It’s All About the Map!

Incorporation of Atlases in

New Hampshire Education



The lessons within this book have been created by teachers

who were members of the New Hampshire Geographic Alliance and revised and edited in March of 2020

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**New Hampshire ABC Book**

Written by Erica Almeida: Updated and Revised by Patricia McCabe

*Useful Atlas Pages: 5, 15, 16*

 Grade Level: 2 - 4

Overview: Create an ABC book about New Hampshire

Students will use The New Hampshire School Atlas to find examples of the unique physical characteristics of New Hampshire. Students will also demonstrate their understanding of adjectives in their description of the physical characteristics of New Hampshire.

Standards:

Essential Element: Places and Regions

Geography for Life: 4:4.1.A - Places are locations having distinctive characteristics that give them meaning and distinguish them from other locations

New Hampshire SS:GE:2.2:3 - Observe the ways in which different people perceive places

Geography for Life: 4:4.2.A - Places have physical and human characteristics

New Hampshire SS:GE:2:2:1 - Explore the physical and human characteristics of a place

New Hampshire W:1W:4:3 - In informational writing students demonstrate use of a range of elaboration strategies

Common Core:

CCSSELA-LITERACY.L.3.1A – Explain the function of nouns, pronouns, verbs, adjectives and adverbs, in general and their functions in particular sentences.

Time to Complete Lesson: Approximately two hours.

Materials:

Thirteen pieces of blank paper per student

Hole punch

1 rubber band per student

1 flattened paper clip per student

Crayons and markers

Objectives:

1. Using the New Hampshire School Atlas, students will locate unique places and characteristics of New Hampshire

2. Using the New Hampshire School Atlas, students will use descriptive words to describe places in their state.

3. Students will know how map legends can be used to identify unique places and characteristics of an area.

Procedure:

Opening: Explain how the students will use the New Hampshire School Atlas to conduct Scavenger Hunt to find unique physical characteristics of New Hampshire. The information they find will be put into their ABC books.

1. Make the ABC book

 Take 13 pieces of 8.5 X 11 paper and fold in half.

 Put the folded pieces of paper together to form a book opening to the right.

 Punch two holes in the folded end of the booklet, centered, slightly shorter than the flattened paper clip.

 Take a flattened paper clip and place the ends through the holes, so the book opens from the right.

 Take an elastic band and loop it around the two ends of the paperclip. This will be the binding of the book.

 Students will letter each page A-Z.

2. Scavenger Hunt

Working in teams of two, students will conduct a scavenger hunt through the New Hampshire School Atlas to find physical and human characteristics of New Hampshire to match the letters of the alphabet. They should write these words or groups of words on the appropriate page. Older students should use sentences to describe the characteristics; they should focus on using descriptive words (adjectives) for their descriptions. Students can use the map key to determine appropriate adjectives for places; i.e., Nashua is urban (U) or densely populated (D). If time allows, students may draw an illustration. Students may need assistance for X and Z; i.e. extreme cold (Mt. Washington) and Zip Lines (several mountain resorts).

 The teacher should direct the students to use specific words to describe place names of cities, towns, rivers, lakes, counties, settlement centers, weather, people or traditions.

 After the books are completed, each student should be paired with another student to share their books.

Lesson Extension: Teacher can read aloud to class the book; *G is for Granite*.

Resources:

NH Mapmaker interactive:

http://mapmaker.education.nationalgeographic.com/gvXzcRqnAxrv8ecJWNdBgE/

NH Digital Atlas: http://nhga.maps.arcgis.com/home/index.html

The New Hampshire School Atlas

Harris, Marie. *G is for Granite.* Illus. Karen Busch Holman. Ann Arbor, MI: Sleeping Bear Press. 2002

 ABC Lesson Plan Rubric

Each grading category should be marked with Beginning, Developing, Accomplished or Exemplary.

\_\_\_\_\_\_\_\_\_\_\_ 1. Students created the booklet.

\_\_\_\_\_\_\_\_\_\_\_ 2. Student found physical and human characteristics for each letter of the alphabet.

\_\_\_\_\_\_\_\_\_\_\_ 3. Student shows an understanding of using map legends to interpret maps to determine appropriate adjectives to describe places.

\_\_\_\_\_\_\_\_\_\_\_\_ 4. Student has identified unique physical and human characteristics and places of New Hampshire.

\_\_\_\_\_\_\_\_\_\_\_\_ 5. Student work is neat and creative.

\_\_\_\_\_\_\_\_\_\_\_\_ 6. Student has worked independently and completed the project in a timely manner.

\_\_\_\_\_\_\_\_\_\_\_\_ 7. Student has used proper conventions for writing.

**New Hampshire Atlas Mystery**

(Revised from the Rhode Island Atlas Lesson Plans)

**Grades:** 3 – 5

**Objectives:** The student is able to interpret information on a map

Use an atlas to answer geographic questions

Compare data from multiple maps

**Curriculum Connections:** Geography, Reading

**Geography Standards:** 1,17,18

**Materials Needed:** The New Hampshire School Atlas

The New Hampshire Atlas Mystery Student Activity Sheet – one per student

The attached answer sheet

Pencils

**Lesson Overview:**

In this lesson, students use The New Hampshire School Atlas to answer a series of 13 questions and then solve the mystery by using their answers to spell out a phrase. In the process of solving the mystery, they will become familiar with the variety of maps and data included in the atlas.

**Getting Started:**

Tell the students that their activity today is called The New Hampshire Atlas Mystery. Ask them what you need to solve a mystery – clues! In this activity they will receive clues about New Hampshire that can be answered by gathering information from The New Hampshire School Atlas. Once they have solved all the clues, they will be able to unravel the mystery.

**Developing the Lesson:**

Divide the class into ten groups of two or three students.

Distribute one copy of the New Hampshire School Atlas and The New Hampshire Atlas student activity sheets (one per student) to each group. Each student should also have a copy of the answer sheet.

Explain that the students should use The New Hampshire School Atlas to find answers to each of the 13 questions on the student activity sheet. The group should write their answers on the answer sheet to solve the mystery, but each group member should also write the answers next to the corresponding clue on their own student activity sheet.

NOTE: It is a good idea to read through the mystery clues first to identify words that might be unfamiliar to your students (e.g. industries, precipitation, diversity and census). Introduce these as new vocabulary words at the beginning of the activity.

**Wrapping Up:**

If students have solved the clues on the student activity sheet correctly their paper should read 1-M, 2-T, 3-., 4-W, 5-A, 6-S, 7-H, 8-I, 9-N, 10-G, 11-T, 12-O, 13-N. Spelling: Mt. Washington.

**Extensions:**

Working in groups, have students create posters using pictures, words and/or maps to show information they learned about New Hampshire from the atlas.

**The New Hampshire School Atlas Mystery Activity Sheet**

1. A major product of New Hampshire is Dairy. If Dairy is a major product in more than three counties, place a “W” next to #4. If it is a major product in less than three counties, place an “L” next to #4.

2. Transportation is a way people get from one place to another. In New Hampshire people travel from one part of the state to the other part of the state on Interstates. If Interstate 93 connects Concord with Littleton, place a “S” next to #6. If Interstate 93 connects Keene with Laconia, place an “A” next to #6.

3. New Hampshire has many major rivers and watersheds. If the Saco River is located in a large watershed, place a “T” next to #5. If it is located in a smaller watershed, place an “A” next to #5.

4. There were many major Native American Tribes in New Hampshire at one time. If the Penobscot were one of those tribes, place a “P” next to #13. If they were not, place a “N” next to 13.

5. Precipitation includes rainfall. If the annual precipitation in most of New Hampshire is between 46 and 54 inches, place a “T” next to #2. If a large area has a precipitation 38 to 44 inches, place an “O” next to #2.

6. If New Hampshire has a state song, place a “G” next to #10. If it does not have a state song, place an “O” next to #10.

7. If three states and one Canadian province border New Hampshire, place an “M” next to #1. If only one state and two Canadian provinces border New Hampshire, place an “X” next to #1.

8. Look at the map of Landform Regions. If the White Mountains are located in the Mountains, place a “Period” next to #3. If it is located in the Highlands, place an “N” next to #3.

9. Looking at the map on Diversity of New Hampshire, if Littleton has a 3.1 – 5% of diversity, place a “N” next to #9. If it has a 0 to 2%, place a “Z” next to #9.

10. Which county of New Hampshire has the smallest population? If you choose Belknap, place an “N” next to #7. If you choose Coos, place an “H” next to #7.

11. A census requires that all persons living in the US must be counted every 10 years. What type of transportation was used to count the number of people living in New Hampshire in 1790? Answer by choosing a “C” for a car, an “O” for horseback, or an E for train. Put your answer next to #12.

12. Count how many counties were in New Hampshire in 2010 with less than 50,000 square miles? If there were three, place an “I” next to #8. If there was only one, place an “A” next to #8.

13. Are there more Early Settlement Centers in the northern part of New Hampshire? If your answer is yes, place an “F” next to #11. If your answer is no, place a ”T” next to #11.

**Answer Sheet:**

1\_\_\_

2\_\_\_

3\_\_\_

4\_\_\_

5\_\_\_

6\_\_\_

7\_\_\_

8\_\_\_

9\_\_\_

10\_\_\_

11\_\_\_

12\_\_\_

13\_\_\_

**Answer:**

**Mapping Many and Math**

Written by Erica Almeida: Updated and Revised by Lara M.P. Bryant

*Atlas Pages: 18-19*

Grade Level: 2 - 4

Overview: Students will examine population patterns and distribution in New Hampshire.

Standards:

Essential Elements: Human Systems and the Uses of Geography

Geography for Life 9:4.2.A - Describe how the number of people varies from place to place.

New Hampshire SS:GE:2:4:1 - Explore the distribution of a population.

New Hampshire SS:GE:4:4:1 - Recognize the distribution of a population and its underlying causes.

Common Core:

CCSS Math 3.MD 3 - Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in the scaled bar graph.

Time to Complete Lesson: several class periods

Materials:

Graph paper (or constructed bars to represent each interval in the population map legend.)

Colored pencils

Objectives:

1. Using the New Hampshire School Atlas, students will collect population data for various counties.

2. Using population maps, students will compare and contrast a New Hampshire county’s population data from 1850, 1910, 1970 and 2010.

3. Given the New Hampshire School Atlas and collected data, students will create bar graphs to compare the population of rural and urban areas.

 Procedure:

Opening: As a class, define population. (Definition: the total number of people or inhabitants in a country or region). Ask the students to guess how many people live in their town. Their county? Have children use page 19 of the New Hampshire School Atlas to analyze the choropleth map that illustrates population for the year 2010. How close were their estimations? Compare population changes that occurred between selected cities.

 Select five towns for the students to examine. One town should be their hometown, or the town the school is in, and four other towns selected from each of the interval classes in the map legend.

 Ask the student to use the population table in the back of the atlas to determine the total population of each town.

 Have each student use the legend to determine which color each town should be based on its population.

 Create bar graphs to illustrate each town’s population. One inch = 5,000 people is a good scale to use. A sample student bar graph may look like the ones below.

A. With younger students you can have bars already prepared for each color that are the correct length, as illustrated in Figure A.

i. Use the maximum number in the interval for the length of the bar.

ii. Have the student mark on the bar the actual location of the town. This will help illustrate the range of town sizes that are included in each colored interval on the map.



  Fig*ure A Figure B*

B. With older students, you should have them create a scaled bar for each town, as illustrated in Figure B.

Discussion Questions:

1. Which towns have higher or lower populations? Which towns are urban? rural?

2. How much more population does one town have than another?

3. Which part of the state has more population? Less population? Using other maps in the atlas, try to think of some reasons for the settlement patterns in New Hampshire.

For Further Discussion:

Compare the 1970 and 2010 populations for towns within a county. Have students list which towns/cities have seen changes in population. How can population change affect towns/cities? Why does population change over time? What factors can lead to population change in a given area?

1. Locate the five towns of Keene, Carroll, Manchester, Laconia, Wakefield and their populations and record in which county they are located in the chart below.

  Town County Population

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

2. Which county has the town with the largest population?

3. Which county has the town with the smallest population?

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**Part 2- Complete the graph**

1. The bar graph below represents each of the five towns that you have examined and their populations

2. Using the table of information about the five New Hampshire towns on page 4, complete the bar graph by labeling the correct town name to the correct population number.

**Part 3-Questions**

Remember that according to the US Census Bureau:

**Urban**: describes areas that have populations **greater than** **or equal to** 2,500 people

**Rural**: describes areas that have populations **less than** 2,500 people

New Hampshire’s total population: 1,235,786 (U.S. Census Bureau)

1. Looking at the bar graph on page 6 of this handout, which of the five towns has the greatest population?

**Greatest**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which of the five towns has the least population?

**Least**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Among the five towns, list which towns are Urban and which are Rural:

**Urban**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Rural**:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How much greater is the population of Keene than the town of Carroll?

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Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Things to remember:

Urban- Population greater than 2,500 people

Rural- Population less than 2,500 people

**Part 1:** Where is your school’s town?

Follow the instructions to answer the questions to find information about your school’s town:

a. Name of town

b. Population of town

c. Area of town

What is the name of your school’s town?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the population of your school’s town?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is your school’s town considered urban or rural?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How does your town compare to surrounding towns?

Is it larger or smaller? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Does it have more or less people? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 2:** Populations of other New Hampshire towns

Follow the instructions to answer the questions:

**A.** Find one town with a population greater than your town’s population:

Write your final expression:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Branching Out: An Introduction to Watersheds**

Emily Chrusciel, Nashua School System; Stephanie Barger, Derry School System

*Atlas Page: 7*

Grades Level: 3-5

Standards:

Essential Element:

Geography for Life: 1 - How to use maps and other geographic representations, geospatial technologies and spatial thinking to understand and communicate information.

Geography for Life: 4.7.3.A - Identify examples of physical processes.

Common Core:

CCSS.ELA-Literacy.RI.4.7 - Interpret information presented visually, orally, or quantitatively

(in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

CCSS.ELA-Literacy.RI.4.4 - Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.

Time to Complete Lesson: Two days

Materials:

Cardstock paper (one sheet per student)

Blue paper (one sheet per student)

Non-permanent markers

Spray bottles

NH tile map: Available at http://sites.keene.edu/schoolatlas/

Blue and yellow yarn

Objectives:

1. Determine the definition of a watershed and how the topography dictates watershed boundaries.

2. Map a watershed on the NH tile map.

3. Discuss human impacts on watersheds and how to minimize or eliminate these impacts.

Procedure:

Opening:

Allow time for discussion to ensure understanding of the following terms:

Watershed

Creek/brook/stream

River

Lake

Topography

*What is a Watershed?* - A drainage area of a river and its tributaries or land over which water flows to get to the target water body, the target water body being the one that you are studying. The watershed is also the land, not just the water. The area includes creeks, brooks, streams, rivers, and lakes, and crosses county, state and national boundaries. Precipitation drains downhill into bodies of water and can carry sediments and other materials to a final destination.

\*Explain to students that both parts of this lesson will focus on the concept of watersheds and where watersheds are in relation to students’ home location in New Hampshire.

Day 1 (Exploring and understanding watersheds):

 Pass out a piece of cardstock and blue paper to each student. Have students crumple cardstock sheet into a ball and partially unfold cardstock until it resembles mountains and valleys.

 Place cardstock on top of blue paper, which represents the lowest elevation of a watershed. (see National Park Service reference). Have students mark high points on cardstock with a pencil or crayon (these are the mountain peaks).

 Pass out one marker to each student so they can mark the valleys on cardstock.

 Have students observe the “mountains” and “valleys” on their cardstock and discuss how the mountain peaks separate (divide) the watersheds from one another. If water falls on top of the mountain peak, some of it will flow down one side into a watershed and some water will flow down another side into a different watershed. Using a spray bottle, have students gently spray each watershed and observe where the water flows.

Day 2:

 Discuss with students what they learned about watersheds in part 1 of the lesson.

 Distribute The New Hampshire School Atlas and turn to page 7, Major Rivers and Watersheds, and have students determine which watershed they live in and identify major rivers located in their watershed.

 Discuss the major rivers that make up the students’ watershed area and make note of the patterns water makes as it branches to form watersheds.

 Construct New Hampshire tile map in a large open space.

 Have students outline their watershed boundary, on the tile map, with yellow yarn. Use the Major Rivers and Watersheds map as a reference. Mark the high spots with an X on the map.

 Now using blue yarn, have students trace and plot the major rivers and streams that make up their watershed as noted on the Major Rivers and Watersheds map.

 Wrapping Up:

Have students make note of the river(s) closest to their town/city and discuss how their town/city impacts these rivers. Identify terms “upriver” and “downriver.” Possible pollution topics may include litter, pet waste, loose soil and dust, herbicides/pesticides/fertilizer, oil/grease from automobiles and factory waste. Ask students to think of a scenario in which any of the above topics could affect their watershed over time. This conversation should ultimately lead that all waste drains into the ocean. Lastly, discuss conservation efforts on how to protect a watershed and minimize/eliminate human impacts.

Lesson Extensions:

 Explore other watersheds on the tile map

  A River Puzzle: Geography Action! Rivers 2001 National Geographic Society http://education.nationalgeographic.com/education/activity/river-puzzle/?ar\_a=1

 Write a letter to a local official on protecting a nearby watershed

Resources:

Cherry, L. (1992). A river ran wild: An environmental history. San Diego: Harcourt Brace Jovanovich.

The Children’s Museum of New Hampshire. (n.d.). Rivers: Bringing New Hampshire to life natural science & New Hampshire history curriculum. Retrieved March 27, 2014 from <http://www.childrens> museum.org/cmnh2010/uploadedFiles/About/RiversCurriculum.pdf.

National Park Service. (n.d.). Explore your watershed. Retrieved March 27, 2014 from

http://www.nps.gov/seki/forteachers/upload/Explore-Your-Watershed-3rd-and-4th-Grade-presentation.pdf.

Popova, M. (n.d.). The life cycle of a single water drop, in a pop-up book animated in stop-motion water drop. [Web Video]. Retrieved from http://www.brainpickings.org/index.php/2014/01/23/revoluton-helen-friel/.

Strauss, R. (2007). One well: The story of water on Earth. (R. Woods, Illustrator). Kids Can Press.

Wick, W. (1997). A drop of water: A book of science and wonder. New York: Scholastic.

**Traveling New Hampshire**

Liesel Dolce, Keene School System;

Megan Duprat, Nashua School System

*Atlas Pages: 12,13,5,16,19*

 Grades: 3-5

Overview:

In this lesson, students will identify how population and landforms influence the development of major highways and railways. They will also identify places they would like to see and have already visited outside of their own community. Students will calculate distance and time needed to travel to those places.

Standards:

Essential Element: The World in Spatial Terms

GS:1 - How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

GS:2 - How to use mental maps to organize information about people, places, and environments in a spatial context

Essential Element: Human Systems

GS:4 - The physical and human characteristics of places

GS:9 - The characteristics, distribution, and migration of human populations on Earth's surface

Common Core:

CCSS.MATH 3.MD:4 – Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch

CCSS. MATH 4.MD:1 – Know relative sizes of measurement units within one system of units

CSS. ELA- RI. 4.2—Determine the main idea of a text and explain how it is supported by key details; summarize the text

Common Core English Language Arts and Geography Connections:

“Geography uses multiple forms of visual representations of information with varying levels of complexity … [T]ext is defined both in a traditional sense as the written word and in an expanded sense to include the various forms of geographic text.” (National Geographic Society, 2013)

Time to Complete Lesson: 2 Days

Materials:

Tile map (recommended to print in color) available at http://sites.keene.edu/schoolatlas/

Three different colors of yarn or ribbon (avoid blue)

NH Highway worksheet and Visiting NH worksheets (Places I’ve Been, Places I want to Visit)

Internet Access for all students!

Objectives:

Identify the names and locations of New Hampshire cities, towns, major highways and railways.

Use a transportation map to determine the best way to travel from one town to another.

Use a map scale to calculate distances between locations.

Essential Questions:

How do landforms influence the building of roads and railways?

How do landforms influence traveling distances?

How does population influence transportation systems?

Procedure:

Opening: Students will need an understanding of NH landforms before starting this lesson.

Have students work together as a class and place the New Hampshire tile map together. This map will be used throughout the lessons. Tell them in today’s lesson they will locate major New Hampshire highways and speculate the reasons for their locations.

Day 1:

 Give students NH Highways worksheet. Have them complete question 1 independently. Next, have them collaborate in small groups to complete questions 2-4. After small group work, have the whole class discuss students’ observations.

 Assemble the New Hampshire tile map. Using The New Hampshire School Atlas, pg. 13, as a reference, use colored yarn to trace the major highways (using one color of yarn) on the tile map. Based on location and direction of the major highways, have students speculate the location and the direction (north, south, east, west) the state’s railway system runs.

 After brainstorming, have students reference the thematic map on pg. 12 of the New Hampshire School Atlas. Discuss observations about the location of railways. Using The New Hampshire School Atlas, pg. 12, as a reference place the railways’ routes (using the second color of yarn) in appropriate locations on the class tile map.

Day 2:

 Give students the Places I’ve Been worksheet. Have them name three NH places beyond their community they have visited. For example, Grandma’s house, Strawberry Banke, or Keene’s Pumpkin Festival. Using the thematic map Major Highways, in The New Hampshire School Atlas, pg. 13, have students use the map scale to measure time and distance for their trip.

 Give students the Places I Want to Visit worksheet. Use the Internet to find three other NH locations they would like to visit. Students will use the scale for the tile map to measure the time and distance for this trip.

 Ask student volunteers to share travel routes and distances they would have traveled, and to use yarn/string to trace their routes on the tile map.

Who had to travel the farthest?

Who had the shortest trip?

How often do they make that trip?

Other observations?

 Discuss other New Hampshire destinations that students want to visit.

What is the reason for driving to this place?

Based on distance, which place would students travel to more frequently?

What is the longest student trip?

What is the shortest student trip?

 Ask students to suggest other means of transportation (besides driving) that they might use to travel from one destination to another (train, bus, ferry, boat, bicycle, etc.).

Lesson Extension:

 Suggest students plan a destination outside of NH to visit. Students must use major New England highways, determine distance and the length of time to arrive at their destinations.

 Read The Ox Cart Man and correlate the story with thematic map: Major Agricultural Products.

Resources:

Hall, D. (1979). *The Ox Cart Man*. (B. Cooney, Illustrator). New York: Viking Press.

Harris, M. (2002). *G is for Granite: A New Hampshire Alphabet.* (K. Holman, Illustrator). Chelsea, MI: Sleeping Bear Press.

\*The New Hampshire county map outline go to [http://sites.keene.edu/schoolatlas/](http://sites.keene.edu/schoolatlas/%20)  to print the NH county map that just shows the capital.

Another great site to use is www.50states.com. This site offers simple maps for all 50 states and is a great resource to have for your classroom! Click her to use these maps: [http://www.50states.com/maps/#.VQGotvnF98E](http://www.50states.com/favicon.ico)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

NH Highways

Directions: Use NH tile maps for the following activities and questions.

 NH has 3 major highways, Interstates 93, 89, and 95. Using NH population information found on page 19 in The New Hampshire School Atlas, use yarn to trace on the tile map where you think the three highways are located. Sketch your predictions on the map below.



 Explain your reasoning below.

 Within small groups, share maps and find similarities and differences in where each group placed their highway tracings. Write below.

 Compare your maps to the thematic map, The New Hampshire School Atlas, pg. 13. Did you place the highways close to their actual location? If yes, what was your reasoning? If no, why do you think the major highways are located where they are? What other map may support your reasoning?

 What other observations about the highway locations can you make?

**Where in the World is New Hampshire?**

Written by Henry Bailly, Westmoreland School; and Virginia Gitchell, Chesterfield Central School

*Atlas Pages: 3,4,5*

Grade Level: 4

Overview: Explore resources to create original maps of the United States, New Hampshire (including the three New England states that border NH), counties, and the town of the students.

After the editing process is complete, students will divide into five groups to develop a final assigned map. The lesson assumes that students have prior knowledge of New Hampshire geographical locations.

Standards:

Essential Element: Places and Regions

Geography for Life 2.4.3A.4A - How to use mental maps to organize information about people, places and environments in a spatial context.

New Hampshire SS:GE:4:2.1 - Describe the physical and human characteristics of places, e.g., land forms or where people live.

New Hampshire SS:GE:4:2.5 - Compare and contrast the ways in which different people perceive places, e.g., drawings and sketch maps of familiar places or examples from children's literature.

Common Core:

CCSS.ELA-Literacy.RI.4.6 - Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

CCSS.ELA-Literacy.W.4.8 - Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.

Materials:

World Map

United States Map

White Drawing Paper

Pencils, Colored Pencils and Erasers

Optional: Rulers

Objectives:

1. Use mental maps to organize information about people, places and environment in

a spatial context.

1. Display spatial information on maps and other geographic representations.

2. Compare and contrast the ways in which different people perceive places.

 Procedure:

Opening: As a pre-assessment students will create sketch maps of the world, the United States, New Hampshire (including the three New England states that border NH), New Hampshire counties, New Hampshire regions and students’ town. The maps’ qualities will determine students’ prior knowledge and guide teacher’s instruction. Explain that today’s lesson is about New Hampshire’s relative location to the world and bordering states, and that they will create five political maps that show New Hampshire’s relative location to each of the 3 bordering New England states and the rest of the United States. Plan on multiple class periods to complete this lesson in its entirety.

*Key Vocabulary:*

Relative Location - the location of a place or region in relation to other places or regions.

County - Geographical region of a state used for administrative or other purposes.

Region - Unifying characteristics, either physical or cultural, that link places to one another.

Political Map - designed to show governmental boundaries of countries, states and counties.

Development:

Using pre-assessment sketch maps of the world, United States, New Hampshire and counties, students will share them in small groups. This will help individual students fill in gaps found on their own maps. Each group will compare and contrast their findings and corrections with other groups and then gather as a whole to determine changes needed for final map-making. The class will reference a world atlas and The New Hampshire School Atlas to adjust their sketch maps. This will model the work students will do in small groups and independent work later in the lesson. For each atlas page, students will need to collaborate by comparing, contrasting and creating a final, accurate sketch map for their group.

*United States Atlas*

Students will work on an analysis of their United States maps. The class will then gather to share them. The teacher will then collect the maps to be used later in small groups.

*The New Hampshire School Atlas – page 3*

Students will analyze their New Hampshire sketch maps (including the three New England states that border NH).

*The New Hampshire School Atlas – page 4*

Students will analyze their New Hampshire county sketch maps.

*The New Hampshire School Atlas – page 5*

Students will analyze their Landform Regions map.

 Optional Resource: New Hampshire tile map, located at http://sites.keene.edu/schoolatlas/

In small groups, students will analyze their town map creations by comparing, contrasting, and compiling a final, accurate map.

Wrapping Up:

Conclude the lesson by choosing from one of the following suggested activity options:

 1. The five small groups will create a pencil and paper map on large poster paper (color will be added to enhance the work). Each group will be assigned a specific type of map to draw: United States; NH, which will include three bordering New England States; NH counties; NH landform regions; and town maps. The class will compile their group maps into one large collection and display on a bulletin board.

2. Each group will be assigned a specific type of map to draw (United States; NH, which will include three bordering New England States; NH counties; NH landform regions; and town maps).  Each student within the group will create a map of their assigned topic.  The teacher will then collect the maps and use them to create mobiles to hang in the classroom; each mobile will each of the five types of maps.

3. Each group will create a nesting maps project.  Each student within the group will be assigned a type of map  (United States; NH, which will include three bordering New England States; NH counties; NH landform regions; and town maps)  to create a collection of maps that will be displayed in a form similar to Russian nesting dolls. An example would be collecting different sized container covers from various containers, such as contractors’ buckets, paint lids, large plastic coffee containers, hot cocoa lids, and plastic frozen juice lids. Each map would be drawn to fit the size of the lid and then nest the lids into each other.

4. Individual students will create a layered flip book illustrating each type of map (United States; NH, which will include three bordering New England States; NH counties; NH landform regions; and town maps). This option will require extended amount of time.

Lesson Extensions:

Use the Barbara Petchenik children’s map competition (http://children.library.carleton.ca/) to view maps created by children from around the world. Encourage the class to create their own world maps comparable to the winning competition maps.

Resources:

Petchenik (n.s) The Barbara Petchenik children’s map competition. Retrieved March 15, 2014, from http://children.library.carleton.ca/.

Robeson, K. (n.d.). Me on the map. [Lesson Plan]. Retrieved March 15, 2014, from

http://mga.umbc.edu/docs/Me\_on\_Map\_Gr1.pdf.

Sweeney, J. (1996). Me on the map. (A. Cable, Illustrator). New York, NY: Crown.

**New Hampshire Postage Stamp Activity**

Written by Erica Almeida: Updated and Revised by Patricia McCabe

*Atlas Pages: 11, 15, 16; ALSO SEE TOWN & COUNTY FACTS*

Grade Level: 4-6

Overview: Research a city/town in New Hampshire, based on the unique characteristics of the location; design a postage stamp that represents the city/town. Students will use The New Hampshire School Atlas to find examples of the unique physical characteristics of New Hampshire, as well as analyze the spatial organization of people, places, and environments within the state.

Standards:

Essential Element: The World in Spatial Terms

Geography for Life: 4:1:1:B, 4:1:2:A - How to use maps and other geographic representations, geospatial technologies and spatial thinking to understand and communicate information.

New Hampshire SS:GE:1 - Students will demonstrate the ability to use maps, mental maps, globes and other graphic tools and technologies to acquire, process, report and analyze geographic information.

Essential Element: Places and Regions

Geography for Life: 4:4:1:A - Places are locations having distinctive characteristics that give them meaning and distinguish them from other locations.

New Hampshire SS:GE:2:2:3 - Observe the ways in which different people perceive places.

Geography for Life: 4:4:2:A - Places have physical and human characteristics.

New Hampshire SS:GE:2:2:l - Explore the physical and human characteristics of a place.

Common Core:

CCSS.ELA-Literacy.R1.4.7 - Interpret information presented visually, orally or quantitatively (via charts, graphs, diagrams, time lines, animation or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

Time to Complete Lesson: Approximately two class periods.

Materials:

8.5” X 11” piece of unlined paper for each student

Crayons, markers, colored pencils, scissors and glue

 Objectives:

1. Using a map of New Hampshire, graphs, tables and the internet, students will locate and gather information about a specific New Hampshire city or town.

2. Students will identify regions within New Hampshire and describe the physical characteristics of each.

3. Using the information gathered, students will create a postage stamp to represent the city/town.

4. Students then will examine and analyze the work of other students in the class.

 Procedure:

Opening: Explain how the students, working in pairs, will create a unique postage stamp that represents their assigned town/city. The stamp will not contain the name of the city but will represent unique characteristics of the town/city. After the postage stamps are complete, students will have the opportunity to attempt to identify the town/city represented by the postage stamps created by their fellow classmates.

 *Assign two students a different city/town in New Hampshire.* Working in pairs, each pair of students will draw from a hat a name of a city/town. The teacher should secretly log the name of the city/town of each student pair.

*Suggested cities/towns:* Concord, Nashua, Manchester, Portsmouth, Berlin, Keene, Dover, Rochester, Claremont, Hanover, Lebanon, Laconia, Colebrook and Salem.

 *Locate chosen New Hampshire cities.* Using a NH map (or an ELMO if available) the teacher will lead the students in locating cities/towns which the students will be researching in this project. In addition, the counties in which they are located should be identified. This will assist the students in using the thematic maps in The New Hampshire School Atlas.

 *Gather Information.* Students will use The New Hampshire School Atlas to complete Worksheet 1A.

Explain that the worksheet will act as an atlas scavenger hunt and the information from the worksheet will help the students design their postage stamp. The teacher should go over the worksheet before students begin to work on it and explain terms that might not be familiar. Students should use the internet to gather additional, unique information about their city/town. For example, a student researching Newport would find its nickname is the Sunshine Town and its emblem is the **Corbin Bridge** (see below). In addition, students could use magazines or books to gather information.



 *Create the Postage stamp.* Give students an 8.5” x 11” piece of paper and using the information they have collected from the worksheet 1A and the internet, they should think of a way to represent their city/town. For example, Newport could be represented by drawing a covered bridge with a shining sun. Using the sheet of paper and the information gathered the students should design their postage stamp. On the back of the stamp, students should put additional information about their city/town; i.e., popular attractions, lakes, physical and cultural characteristics. The name should not appear on the stamp! After each student pair has created their postage stamp, the teacher should collect them and assign each postage stamp a number (use a sticky note to attach number to front of postage stamp). Postage stamps should be displayed with the worksheet. The teacher should label their master sheet of assigned cities with the corresponding postage stamp number.

 *Explain to the students that they are detectives.* They will need to determine how each stamp corresponds to a particular city. The students will use Worksheet 1B to make their educated guesses. Explain that each city or town is represented only once.

 After each child has had a chance to guess their peers’ postage stamps, collect the stamps. Have students volunteer their guesses for the stamps. After the students have made their guesses, have the stamp’s creators either confirm or deny the city identification and then explain why they designed the stamp in that manner. Continue until all postage stamps have been explained.

 Resources:

The USPO web site showing past stamps: http://uspsstamps.com/stamps/series.

NH Mapmaker interactive:

http://mapmaker.education.nationalgeographic.com/gvXzcRqnAxrv8ecJWNdBgE/.

NH Digital Atlas: http://nhga.maps.arcgis.com/home/index.html.

The New Hampshire School Atlas, 2014.

New Hampshire Postage Stamp Rubric

Each grading category should be marked with Beginning, Developing, Accomplished or Exemplary.

\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. Students completed Worksheet 1A with complete information.

\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. Students created a postage stamp that includes characteristics of their city/town.

\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. Stamp shows knowledge of the city/town and the region of its location.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_4. Student work is neat and creative.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. Students have worked independently and have completed the project in a timely manner.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. Students have used correct spelling, grammar and punctuation.

WORKSHEET 1A (DO NOT PUT NAME OF CITY/TOWN ON THE WORKSHEET)

Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Before you create your postage stamp, you should complete the worksheet. The worksheet will help you decide what information you need to complete your postage stamp and will provide the information to other students to guess the city/town of your postage stamp.

1. In which county is your city/town? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What is the population of your city/town? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Are there major highways through your city/town? \_\_\_\_\_\_

If so, which ones?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Was there railroad access to your city/town? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Was your location an early settlement center? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. What were the early industries of your city/town? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. What Native American tribe lived at your location? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. What are the major agricultural products of your area? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. What is the tourism region? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. What is the diversity percentage of your location? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. List some unique characteristics of your city/town.

12. Your city/town is best known for:

**Where Are All the Walmarts?**

Written by Erica Almeida: Updated and Revised by Patricia McCabe

*Atlas Page: 13*

 Grade Level: 4 - 6

Overview: Based on geographic principles, students will predict and analyze locations of Walmarts in New Hampshire.

Essential Element: The World in Spatial Terms

Standards:

Geography for Life:1:4:1:B - Describe how properties of geographic representations determine the purposes they can be used for.

Geography for Life:2:4:1:A - Identify from memory the position and arrangement of physical and human features.

Geography for Life:2:4:3:A - Identify from memory locations and geographic characteristics to answer geographic questions.

Geography for Life:3:4:2:A - Describe and compare distributions of people, places and environments to examine spatial patterns, sequences, regularities and irregularities.

Geography for Life:11:4:2:A - Identify where goods and services are produced and consumed.

Geography for Life:11:4:2:B - Analyze and explain why some goods and services are produced in certain places.

Geography for Life:11:4:4:A - Describe and analyze different modes of transportation and communication used to move people, products and ideas from place to place.

New Hampshire SS:EC:2 - Students will learn about the pillars of a free market economy and the market mechanism.

Time to complete lesson: Two class periods.

Materials:

Crayons, colored pencils and/or markers

Calculator

Objectives:

1. Students will gain an understanding of how transportation systems have influenced the location of businesses.

2. Students will first predict the locations of Walmarts in New Hampshire and then locate the actual locations. They will assess how accurate their predictions were.

Procedure: The teacher will discuss with students why centers of commerce have traditionally grown up around transportation availability. They will discuss the importance of ports and the emergence and growth of cities at our ports, as well as the use of rivers, trains and the highway systems for fostering our centers of commerce. The teacher will stress the same pattern has been true in New Hampshire and that in this lesson students will be discovering if the location of Walmart stores in New Hampshire have followed any pattern. The teacher will also discuss the purpose of a road map and how it is different from other maps of New Hampshire. Analyzing a map key should be reviewed with the students. Students will name other types of maps that may be useful in making predictions.

1. Students will work in pairs and using a road map of New Hampshire and other maps from The New Hampshire School Atlas will make predictions of where 10 Walmart stores might be located in the state. Students should assess if their predictions follow any patterns and be able to explain what the patterns are. Students should reflect on what factors they used for their predictions: roads, population, etc.

2. Students will then fold the road map and create a mental map of New Hampshire and place the predicted locations of the 10 Walmarts on their map. Their map should include major highways, cities and landmarks.

3. Using the internet, the students will print the New Hampshire Walmart store locations using the website: <http://www.priceviewer.com/walmart_locations/NH.html>

4. Using the road map, students will locate the actual location of the Walmarts and correct, if necessary, their mental map to reflect the actual location of the Walmarts. Students will evaluate the accuracy or inaccuracy of their predictions. They also will assess if the pattern of locations was different than their predicted patterns (See Worksheet A).

 With the students, the teacher will discuss the pattern of locations of the stores and why the stores are located where they are.

Lesson Extension: Have students debate the conflict between local, small business and global, big business.

 Resources:

NH Mapmaker interactive:

http://mapmaker.education.nationalgeographic.com/gvXzcRqnAxrv8ecJWNdBgE/

 NH Digital Atlas: http://nhga.maps.arcgis.com/home/index.html

 Thomas O. Graff. (1998). The Locations of Wal-Mart and Kmart Supercenters: Contrasting CorporateStrategies. The Professional Geographer. 50:1, 46-57, DOI:

10.1111/0033-0124.00102.

WORKSHEET A

NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Predicted Locations of Wal-Mart Stores

City/Town Reason for location

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

1. After using the map to find the actual locations of stores, were your predictions accurate?

Why or Why not?

2. Is there a pattern to the location of the Wal-Mart Stores in New Hampshire? Explain your answer.

**Plan a Trip Along the 43rd Parallel N**

Written by Erica Almeida: Updated and Revised by Patricia McCabe

*Atlas Pages: 5, 6, 19*

*ALSO SEE TOWN & COUNTY FACTS*

Grade Level: 4 - 6

Overview: Students will research and plan a trip to a world location which is located at the same latitude as their hometown. Students will use The New Hampshire School Atlas and a world map to analyze the spatial organization of people, places and environments in New Hampshire.

Standards:

Essential Element: The World in Spatial Terms

Geography for Life: 1:4:l:A - Identify and describe the properties (position and orientation, symbols, scale, perspective, coordinate systems) and functions of geographic representations.

New Hampshire SS:GE:6:1:3 - Students will utilize maps, globes, graphs, charts, models and databases to analyze spatial distributions and patterns.

Essential Element: Places and Regions

Geography for Life: 4:4:2:A - Describe and compare the physical characteristics of places at a variety of scales, local to global.

Geography for Life: 4:4:2:B - Describe and compare the human characteristics of places in the world.

Essential Element: Physical Systems

Geography for Life: 7:4:2:A – Describe how Earth’s position relative to the Sun affects conditions on Earth.

Essential Element: Human Systems

Geography for Life:9:4:2:A - Describe how the number of people varies from place to place.

Geography for Life:10:4:2:A - Identify and describe examples of cultural markers.

New Hampshire SS:EC:4 - Financial Institutions and the Government

Common Core

CCSS.ELA-Literacy.SL6.5 - Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume and clear pronunciation.

CCSS.ELA-Literacy.SL6.6 - Adapt speech to variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

 Time to Complete Lesson: Several Class Periods.

Materials:

The New Hampshire School Atlas, World Atlas

A blank political world map with latitude and latitude

Internet Access

Objectives:

1. Using a world map, students will locate 43 degrees north latitude in New Hampshire, roughly where they live, and will find cities throughout the world at roughly 43 degrees north latitude.

2. Students will compare and contrast the New Hampshire location and the world location.

3. Using the information obtained, students will plan a trip to the world location.

Procedure:

Opening: Explain how students will be learning about world locations that are located at approximately the same north latitude as their town in New Hampshire. Working in teams of four they will compare and contrast their location with the world location. They then will plan a trip to their location. They will then report to their classmates the information they have learned.

 Students will locate towns/cities in world locations that are at approximately 43 degrees north latitude.

 Students will be assigned to a team of four students. Students will identify the 43rd  parallel N on a generic world map that should be provided for them.

 Using Worksheet A as a guide, they will locate and color all the countries that have the 43rd parallel N running through their territory. The teacher should give each student team a group of these countries and help them locate a city in each country that is in close relation to the 43rd parallel N. Students will use the internet to investigate their location and start the process to compare and contrast their city with their town in New Hampshire. Each student of the team can be assigned a different city, or the team can work on all the cities together.

 Students will plan a trip to their location (See Worksheet B).

 Students will report to the class the information they have found and will describe their planned trip to the location.

Classroom Discussion: Students and teacher will compare and contrast the world locations based on the latitude. They will attempt to draw conclusions about world locations at the same latitude.

 Lesson Extension: Hypothesize about locations at the same longitude.

GRADING RUBRIC FOR PLAN A TRIP – Team Grade

Each grading category should be marked with Beginning, Developing, Accomplished or Exemplary.

\_\_\_\_\_\_\_\_\_\_\_\_ 1. Team completes the Worksheets 1A & 1B with complete information

\_\_\_\_\_\_\_\_\_\_\_\_ 2. Team finds information about their location using a variety of resources

\_\_\_\_\_\_\_\_\_\_\_\_ 3. Team compares and contrasts their home and work location

\_\_\_\_\_\_\_\_\_\_\_\_ 4. Team’s oral report reflects a thorough knowledge of the world location

GRADING RUBRIC FOR PLAN A TRIP – Individual Grade

Each grading category should be marked with Beginning, Developing, Accomplished or Exemplary.

\_\_\_\_\_\_\_\_\_\_\_ 1. Student is cooperative with teammates

\_\_\_\_\_\_\_\_\_\_\_ 2. Student completes team assigned tasks in a thorough and timely manner

\_\_\_\_\_\_\_\_\_\_\_ 3. Student participates appropriately in the team oral report

 WORKSHEET A

 Team member names

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 On your map, draw a thick, black line where the 43rd parallel N is. Color in all the countries listed. With an atlas, find a city in each country or territory that is close to the 43rd parallel to do further research on.

|  |  |  |
| --- | --- | --- |
| **Coordinates:** | **Country:** | **Selected City:** |
| 43°0’N 0°0’E | France |  |
| 43°0’N 10°30’E | Italy |  |
| 43°0’N 17°2’E | Croatia |  |
| 43°0’N 17°40’E | Bosnia and Herzegovina |  |
| 43°0’N 18°28’E | Montenegro |  |
| 43°0’N 20°6’E | Serbia |  |
| 43°0’N 20°34’E | Kosovo (separatist nation in Serbia) |  |
| 43°0’N 22°49’E | Bulgaria |  |
| 43°0’N 40°56’E | Abkhazia (separatist nation in Georgia) |  |
| 43°0’N 41°54’E | Georgia |  |
| 43°0’N 51°46’E | Kazakhstan |  |
| 43°0’N 56°0’E | Uzbekistan |  |
| 43°0’N 73°33’E | Kyrgyzstan |  |
| 43°0’N 96°10’E | Mongolia |  |
| 43°0’N 110°40’E | People’s Republic of China |  |
| 43°0’N 129°53’E | North Korea |  |
| 43°0’N 131°6’E | Russia (Eastern) |  |
| 43°0’N 140°31’E | Japan – Island of Hokkaido |  |

WORKSHEET A

Name of city and country \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Physical Characteristics of location near city/town:

 Are there mountains near your world location? If so, what are the names of the mountain range/ranges? Or is the land flat?

 Are there rivers, lakes, seas, or oceans near your location? What are the names of the bodies of water? Or is your area a dry, waterless area? Is it located in a desert? What is the name of the desert?

Is the location forested or treeless?

Is your world city/town located in a predominately rural or urban area?

Compare your hometown with your world location.

 Climate

What is the general climate of your location?

Does your location experience seasons?

What is summer like?

  What is winter like?

Compare the climate of your location with the climate of your hometown.

WORKSHEET A

 Customs

Does your world location have different and interesting foods and drinks?

What language do the people of your country speak?

Does your world location celebrate different and interesting holidays and celebrations?

Does your world location play different and interesting sports?

Compare and contrast the customs of your home location with your world location.

Economy

What type of money do the people of your world location use?

What are some of the industries of your world location?

How do most of the people of your world location make a living?

In general, what is the standard of living of the people in your world location?

What types of homes do people of your location live in?

Compare and contrast the economy of your home location with the world location.

WORKSHEET B

Team member names

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Working together, plan a trip to your world city!

Decide in which season you will visit your world location.

Create a packing list of clothes and supplies to take with you.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Decide upon new foods and drinks to try while you are there.

1.

2.

3.

4.

5.

Decide what interesting places you will visit while you are there.

1.

2.

3.

4.

5.

Will you participate in any holidays, celebrations or sporting events?

**“Me on the Map” Lit Trip**

Written by Meghan Vetter

Can be used with:

Google Earth *OR* The New Hampshire School Atlas: Page 3

Grade level: K-2

Overview:

This lesson has more than one function. Students will be tested on their prior knowledge of location, as well as complete a formal activity on the concept, and eventually perform a posttest to evaluate what they have learned. The main activity involves reading “Me on the Map” as a class, then completing a worksheet that uses Google Earth to find the student’s special place on the map. Using the hierarchical techniques taught by the girl in the story, students will be able to start with the United States and eventually arrive at their special place on the map, their school. The students will use the attached activity page as a guide and answer sheet for the Google Earth activity.

Standards:

Essential Element: The World in Spatial Terms

Geography for Life: 1 - How to use maps and other geographic representations, geospatial technologies and spatial thinking to understand and communicate information.

Geography for Life: 3 - How to analyze the spatial organization of people, places and environments on Earth's surface.

Common Core:

CCSS-ELA-Literacy. K-5.7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Time to Complete Lesson: Three Days

Materials:

Pre-test: Glue and construction paper; pre-cut pieces of North America

Google Earth Activity: “Me on the Map” by Joan Sweeney; internet access, pre-made KMZ file

Post-test: Construction paper, scissors, glue, markers/colored pencils;

Blank maps of the world, North America, the USA, students’ state, students’ town

Objectives:

1. Be able to find a location on the map through hierarchical techniques

2. Answer questions about the geographic location of their school

3. Understand the term hierarchy and be able to distinguish order of items.

 Procedure:

1. *Pre-test: Piece Together the World*

 Using individual pieces of North America representing Canada, the contiguous United States, Alaska, and Mexico, students will glue the pieces in their proper locations onto a piece of construction paper, and then draw some type of symbol like a star or colored-in circle of where they live.

2. *Google Earth Activity:*

 Read “Me on the Map” by Joan Sweeney as a class. Discuss how the girl placed herself on each of the maps in the story.

 Log onto computers that have access to the Google Earth KMZ files. Essentially, it shows the student a location outlined in a different color and moves from small to large-scale until it is outlining the student’s school.

 This KMZ file was pre-made specifically for an elementary school in Keene. Although all files will be available, the street and school file may not be applicable for all classrooms. The link will be included on the website version of the lesson, highlighted in blue below. Log on to the NHGA website ([www.nhga.net](http://www.nhga.net)) to get it online. NOTE: The NH Geographic Alliance is not active anymore but the website is still up.

 **If you cannot access this file** - Use page 3 of The New Hampshire School Atlas and ask the students to use the filled in colors on that page instead!

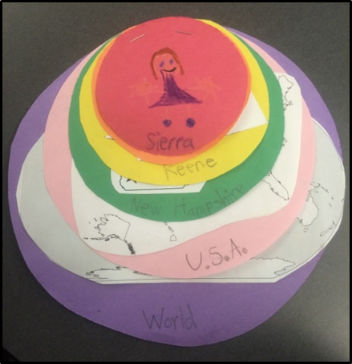
 Students will locate the outlining color that represents their country, state, town, street, and school and fill in their answers accordingly on the worksheet.

3. *Post-test: Flip Book*

 Students will cut out pieces of a picture of a school, their town, the country, and the world, and to glue them to circle shaped pieces of colored paper of varying size.

 Students will be given an extra small circle, which was intentionally left blank, so they can draw a picture of themselves.

 When the pieces are glued correctly, the students can attach the circles together to make a book displaying the circles from the largest location on the bottom to the smallest location on top.



*Pre-test Sample Download* ***KMZ Files*** *Post-test Sample*

*\*\*Sample pictures taken by Stephanie Varanay\*\**

Resource:

Sweeney, Joan, and Annette Cable. *Me on the Map.* New York: Crown, 1996. Print.

**Me on the Map”**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part One- Matching:** Match each letter with its correct place.

\_\_\_\_ United States A. Street Name

\_\_\_\_ New Hampshire B. Town

\_\_\_\_ Hinsdale C. Country

\_\_\_\_ School Street D. School Name

\_\_\_\_ Hinsdale Elementary E. State

**Part Two- Google Earth: Circle the correct answer.**

What is orange?

Country State Town Street Our School

What is red?

Country State Town Street Our School

What is yellow?

Country State Town Street Our School

What is green?

Country State Town Street Our School

What is blue?

Country State Town Street Our School

Sweeney, Joan, and Annette Cable. *Me on the Map.* New York: Crown, 1996. Print.

**Go West, Young People!**

Updated and Revised by Patricia McCabe

Grade Level: 4 - 5

Overview: Students will use a map of the United States to trace the movement of emigrants from the eastern United States to California.

Standards:

Essential Element: The World in Spatial Terms

Geography for Life: 1:4:2:B - Construct maps and graphs to display geospatial data

New Hampshire SS:GE:4:4:2 - Describe the types and historical patterns of human migration

New Hampshire SS:HI:6:4:3 - Demonstrate an understanding of how westward movement led to personal opportunities and a more diverse economy

Essential Element: Human Systems

Geography for Life:9:4:3:A - Describe examples of human migration

Geography for Life: 9:4:3:A - Explain why people move from one place to another

Common Core:

CCSS.ELA-Literacy.W.4.3 - Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

CCSS.ELA-Literacy.SL4.4 - Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

Time to complete Lesson: Several Class periods

Materials:

Colored Pencils

Outline map of the United States (state divisions, major rivers, mountains, etc.)

Map of the United States for reference

Map showing the major western emigration trails

Objectives:

1. Students will learn the terms immigration and emigration and the difference between them.

2. Students will learn of the trip west many families took to reach the gold fields of California.

3. Students will learn about the trails that were used by the pioneers.

4. Students will learn why the lure of gold was so great.

5. Students will construct a Gold Trekking Map across the USA to show how

pioneers traveled to the Gold Fields of California.

Procedure:

Opening: The teacher will first define the terms immigration and emigration. The Pilgrims were immigrants when they came to the New World because they left one country to travel to another. On the other hand, the settlers who traveled west were emigrants since they were traveling out of the United State to the territories. The teacher will discuss with the students how many families left farms in the east to find a better life in the west. Many of the farms in the east were very unproductive, and it was hard to survive. Once gold was discovered, many families felt they would have a better life if they resettled in the gold fields of California.

 The teacher will chose a book of appropriate level to read to the class as they work on this project, such as Wagon Train Kids, by K. B. Shaper.

 To prepare their maps, students will label the states, major rivers and mountain ranges.

 As the teacher reads the book, students, with the guidance of the teacher, will label the route the family follows as they make their way west. The teacher will want to show the students which of the trails the family was following. (Refer to History Text(s) to find maps of the trails to the west).

 After the students have completed their map showing the route across the country the family in the story took west, they will then write a creative piece of writing imagining they were a child experiencing one day of the trip west. (See Worksheet A)

 Students will share their written piece with the rest of the class.

 Using other thematic maps such as climate and vegetation, students can describe their location in their narrative.

Lesson Extension:

Classroom discussion: Do people migrate today? Why?

 To fully address standards on migration, further lessons can be developed to study patterns of migration in the New Hampshire. Using The New Hampshire School Atlas, study what types of settlement and migration patterns can be seen using the population maps. To study cultural patterns, use the diversity map to study the cultural make-up of settlements in New Hampshire.

Resources:

NH Mapmaker interactive:

http://mapmaker.education.nationalgeographic.com/gvXzcRqnAxrv8ecJWNdBgE/

NH Digital Atlas: http://nhga.maps.arcgis.com/home/index.html

The New Hampshire School Atlas. 2014.

 Go West Young People Rubric

Each grading category should be marked with Beginning, Developing, Accomplished or Exemplary.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1. Student completed the trail map accurately.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. Student’s map shows attention to detail and is neat.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. Student’s story is written using geographic information.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. Student used standard conventions of writing.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. Student’s oral presentation follow speaking conventions.

WORKSHEET A

NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Imagine you were with the family traveling west for one day. Tell what your day was like. You will need to include at least one landmark of your route, include what you ate for the day, what were the activities of your day and what you did to help the family as they traveled. What was the land like as you traveled? What was it like to get ready to camp for the night, where did you sleep, and what was it like sleeping on the trail?