



Lesson 3.6 “Summative Assessment: Mapping the Settling of New Hampshire” Unit 3: Settling New Hampshire

Lesson Objectives

- Students will define the purposes and types of a variety of maps, with a focus on thematic maps.
- Students will create research plans and gather material and information to conduct research.
- Students will design and create a map with essential map features and multiple layers of data about the English settlement of 17th-century New Hampshire.
- Students will draft, edit, and publish an analytical label for their map that explains the connections and patterns shown in the data layers.

Lesson Competencies

- I can analyze, use, and construct maps and other geographic representations to explain relationships between people and the environment. (Moose SS)
- I can analyze primary and secondary sources and draw appropriate conclusions. (Moose SS)
- I can locate, organize, and analyze information from print and non-print sources to support my development of central ideas and subtopics. (ELA 8)
- I can analyze, use, and construct maps and other geographic representations to explain relationships between people and the environment. (Moose SS)
- I can organize my ideas and details into paragraphs and sections, using linking words and phrases to convey meaning. (ELA 5)

Essential Questions

How has New Hampshire come to be the way it is?
How has New Hampshire been shaped by many voices?

Focus Questions

How were the Abenaki impacted by the arrival of the Europeans?
What did explorers find when they first encountered the land?
Why did the English settle New Hampshire?

Estimated Time

Four or five 40-minute class sessions

Materials & Equipment

“Maps: Types and Purposes” for printing or projection
“Thematic Map Examples” for printing or projection
Class set of project packet including:
 “Rubric for Thematic Map Project”
 “Primary and Secondary Sources for Thematic Map Project”
 “Thematic Map Project Instructions”
 “Thematic Map Plan”
 “Thematic Map Label”
“New Hampshire’s Seacoast Region” base map for projection or printing or alternatively, “New Hampshire Major Lakes and Rivers”
11” x 17” paper for drawing maps
Pencils, rulers, colored pencils, fine tip markers for adding data layers



Educator Introduction & Rationale

During the 17th century New Hampshire underwent many changes that laid the foundation for how the region would evolve over the next centuries. Early European explorers to New England reported abundant natural resources. The first four English settlements in New Hampshire were established to take advantage of these resources and were the primary communities in New Hampshire throughout the 17th century. The organization of these towns provided the structural model for subsequent settlements and the colony's government. This settlement activity, so fruitful for those arriving from Europe, also had an enormous impact on the indigenous people of the land we call New Hampshire. Ultimately, the rhythms of life for the Abenaki were disrupted and most of the population was forced to leave New Hampshire and relocate to Canada. Reference the Educator Overview for more information.

This lesson is the sixth in Unit 3: Settling New Hampshire and serves as a summative assessment of student learning. Achievement of the learning objectives in all earlier lessons in the unit is recommended before engaging with the activities in this lesson so the project is well-informed. A rubric is provided for both student self-assessment and educator assessment. It is recommended that this rubric be introduced at the beginning of the project as a guide for students as they plan and create their projects, in addition to being used for assessment at the completion of projects. Please note, lesson vocabulary and definitions are at the end of the document. You may wish to preview these with your students.

Maps were a vital tool and record for the Europeans who explored and settled the land we call New Hampshire. Maps were not merely for way-finding, but for explaining what the land had to offer and who was entitled to use it. The maps of the 17th century did not always share the full story of who had been using the land or how it could be used to benefit all the inhabitants. This summative assessment challenges students to create a thematic map that illustrates connections between the natural resources of 17th-century New Hampshire and the various groups who needed and wanted to make use of those resources.

Over the course of four or five sessions, students complete a series of activities to meet this challenge. First, they build their understanding of the function and design of thematic maps. Then, they develop a research plan for their own map project. Finally, they design and create a map that tells a story of exploration and settlement in the 17th-century New Hampshire seacoast region using multiple layers of data. Using provided primary and secondary resources, students must select the appropriate sources to consult to create their layers. Their completed maps are accompanied by a brief written description of the patterns and connections they observe between the layers they have plotted. The number of layers a student chooses to plot will increase the challenge of the project, though it is recommended that a student plot at least two layers in order to have one point of comparison. Please adapt all the material in this lesson, as necessary, to meet the needs of the students in your classroom.

Learning Activity

Activation

Map types and purposes. Facilitate a whole group discussion about the types and purposes of maps. Ask students what they know about why maps are made and how they are used, in the past and in the present. Consider collecting student responses on “Maps: Types and Purposes” chart. Map categories are provided on the chart for student reference.

Teaching tip: If students have completed Unit 1: New Hampshire Geography, or a similar geography unit, have them use their background knowledge to complete the chart.

Guided Practice & Discussion

Finding the themes in thematic maps. Project or distribute selections from “Thematic Map Examples” and use “Thematic Map Guide” for educator reference. Ask students to work in small groups or pairs to determine what makes these maps different from other maps they have used in this unit. Guide this brief analysis with these three questions:

- What information is being shared?
- How does this map help the person using it?
- Why do you think there are two different dates on most of the maps?

Teaching tip: Students can examine just one map from the set. Small groups can work together and then report back to the whole group so that multiple map stories are shared. A variety of options are provided to accommodate a range of ability and interest.

Possible Outcomes:

- Each of the maps display one kind of information and how it relates to geography.
- The maps do not try to include lots of different kinds of data, but rather focus on one theme.
- The maps were made after the events described. This is why there are two different dates on the map: the first date shows the date of the information and the second date shows the date the map was made.
- The maps are intended to help someone understand the particular theme and how the events connect to the land on which they happened.

Direct Instruction

Introducing the project. Explain to students that the maps in the set are in a category called **thematic maps**. Thematic maps show events or data about a certain topic and how it looks geographically; they can also be called special-purpose maps. They are often a visual way of explaining how people interacted with each other and with the land in the past or the present. Some thematic maps show current information, such as population density or traffic flow. Thematic maps are interesting because they are focused around one idea and so reflect the story the mapmaker wanted to tell.

Tell students that to complete their study of exploration and colonization in New Hampshire, they will create their own thematic maps. Using primary and secondary sources, they will add layers of historic data to a present-day map of New Hampshire's seacoast region or of New Hampshire to tell a story about who was living in 17th-century New Hampshire.

Project selections from "Thematic Map Examples" and review the features each uses to share its story.

Guided Practice

Planning and research. Distribute "Thematic Map Project Instructions" to students with "Thematic Map Plan" on the other side and the "Rubric for Thematic Map Project." Explain to students that one side gives detailed instructions for planning the project and the other side is a chart where they will record their choices and list their sources from "Primary and Secondary Sources for Thematic Map Project" that they need to gather the data for their layers. Review the rubric with students so that they can envision an "Above Standard" project.

Decide for your class whether you will allow them to use other resources from Unit 3: Settling New Hampshire in the "Moose on the Loose" website. Both the student content and additional resources will have more information they can use.

Provide students with copies of the sources to examine in order to make these choices. Students should be sure that at least one of their layers relates specifically to English settlement. After they have made their selections, give students time to examine the sources and determine what the sources tell them about the data layer category. There is a space on the planning sheet to record these observations.

Teaching tip: As they look through the sources, discuss with students how written accounts of natural resources and reports containing data that can be represented on the map.

- Think about the variety of ways thematic maps show data: using different style lines, different colors, symbols, illustrations, and brief labels. A symbol for fish could be used in waterways described as being full of fish. Shading in green for plentiful forests could reflect reports of an abundance of timber.
- Students also need to plan how to take data from one map and transfer it to another map, which can be difficult if the maps are different scales. For example, students can find out what the distance is between two settlements by using a scale on a published, modern map. Then, they can measure the distance in inches between those two settlements on that map. If the settlements are two inches apart on the student map and in real life, they are 10 miles apart, then two inches equals 10 miles, or one inch equals five miles. That is the scale for their map. Discuss with students both of these aspects of the project.



Independent Practice

Creating a thematic map. When students have completed their plans, they are ready to begin constructing their maps. The experience of drawing the base map will support their geographic knowledge of the seacoast region. If possible, project "Seacoast Region" on large pieces of paper (at least 11" x 17") so that students can trace the base map. Otherwise, it is recommended that enlarged copies of "Seacoast Region" be provided to students so they have ample room to include their data layers. If a particular student is dedicated to showing data from all around the state, use "Major New Hampshire Lakes and Rivers" as a base map.

Give students time to add data layers according to their individual plans. Remind students of the variety of ways thematic maps can show data: using different style lines, different colors, symbols, illustrations, and brief labels. Consider projecting images from the Thematic Map Set for reference and inspiration.

When students have completed their thematic map, they need to write a label for the map, first using "Thematic Map Label" to plan and draft, and then writing or typing a final version to be displayed alongside their completed map. The label falls under the category of informational writing. The provided planning sheet helps students organize their thinking about connections between their layers.

For example, a student may choose to display data about Natural Resources, Early Industries, and Abenaki Living Range. The questions on the sheet will help them explain the geographic locations of those data points and look for overlaps among the data categories. Students should write at least one complete paragraph explaining the connections they observed.

Summative Assessment

Applying the rubric. Students should already be familiar with the rubric, having used it to guide their planning and creation of their project. Now give students the opportunity to use the rubric to assess their work. Did they meet their goals? If not, consider providing time for adjustments to be made before educator use of the rubric for assessment.

Create a map exhibit. Set the completed maps and labels out so that all students can examine them and read the labels. Ask students if they notice if more than one map addresses the same combination of layers. Have students organize the completed maps in groups according to the topics they address. Hang the maps to create an exhibit and invite families, other classes, or administrators to visit.

Reinforcement & Extension

Reinforcement and extension are provided by adjusting project goals, using the rubric or other appropriate measures, to meet individual student needs and abilities.



Supporting Materials

Thematic Map Examples

- Picture Map of Scenic New Hampshire, 1957, from New Hampshire Historical Society
- Abraham Lincoln Visits Massachusetts 1848, 1948, Courtesy of the Leventhal Map and Education Center
collections.leventhalmap.org/search/commonwealth:3f463b38r
- Airways of the World, 1919, Courtesy of the Leventhal Map and Education Center
collections.leventhalmap.org/search/commonwealth:7h149w30k
- Military Map of the United States and Territories, 1861, Courtesy of the Leventhal Map and Education Center
collections.leventhalmap.org/search/commonwealth:4m90f941n

Primary and Secondary Sources for Thematic Map Project

- New Hampshire's Seacoast Region Map from New Hampshire Historical Society
- An Exact Map of New England and New York, 1702, detail, Courtesy of the Leventhal Map and Education Center
collections.leventhalmap.org/search/commonwealth:3f462t13m
- Excerpt from *The Voyage of Martin Pring*, 1603
- Historic Map of New England, 1675, Courtesy of the Leventhal Map and Education Center
collections.leventhalmap.org/search/commonwealth:3f462s90h
- N'Dakinna and New England States from New Hampshire Historical Society
- New Hampshire's First Four English Settlements from New Hampshire Historical Society
- Trade and Settlement Report, 1699 from New Hampshire Historical Society
- "Major New Hampshire Lakes and Rivers." NH GRANIT Database, Complex Systems Research Center, University of New Hampshire.



Standards

“Moose on the Loose” Content:

- ✓ Students will understand that the Abenaki inhabited the area that became known as New Hampshire for thousands of years before European settlement. They will understand that the Abenaki interacted with the environment and used its resources to meet their needs. (3-5.T1.2)
- ✓ Students will understand that European exploration led to the colonization of the region that became New Hampshire. They will understand that, beginning in the early 1600s, colonial New Hampshire was home to people from different areas of the world. (3-5.T2.1)

“Moose on the Loose” Skills:

- ✓ Gathering, Interpreting, and Using Evidence (3-5.S1.1, 3-5.S1.2)
- ✓ Communicating and Critiquing Conclusions (3-5.S2.1, 3-5.S2.2)
- ✓ Effective Historical Thinking (4.S3.1)
- ✓ Comprehensive Geographic Reasoning (3-5.S4.1, 3-5.S4.2)

New Hampshire Social Studies Frameworks:

- ✓ Geography: The World in Spatial Terms (SS:GE:4:1.1, SS:GE:4:1.2)
- ✓ Geography: Human Systems (SS:GE:4:4.4)
- ✓ Geography: Environment and Society (SS:GE:4:5.2)
- ✓ US / NH History: Contacts, Exchanges & International Relations (SS:HI:4:2.1)

NCSS Themes:

- ✓ Theme 2: Time, Continuity, and Change
- ✓ Theme 3: People, Places, and Environments

C3 Frameworks:

- ✓ Determining Helpful Sources (D1.5.3-5)
- ✓ Geographic Representations: Spatial Views of the World (D2.Geo.1.3-5, D2.Geo.3.3-5)
- ✓ Human Population: Spatial Patterns and Movements (D2.Geo.8.3-5)
- ✓ Perspectives (D2.His.4.3-5)
- ✓ Historical Sources and Evidence (D2.His.10.3-5)
- ✓ Gathering and Evaluating Sources (D3.1.3-5)

Common Core ELA:

- ✓ Key Ideas and Details in Informational Text (RI.4.3)
- ✓ Integration of Knowledge and Ideas in Informational Text (RI.4.9)
- ✓ Text Types and Purposes in Writing (W.4.2)
- ✓ Production and Distribution of Writing (W.4.4, W.4.6)
- ✓ Research to Build and Present Knowledge (W.4.7)



Lesson Vocabulary

Abenaki	(noun) Name used to refer to the indigenous people of the land now called New Hampshire
colonist	(noun) A person living in an area governed by another, often distant, country
colony	(noun) An area governed by another, often distant, country
compass rose	(noun) A symbol that represents a compass showing cardinal and intermediate directions
culture	(noun) The beliefs, values, and practices learned and shared by a group of people from generation to generation
explorer	(noun) A person who travels to an unknown area, usually in search of information or opportunity
indigenous	(adjective) When something grows or occurs naturally in a place
indigenous people	(noun) The first people who lived in an area before people from other cultures arrived
industry	(noun) 1 Making products by using machinery and factories 2 A group of businesses that provide a particular product or service
natural resources	(noun) Something found in nature, like animals, rocks, or fossil fuels, that is used by people
pelt	(noun) The skin of an animal, usually with fur
perspective	(noun) The point of view expressed through writing, speech, photographs, and other sources of information
sachem	(noun) Respected elder in a tribe who guides decision making
sassafras	(noun) A tree from the east coast of North America; all parts of the tree, like bark, leaves, and roots, are helpful to humans
settlement	(noun) A place where people establish a community
shipyard	(noun) A place near a forest and a river with space build ships
timber	(noun) Trees that have been cut into larger beams or smaller planks to be used in construction

