



Lesson 1.1 “Map Vocabulary and Introduction”

Unit 1: New Hampshire Geography

Lesson Objectives

- Students will practice introductory map skills.
- Students will use class resources to complete vocabulary classwork about maps and geography.

Lesson Competencies

- I can analyze, use, and construct maps and other geographic representations to explain relationships between people and the environment. (Moose SS)
- When appropriate, I can use context to determine intended meanings of words and phrases. (ELA 1)
- I can determine intended word/phrase meaning when multiple meanings or non-literal meanings are possible. (ELA 2)

Essential Questions

How has New Hampshire come to be the way it is?

Focus Questions

What physical and human characteristics define New Hampshire?

Estimated Time

Two 40-minute class sessions, although vocabulary activities can be extended as desired

Materials & Equipment

Vocabulary materials as needed for selected activities
“Moose on the Loose: Analyze It! Maps” video (see Resources)
Class set of “Town Boundaries Map”
Class set of “Analyze It! Town Boundaries Map” worksheet



Educator Introduction & Rationale

Mapping and knowledge of mapping vocabulary are vital skills in the classroom and in life. A core part of all social studies standards, proficient map skills allow students to engage in learning throughout all grades as well as grow into productive citizens who can function effectively in society.

This lesson is the first lesson in Unit 1: New Hampshire Geography and is designed as a two-part lesson to introduce students to map vocabulary as well as basic map skills. In the first part, the educator gives students a pre-assessment to understand how familiar they are with map vocabulary, then selects vocabulary activities from a variety of options for students to engage in. In the second part of the lesson, students use the “Moose on the Loose” Social Studies methods process to Encounter, Investigate, and Build upon a current-day map of New Hampshire. At the end of the lesson students are asked to utilize what they learned to complete another vocabulary activity, a valuable tool in understanding the students’ growth from start to end of the lesson. Please adapt all the material in this lesson, as necessary, to meet the needs of the students in your classroom.

There are reinforcement activities suggested at the end of the lesson for students who may need more help with the concepts and vocabulary of the lesson. There are extension activities suggested for students who are ready to extend the learning in the lesson.

Learning Activity

PART 1

Activation

What are maps for? Generate ideas about the purpose of maps by brainstorming in the classroom. Have students talk in groups first or give them individual thinking time so that everyone has something to contribute in discussion. Make a list on chart paper to display for the class and invite students to add to it even after the discussion has finished. **Possible responses:**

- To know where you are
- To catch a bus or subway train
- To show directions to somewhere
- To show where something is, like food, water, or treasure
- To show physical features like how high, how low, how flat, how dry the earth is
- To represent information, like amount of people, natural resources, weather, or country borders
- To show something that happened in history, like a battle or the Oregon Trail

As students brainstorm, try to categorize their answers so that patterns emerge and they can make connections.

Mapping pre-assessment. It is good practice to pre-assess students' knowledge of content in the lesson so that you are aware which students may need more practice with skills and which students are on target with learning goals. Distribute the "Map Vocabulary" worksheet and let students know that this is not an assessment, but rather a chance to show what they know and what they need to practice.

Once students have had sufficient time to complete the worksheet, collect and evaluate them, or have students correct them together in groups. Note particularly students for whom this vocabulary is new. This vocabulary is not only social studies knowledge in upper elementary grades but also expected understanding for citizens in the world.

Guided Practice

Map vocabulary. There are many ways to practice vocabulary, and addressing many types of learning styles is important. Vocabulary practice can be integrated into morning meeting, done briefly and frequently throughout the week, or engaged in over a longer time during social studies instructional sessions. It is recommended, also, to post critical vocabulary so students can see it throughout the day and to give students a copy of the expected word mastery list. Decide for your students which of the suggested games and worksheets are best for them. Options are outlined below as well as in the Reinforcement and Extension activities.



Eyes-Closed True or False. Tell students that you will read a statement about maps, and they will need to show whether they think the statement is true or false by putting thumbs up for “true” and thumbs down for “false.” Tell them that the trick is that their eyes will be closed so they will have to listen carefully. Pre-select 8–10 statements about maps and map vocabulary (see definitions) with a variety of true and false responses, and start with a simple statement. Have students indicate whether it was true or false, and reinforce learning by complimenting correct answers without calling out students who have indicated incorrect answers. When a statement is false, ask for a volunteer to turn it into a true statement. To extend learning, students could write their own true and false statements about a topic, or statements could be recorded on chart paper to refer to later.

Question/Answer Loop Cards. Tell students that you will play a vocabulary game where each student has a definition and a vocabulary word, and the goal is to loop through the classroom without error. The trick is that all answers must be stated in the form of a question. You will ideally have one card per student, although you may have to pair students up depending upon the size of your class. Start the game by standing up and reading the first definition, such as “This is an invisible line that circles the middle of Earth from north to south and represents zero degrees longitude.” The student with the word “prime meridian” would then stand and say, “What is the prime meridian?” That same student then reads their definition and waits for an answer. The game continues until someone’s card reads, “I have the last card,” and the loop is closed!

Vocabulary matching. Hand out vocabulary definitions and images separately so that each student has a definition or an image. Have them study it so that they know what their vocabulary word is. They should then walk around the class to find their matching definition or image and display them for the class. Alternatively, you could add vocabulary word cards to the mix to make groups of three or pair up only words and definitions or words and images. Another variation has students placing the image, word, or definition on their forehead so they can’t see it. In this variation, they must ask “yes” or “no” questions to other students about what’s on their forehead before finding their match.

Teaching Tip: This is a good spot to pause if you will divide the lesson between two teaching periods.

PART 2

Guided Practice **Introduction to mapping.** Use the “Analyze It! Maps” video on the student side of the “Moose on the Loose” website in the Analyze It! section to introduce students to working with maps. The video is seven and a half minutes long and talks about what maps mean as well as taking students through the Encounter, Investigate, and Build skills found on the Analyze It! worksheets.

Choose for your students whether you will watch the video through together, then do the “Analyze It! Town Boundaries Map” worksheet, or whether you will pass out the worksheet and pause the video so students can complete their questions with the video.

Review the worksheet as a class, ensuring all students have had a chance to ask questions and have a clear understanding of basic map skills.

Discussion & Reflection **Pre- to post-assessment.** Give students the “Map Vocabulary” worksheet again or conduct another vocabulary exercise. After it is complete, compare it with their pre-assessment so students can see their progress.



Reinforcement

1. **Vocabulary video.** Created by Roble Education and the Mineola Union Free School District in New York state, this video is a six-minute review of key mapping vocabulary. <https://youtu.be/cTrsvGytGG0>
2. **Using maps.** Read the book *Maps and Globes* by Jack Knowlton (1985). Although a bit dated, this book does an excellent job talking about maps in history as well as different types of maps with easy-to-access illustrations and language for students. It is a solid introduction to how maps can be used.
3. **Pin the map feature!** In advance, display a large map on your wall. Explain that students will practice their cardinal directions as well as their map features. Keep a set of cards listing map features next to the map as well as a cloth for blindfolding and pieces of tape. In small groups, students should select someone to give directions and someone to place the "pin." One student should blindfold themselves or close their eyes and be turned around and positioned in front of the map. The direction-giver should pick a map feature from the cards, then give the blindfolded student cardinal directions to guide their hand to place the tape on the correct feature. Once the tape is placed, the student should remove the blindfold and see if they can name the feature. Repeat with new students. Ask students, "What made this activity easy or challenging for you? How did you support each other?"

Extension

1. **Human compasses.** In advance, make a sign for each cardinal direction and post it on the appropriate wall. Tell students they will move to face the direction that answers your question. Start with in-school questions to demonstrate, such as, "In what direction is the playground?" or "In what direction is the library?" Move on to more challenging questions, either referencing maps in the classroom or units you have studied. Pose six to ten questions, such as, "In what direction would you travel to get from Japan to Australia?" or "In what direction do we travel to reach Concord, NH?" Increase the challenge by having students compose questions or by adding intermediate directions—northeast, southwest, etc.



Supporting Materials

New Hampshire Historical Society Resources: Images for vocabulary definitions

- Compass Rose and Map Scale Images: Close ups of "A copy of the plan settling the boundaries between the Provinces of New Hampshire and the Massachusetts Bay, Judgment of September 2, 1737"
- Map Key Image: Close up of "An Improved Reference and Distance Map of New Hampshire"

Other Resources: Images for vocabulary definitions

- Cardinal Direction Image:
commons.wikimedia.org/wiki/File:Compass_rose_en_04p.svg
- Continents Image: en.wikipedia.org/wiki/Continent#/media/File:Continental_models-Australia.gif
- Equator Image: commons.wikimedia.org/wiki/File:World_map_with_equator.jpg
- Geography Image:
commons.wikimedia.org/wiki/Category:Geography_education#/media/File:Active_learning_-_jigsaw_map_of_Southeast_Asia.jpg
- Prime Meridian and Hemisphere Images:
commons.wikimedia.org/wiki/File:Primemeridian.jpg
- Human Features Image: Google Earth Pro image of United States at night
- Latitude Image: [commons.wikimedia.org/wiki/File:Latitude_\(PSF\).png](https://commons.wikimedia.org/wiki/File:Latitude_(PSF).png)
- Longitude Image: [commons.wikimedia.org/wiki/File:Longitude_\(PSF\).png](https://commons.wikimedia.org/wiki/File:Longitude_(PSF).png)
- Oceans Image:
commons.wikimedia.org/wiki/Category:Oceans#/media/File:World_ocean_map.gif
- Physical Feature Image:
commons.wikimedia.org/wiki/Category:Landforms#/media/File:Cap_Formentor.jpg

Additional Resources:

"New Hampshire Town Boundaries" Map of New Hampshire from NH GRANIT Database, Complex Systems Research Center, University of New Hampshire. Distance data added by New Hampshire Historical Society staff.

The following activities were adapted from *Doing Social Studies in Morning Meeting* by Leah Carson and Jane Cofie (Responsive Classroom: 2017): Human Compasses, Pin the Map Feature, Eyes-Closed True or False, Question/Answer Loop Cards.

Standards

“Moose on the Loose” Content:

- ✓ Students will understand that New Hampshire has a diverse geography, with mountains, seacoast, and farming land. They will understand it has been inhabited for thousands of years and has a variety of resources. (3-5.T1.1)

“Moose on the Loose” Skills:

- ✓ Gathering, Interpreting, and Using Evidence (3-5.S1.1)
- ✓ Comprehensive Geographic Reasoning (3-5.S4.1)

New Hampshire Social Studies Frameworks:

- ✓ Geography: The World in Spatial Terms (SS:GE:4:1.1, SS:GE:4:1.2, SS:GE:4:1.3)

NCSS Themes:

- ✓ Theme 3: People, Places, and Environments

C3 Frameworks:

- ✓ Geographic Representations: Spatial Views of the World (D2.Geo.2.3-5)

Common Core ELA:

- ✓ Phonics and Word Recognition in Foundational Skills (RF.4.3, RF.4.3a)
- ✓ Vocabulary Acquisition and Use (L.4.4, L.4.4a, L.4.6)

Lesson Vocabulary

cardinal direction	(noun) One of the four main directions featured on a compass rose: north, south, east, and west
compass rose	(noun) A symbol that represents a compass showing cardinal and intermediate directions
continents	(noun) The seven large land masses on Earth: Antarctica, Asia, Africa, North America, South America, Europe, and Australia
equator	(noun) The imaginary line that runs east-west around the middle of Earth and represents zero degrees latitude
geography	(noun) The study of the physical, biological, and cultural features of Earth's surface
hemisphere	(noun) One half of Earth; the northern and southern ones are split by the equator and the eastern and western ones are split by the prime meridian
human feature	(noun) An element added to Earth's surface by people, usually to provide shelter, create borders, or support transportation
latitude	(noun) The distance north or south of the equator, measured in degrees, represented by invisible parallel lines running east to west around Earth
longitude	(noun) The distance east or west of the prime meridian, measured in degrees represented by invisible parallel lines running north to south around Earth
key	(noun) An explanation of abbreviations or symbols used on a map, sometimes called a legend
oceans	(noun) The five large bodies of water on Earth: Arctic, Atlantic, Indian, Pacific, and Southern
physical feature	(noun) A naturally occurring feature on Earth's surface such as a landform or body of water
prime meridian	(noun) The imaginary line that runs north-south around the middle of Earth and represents zero degrees longitude
scale	(noun) A tool, printed or drawn, to show how distances should be measured on a map