

Abstract

This unit explores how communities develop themselves by examining the positive and negative impacts of development of community environments. Students cultivate their understanding of how they can positively impact the environment within their community by reducing reusing and recycling. This unit embeds the learning of map skills as well as geographical features.

My Geography, My Environment

Unit 2

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| **Lens of Social Studies:** **Geographer:**Use geographic representations, terms and technology to process information from a spatial perspective* Interpret maps of the school and community that contain symbols, legends and cardinal directions.
* Interpret the meaning of symbols and the location of physical and human features on a map (cities, railroads, highways, countries, continents, oceans, etc.).
* Understand the effects of humans interacting with their environment
* Give examples of ways in which people depend on the physical environment and natural resources to meet basic needs.
* Explain how people positively and negatively affect the environment.

**Historian:** Understand how various sources provide information about the past* Compare various interpretations of the same time period using evidence such as photographs and interviews.
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| **Unit Compelling Question** | **How do people impact the environment around them?** |
| **Essential Standard(s)** | 2.G.1 Use geographic representations, terms and technology to process information from a spatial perspective.2.G.2 Understand the effects of humans interacting with their environment.2.H.1 Understand how various sources provide information about the past. |
| **Students Will Know (Content)** * Why we use geographic tools such as maps, globes, legends, keys, symbols, cardinal directions, and compass rose, etc.
* How to interpret symbols such as a character, letter, numbers, or similar graphic representation used on a map.
* How to find the location of physical features (e.g., continents, oceans, etc.) and cultural features (e.g., cities, railroads, highways, etc.) on a map.
* Human resources versus natural resources.
* Physical and cultural features of rural, urban and suburban communities.
* The various ways in which people use the environment to meet their needs.
* How natural resources have been manipulated by humans: rivers and canals and irrigation systems, cultivation process, and fertilizing land.
* Examples of how people impact the environment both positively and negatively. For example: conserving water, reducing the amount of waste, littering, etc.
 | **Student “I Can” Statements (Skills)*** I can read a map, using its symbols to find streets, roads, buildings, etc.
* I can read a map using its symbols to find locations of physical and human features.
* I can create a map using symbols, legends, and cardinal directions that provides individuals with directions to a particular location within the classroom, school, or community.
* I can differentiate between rural, urban, and suburban communities. Identify states, towns, countries, and continents.
* I can conduct basic map skills that answer: where are we now? What city are we in? What state are we in? What country are we in? What continent are we on? What planet are we on?
* I can identify the following physical features: mountains, hills, valleys, plateaus, plains, oceans, rivers, bays, and streams.
* I can explain ways people positively and negatively affect the environment.
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| **Generalizations And Essential Questions** | **Maps may change over time.*** How do you read a map?
* How do you know if a map has changed?
* What causes a map to look different over time?

**Humans depend on the environment to meet their needs.*** What basic needs are imperative for our survival?
* What aspects of our physical environment support our basic needs?
 | **People may affect the environment in positive and negative ways.*** What are some positives ways people interact with the environment?
* What are some negative ways people interact with the environment?
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| Key Vocabulary:Tier 1 | Tier 2 | Tier 3 |
| * Earth
* Needs - shelter, food, water
* Flat
* Human
* Map
* Globe
 | * Impact
* Depend
* Affect
* Interpret
* Settle
* Positive
* Negative
* Key
 | * Natural resources, Human resources
* Cultural features, Natural features
* Latitude, Longitude
* Compass rose, Cardinal directions
* Equator, Hemisphere
* Country, Continent
* Depletion, Scarcity
* Climate change
* Reduce, Recycle, Reuse, Conserve
* Civic responsibility
* Ecosystem
* Rural, urban, suburban
* Sphere
* Features
* Physical
* Cultural
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| Key People:  | Famous People | General |
| * Theodore Roosevelt
* Jane Goodall
* Rachel Carson
* Wangari Maatha
* James Cook explored the earth (1768-1779)
* Captain William “Bill” Pinkney - sailor (Open Court Reading: Captain Bill Pinkney's Journey)
 | * Cartographer
* Environmentalist
* Surveyor
* Explorer
* National Geographic Society
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| Notable Events: | **Natural events that changed the environment** | **Human events that changed the environment** |
| * Mount Vesuvius erupted and Pompeii was destroyed in 79 BCE
* 1980 - Mount St. Helens erupts explosively in [Washington](https://en.wikipedia.org/wiki/Washington_%28U.S._state%29) State.
* 2004 - Earthquake causes large tsunamis in the Indian Ocean

(Although these do not represent human impact on the environment, they do show how land/environment can change and thus maps will often change) | * 1750 - Beginning of [Industrial Revolution](https://en.wikipedia.org/wiki/Industrial_Revolution), which eventually turns the use of [coal](https://en.wikipedia.org/wiki/Coal) and other [fossil fuels](https://en.wikipedia.org/wiki/Fossil_fuel) to drive [steam engines](https://en.wikipedia.org/wiki/Steam_engine) and other devices. The Erie Canal was completed in 1825
* The Suez Canal opened in 1869
* The US Transcontinental Railroad was established in 1869
* 1959 - The creation of Lake Norman (North Carolina)
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| Notable Documents and Nonfiction Text: | **Primary Sources*** Charlotte-Mecklenburg Historic Landmark Commission - <http://www.cmhpf.org/photogallery/galleryguide.html> - Pictures of landmarks in Charlotte at various stages of history
* North Carolina Maps - <http://www2.lib.unc.edu/dc/ncmaps/index.html> - A comprehensive, online collection of historic maps of the Tar Heel State.
* Primary Source - A Greener World: Resources about the Environment <http://resources.primarysource.org/greenerworld>
* Time-lapse Videos of land development
	+ <https://www.youtube.com/watch?v=nakX2GmIJv4> - Teucer Vineyard
	+ <https://earthengine.google.com/timelapse/> - Global time-lapse videos show changes to our planet visible from [Landsat](http://landsat.usgs.gov/) satellite imagery. The development changes are shown over a series of years.

**Secondary Sources*** <http://www.openculture.com/2015/04/timelapse-video-showing-the-creation-new-york-citys-skyline.html> - a computer animated time-lapse video showing the creation of the NYC skyline (1500 to present)
* Wangari's Trees of Peace: A True Story from Africa by Jeanette Winter
* [Looking at Maps and Globes](http://www.amazon.com/gp/product/0531292886/ref%3Das_li_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=0531292886&linkCode=as2&tag=giftofcuri-20&linkId=TYDAZMJQPJHTHGPL) by Rebecca Olien
* [Maps and Globes](http://www.amazon.com/gp/product/0064460495/ref%3Das_li_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=0064460495&linkCode=as2&tag=giftofcuri-20&linkId=PV2MBH4IOLGRZFXH) by Harriett Barton
* [Keys and Symbols on Maps](http://www.amazon.com/gp/product/1606945351/ref%3Das_li_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=1606945351&linkCode=as2&tag=giftofcuri-20&linkId=O5ZLQ4B3I5CSUMBL) by Meg Greve
* [North, South, East, and West](http://www.amazon.com/gp/product/1606945343/ref%3Das_li_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=1606945343&linkCode=as2&tag=giftofcuri-20&linkId=GTSGWPQQH3YQ7ZSZ) by Meg Greve
* [Me on the Map](http://www.amazon.com/gp/product/0517885573/ref%3Das_li_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=0517885573&linkCode=as2&tag=giftofcuri-20&linkId=TWGRZXNWGIDIKWAH) by Joan Sweeney
* [Recycle!: A Handbook for Kids](http://www.alibris.com/Recycle-A-Handbook-for-Kids-Gail-Gibbons/book/5600474) by Gail Gibbons
* *What's So Bad about Gasoline?: Fossil Fuels and What They Do* by Anna Rockwell
* *10 Things I Can Do To Help My World* by Melanie Walsh

See unit resources section for websites that provide lists of additional primary and secondary sources. |

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| **Sample Questions Connected to Unit Literacy** |
|  | **Factual Knowledge** | **Conceptual Knowledge** | **Procedural Knowledge** | **Meta-Cognitive** |
| **Remember** | Where is Charlotte located on the map? | What are some causes of environmental problems we face? | What steps can people take to positively influence the environment? | Is it necessary to reduce, reuse, and recycle? Why or why not? |
| **Understand** | How would you summarize the differences between human resources and natural resources? | What is the relationship between land development and pollution? | How would you compare and contrast the cultural feature symbols on a map to the physical features symbols? | Which map allowed you to better understand the topography of the area? |
| **Apply** | How would you use recycling to better the environment? | What directions would you give for someone trying to get from the school to the library? | What approach would you use to teach other students how to read maps? | If you were to ask President Theodore Roosevelt a question about his efforts to protect the environment, what question would you ask? Why? |
| **Analyze** | What might you include on a list about ways people depend on the physical environment? | How would you tell the difference between human resources and natural resources? | Why do you think it is important to accurately read maps? | What inferences can you make about the land use in each of the following communities: rural, urban, suburban? |
| **Evaluate** | How does land development influence environmental pollution? | What information would you give to support the importance of taking care of the environment? | Which do you think is most important to the environment: reduce, reuse, or recycle? What examples can you cite to support your judgement? | In what way is reading a map similar to that of reading a globe? How are they different? |
| **Create** | If someone was traveling across the state, how would you improve a map that only showed cultural features to help the driver understand the terrain? | What could you design to maximize the efforts of your school’s or home’s recycling system? | Can you propose a different plan of action for using natural resources? How would your alternative support the environment? | What document based question could you create that would support the importance of civic responsibility toward the environment? |

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|  | **Factual Knowledge** | **Conceptual Knowledge** | **Procedural Knowledge** | **Meta-Cognitive** |
| **Text Dependent Tasks** | * Make a list of natural resources in your area. (W)
* Read a map and answer questions about where things are on the map using cardinal directions. (CR)
* Read a set of texts about your community’s environmental efforts. Create a method of sharing the important ways your community is positively impacting the environment. (CR, A, P, W)
 | * Study a map and write directions describing how to get from one place to another. (CR, W)
* Create a poster of natural resources using pictures from magazines. Share your poster with a partner. (SPL)
* Construct a map of your community out of Legos or other materials. Share your community map with a partner. (SPL)
* Study a map and write directions describing how to get from your city to the state capital. (CR, W)
 | * Write a plan for how your community can positively change the environment. (P, W)
* Write a plan for how your class can positively change the communities greenways. (P, W)
* Create a map of an imaginary community. Include a key, compass rose, cultural and physical features. One feature in your map must be a school. Then describe to a partner how to read your map and how to travel to various locations from the school using cardinal directions. (SPL, W)
 | * Read a newspaper article about a way a community changed the physical environment. Write a essay explaining what the community development was and what effects the environment may have based on this new development. Also answer the question, “What this development worth the environmental changes that may take place?” (CR, A, P, W)
* Think of one way people negatively affect the environment in your community. Develop a plan to help solve the problem. Write a letter to Charlotte Environment Committee detailing your research and solution. (CA, A, P, W)
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| **Legend** | CR = Close Reading | A = Annotating | SPL = Speaking and Listening | P = Pre-Writing | W = Writing |

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| Learning Connections: |
| *Before Topic is taught (prior learning):* | ***After Topic is taught (anticipated learning):*** |
| Note: This list indicates what students show already understand about geography and the environment from Kindergarten and First grade. Teachers may need to reviews these concepts prior to starting the unit.* Decisions people may make may shape the future.
* Maps and other geographic representations and tools can be used to locate specific places in the classroom, school, and home.
* Geographic representations may differ in accuracy in relation to the size of physical features and their relation to one another.
* Landforms are distinguished by their physical features.
* Land and water may be exhibited differently depending on the geographic representation used.
* Using absolute location often makes it easier to determine a specific place or direction.
* Using relative location to provide directions may present challenges.
* Basic elements of geographic representations can be used to find locations of places.
* The physical environment does not always stay the same due to human-environment interaction.
* People can change the environment through the use of natural resources.
* Different environments will help determine the particular location and choices of a group of people.
 | **Note:** The underlined words indicate the change between the on grade level learning and anticipated future learning. Teachers can use this list to provide enrichment for students.* Landmarks or points of interest can be used to determine the location of a place.
* How human values and beliefs and environmental features affect development.
* Human characteristics of a place are often reflective of a need to adapt or change the physical characteristics of an environment.
* In order for a community to thrive, it is necessary for people to properly maintain the balance between the environment and the community.
* The availability of resources may determine the success or failure of a local community.
* The movement of goods, people and ideas can transform a community.
* Regions may be distinguished from each other through function, culture, and geography.
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**Unit Resources**

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| Unit Title – My Geography, My Environment |
| Resource Title | **Location** | **Summary**  |
| Oxfam Education - Mapping Our World | <http://www.oxfam.org.uk/education/resources/mapping-our-world>  | This is an interactive website that allows students to work with maps and globes. |
| Communities Here & There  | Grade 2 Nystrom Teacher’s Guide | The following units and lessons from the CMS Social Studies curriculum support this unit of study* Unit 1 - Lesson 2 and Lesson 4
* Unit 3 - all 6 lessons
* Unit 4 - all 3 lessons
* Unit 6 - lessons 1, 3, and 4
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| Discovery Education - “Map Skills: Content Collection” | Discovery Education Website - login using the CMS Student Portal or NCEdCloud - then search map skills | Has a collection of lessons and content related to map skills |
| Discovery Education - “Investigating Earth’s Natural Resources” | Discovery Education Website - login using the CMS Student Portal or NCEdCloud - then search natural resources - filter for K-2 and videos (full) | This is a 16 minute video that examines some of the renewable and nonrenewable resources found on Earth, discusses some of the problems with over consumption and contamination of natural resources, and details some of the actions that can be taken for sustainability of natural resources. |
| Listopia: Picture Books about Maps | <http://www.goodreads.com/list/show/9488.Picture_Books_About_Maps>  | A good reads list of picture books about maps and map skills. |
| The Great Kapok Tree | *The Great Kapok Tree: A Tale of the Amazon Rain Forest* by Lynne Cherry | It is a myth like story that explains the ecological importance of saving the rainforests. |
| The Lorax | *The Lorax* by Dr. Seuss | A good book when discussing land use and the changes to the environment. It chronicles the plight of the [environment](https://en.wikipedia.org/wiki/Environment_%28biophysical%29) and the Lorax, who speaks for the trees against the Once-ler.  |
| The Three-R Plan (Reading A-Z) | Reading A-Z: *The Three-R Plan* (Level Q) | This is a fairy-tale story about a land that has grown barren. The king sets out to find someone to solve the problem. Three men each have useful ideas (reduce, reuse, and recycle). The king accepts them all and improvements are soon seen in the kingdom. |
| Mapping Penny’s World | *Mapping Penny’s World*by Loreen Leedy | Lisa and her dog, Penny, learn the basics of mapmaking. |
| Where Once There Was a Wood | *Where Once There Was a Wood* by Denise Fleming | A powerful poem encourages children to protect nature. |
| Reduce, Reuse, Recycle Book List | [http://www.scrapdr.com/docs/Childrens\_Books\_about\_Recycling\_&\_more.pdf](http://www.scrapdr.com/docs/Childrens_Books_about_Recycling_%26_more.pdf)  | This pdf lists children’s books about helping the environment. |
| Oh No! Hannah’s Swamp is Changing | *Oh No! Hannah’s Swamp is Changing* by M. Barrett-O’Leary |  A book about the swamp ecosystem and the importance of taking care of its unique environment.  |
| HMH Guided Reading Sets | Copies of these books sets are available in every school. Ask your literacy facilitator if you are not sure where in your building they are housed.  | The following Houghton Mifflin Harcourt guided reading sets may support this unit of study:* Joy’s Planet Patrol Plan - Level M
* The Community Garden - Level J
* Dad’s Garden - Level Q
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