat with the craft sticks and cardboard to experiment with the movement and levels of water.

Merrimack River at Manchester





CANAL CARTOON

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MODEL CANAL INSTRUCTIONS

1. Use your hands or a small shovel to scoop trenches in the sand that represent upper and lower canals branching off from a river. Look at the map of the Merrimack River at Manchester for guidance.
2. Line your trenches with plastic wrap or blue cellophane.
3. Build locks and gates using craft sticks or cardboard.
4. Use small cardboard boxes to create factory buildings and place them along the canal.
5. Create a boat with another small box or craft sticks. Load it with goods that are going to or from the factories. Place the boat in the upper or lower canal.
6. Cut out the labels and use them to identify important features of your model.



CANAL LABELS

RIVER	FACTORY	WATERFALL
BOAT	LOWER CANAL	LOCK
GOODS	GATE	UPPER CANAL