

Module 9 • Understanding our Ecological History Through Maps

Brief Overview

This module introduces the use of maps as a way to understand historical changes in the urban landscape. Students will learn how the environment of Baltimore City has changed over time by examining a series of historical maps. Students will understand their environmental rights and discuss the impacts that development has had on the health of their community habitats. The students will map environmental aspects of their neighborhood by collecting field data and displaying their data on a large scale Neighborhood Map.

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Time

10 – 12 sessions

Desired Outcomes

Students will:

- Identify characteristics that make a habitat healthy and understand their environmental rights.
- Learn the key features of proper map making.
- Learn how to use maps to trace historical changes in Baltimore City.
- Map the environmental features of their community.

What You'll Need

Materials

- Clipboards
- Compasses
- 11x17 sheet of paper
- Colored pencils/Crayons/Markers/Pencils
- Chart paper
- Scissors
- Pencils
- Folder paper

Worksheets and Handouts

- Sample Ideal Community Map
- Key Features of Maps*
- How our Neighborhood has Changed Over time*
- Compass Treasure Hunt*
- City of Baltimore Current Waterways
- Environmental Rights Graphic Organizer
- Friendly Letter Handout

Maps

- Sanborn Map
- City of Baltimore Historical Waterways
- Historical Neighborhood Stream Map
- Sachse's Bird's Eye View Map
- Blank Neighborhood Map
- Large Scale Neighborhood Map

Journals

- Lesson 1: What do you think it means to have environmental rights?
- Lesson 3: What do you think your neighborhood looked like 100 years ago?
- Lesson 5: What do you think your neighborhood WILL look like in 100 years?

New Vocabulary

Bill of Rights

A formal statement of the fundamental rights of the people of the United States.

Civil Rights

Rights to personal liberty established by the 13th and 14th Amendments to the U.S. Constitution and certain Congressional acts, especially as applied to an individual or a minority group.

Compass

An instrument for determining directions.

Environmental Rights

These rights guarantee access to the unspoiled natural resources that enable survival such as land, shelter, food, water and air.

Legend

A table on a map, chart, or the like, listing and explaining the symbols used.

Map

A map is a visual representation of an area.

Orientation

Which way is north (shown using a ‘north arrow’).

Right (noun)

A just claim or title, whether legal, prescriptive, or moral; ex: you have a *right* to say what you please.

Scale

The scale of the map is the ratio of the size of the map to the actual size of the object on earth. For example, 1 inch on the drawing may represent 1 yard in the garden plot.

Symbol

Something used for or regarded as representing something else; a letter, figure or other character used to designate something.

Careers

Students will learn about different occupations in mapping and history-related fields

- Geographer
- Historian
- Environmental Scientist

Preparing for the Lessons

Leaders will:

- Review lesson sequences and the directions for lesson preparation
- Prepare areas in the classroom and hallways for hanging student work
- Set up a system for keeping student work
- Clean/remove “unsafe” objects from outdoor areas where students will investigate
- Ensure you have all the materials you will need to complete each lesson in the module
- Recruit volunteers to assist in the lessons where the students will be outside of the classroom

Module 9 • Lesson 1 • Our Environmental Rights

Action Synopsis

Students will express their knowledge about environmental rights and explore the rights present in their community. Students will create a map of their ideal healthy community.

Time

1-2 sessions (each session is 1-1.5 hours)

Desired Outcomes

Students will understand the term “environmental rights.” Students will be able to think critically about their community and identify “environmental rights” within their community.

What You’ll Need

For Each Student

- An 11x17 sheet of paper
- Colored pencils or crayons

For Entire Class

- Chart paper
- Sample Ideal Community Map*

Preparing for the Lesson

Leaders will:

- Review new vocabulary terms.
- Become familiar with *Sample Ideal Community Map* found in Leader Tools
- Become familiar with common “environmental rights.”
- Write across the top of a piece of chart paper the title: “Our Environmental Rights.” Hang chart paper in front of class.
- Write across the top of a piece of chart paper the title: “Healthy Habitats.” Hang chart paper in front of class.
- Prepare wall space for hanging student work.

New Vocabulary

Bill of Rights

A formal statement of the fundamental rights of the people of the United States.

Civil Rights

Rights to personal liberty established by the 13th and 14th Amendments to the U.S. Constitution and certain Congressional acts, especially as applied to an individual or a minority group.

Environmental Rights

These rights guarantee access to the unspoiled natural resources that enable survival such as land, shelter, food, water and air.

Right (*noun*)

A just claim or title, whether legal, prescriptive, or moral; ex: you have a *right* to say what you please.

Assessments

- None for this lesson

Lesson Sequence

1. Remind students that this month is Black History month. Tell your students that the KidsGrow lessons for February will explore our community's history and something called "Environmental Rights."
2. Ask the students what a "right" is. Use the terms "Civil Rights" and "Bill of Rights" to get them to define the term. Next, ask the students what an "Environmental Right" is. What "Environmental Rights" do they think they deserve? Write these down on your chart paper as students list them. All people have the right to clean air, clean water, nutritious food, healthy homes, etc.
3. Next, ask the students to list the characteristics of a healthy habitat. Their list may have some of the same answers as their list of Environmental Rights. A healthy habitat provides everything a living organism needs to grow and survive. Write their responses down on a separate sheet of chart paper. Initiate a discussion that links their list of Environmental Rights to their list of the characteristics of healthy habitats. You may do this by using a Venn diagram. See Leader Tools for an example. This discussion should get the students thinking about their own habitat, how healthy or unhealthy their habitat may be, and what environmental rights they may have or may be missing.

4. Once the students understand their environmental rights and can make the connection to healthy habitats, have them draw a picture of their ideal community. Their drawings should display the environmental rights they listed and should include everything a community would need to survive including homes, schools, transit, places for people to work, food, water, medical access, etc. For older students, have them choose one or two environmental right and write a description of the resource. For instance, does their clean water come from streams, reservoirs, rain barrels, or lakes; does the water come from inside or outside the city, how is the water purified? Do they have clean air in their ideal community because there are no factories or do the factories/cars use technology that keeps pollutants out of the air (scrubbers, solar panels, water purifier)? Are there a lot of trees in their community or not trees? Why? Do people have healthy food because everyone owns a piece of land to farm or do people shop at a store? Where does the food come from and what are people eating?
5. You may show the students the *Sample Ideal Community Map* to get them thinking.
6. Once the students have a chance to draw and label features of their ideal community, have a class discussion on how their drawings differ from their actual communities. Write student responses collectively on a piece of chart paper and hang the list in the classroom for the remainder of this module.

Maryland SC Standards (4th and 5th Grade):	
<i>Standards are presented in the following format: (Grade)Standard.Topic.Indicator.Objective – Objective Statement</i>	
Science	
<p>Standard 1.0 Environmental Issues:</p> <p>Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.</p>	<p>Environmental Issues</p> <p>(4)6.B.1.a – Identify and describe that human activities in a community or region are affected by environmental factors:</p> <ul style="list-style-type: none"> - Presence and quality of water - Soil type - Temperature - Precipitation
Social Studies	
<p>Standard 1.0 Political Science:</p> <p>Students will understand the historical development and current status of the fundamental concepts and processes of authority, power, and influence, with particular emphasis on democratic skills and attitudes necessary to become responsible citizens.</p>	<p>The Foundations and Functions of Government</p> <p>(4)1.A.3.a – Analyze perspectives and policies in Maryland regarding historic and current public issues.</p> <p>(4)1.A.3.b – Explain the effect that regional interests have on shaping government policy in and around Maryland, such as Chesapeake Bay issues, availability of land for mining, land use.</p> <p>Individual and Group Participation in the Political System</p> <p>(4)1.B.2.a – Identify various sources of information that are available to citizens to make political decisions.</p> <p>(5)1.B.2.a – Analyze the usefulness of various sources of information used to make political decisions.</p> <p>Protecting Rights and Maintaining Order</p> <p>(4)(5)1.C.1.a – Describe responsibilities associated with certain basic rights of citizens, such as freedom of speech, religion, and press, and explain why these responsibilities are important.</p>

Module 9 • Lesson 2 • Map Making

Action Synopsis

This lesson will focus on understanding maps and how people use maps to display information.

Time

2 sessions (each session is 1.5 hours)

Desired Outcomes

Students will:

- Learn the components of a good map
- Be able to create a map using proper map components
- Learn proper usage of a compass

What You'll Need

For Each Student

- Ideal community maps from previous lesson
- Worksheet: *Key Features of Maps*
- Handout: *City of Baltimore Current Waterways*

For Each Small Group

- Compass
- Handout: *Compass Treasure Hunt* (for older students)

Preparing for the Lesson

Leaders will:

- Copy the worksheet: *Key Features of Maps* for each student and the handout: *City of Baltimore Current Waterways*.
- Take some time to create your own Compass Game. See *Leader Tools* for ideas.
- Familiarize yourself with using a compass.

New Vocabulary

Compass

An instrument for determining directions.

Legend

A table on a map, chart, or the like, listing and explaining the symbols used.

Map

A map is a visual representation of an area.

Orientation

Which way is north (shown using a ‘north arrow’).

Scale

The scale of the map is the ratio of the size of the map to the actual size of the object on earth. For example, 1 inch on the drawing may represent 1 yard in the garden plot.

Symbol

Something used for or regarded as representing something else; a letter, figure or other character used to designate something.

Assessments

- Student’s ability to add proper map components to their ideal community map

Lesson Sequence

1. Pass out one City of Baltimore Current Waterways Map to each student. Ask the students to study the map and as a class discuss what the map is telling you. Ask the students to identify the key features of the City of Baltimore Current Waterways Map that are missing from their ideal community maps and circle them. You can read the key features out loud as the students circle them individually on their maps. The missing features are most likely:
 - Title
 - North Arrow
 - Scale
 - Legend
 - Author/creator
 - labels
 - date of creation
2. Write the key map features on the board. Have students look at their ideal community maps. Pass out the worksheet *Key Features of Maps*. Review the key features of maps written on the board and have the students complete their ideal community maps by completing the *Key Features of Maps* worksheet.

3. Finally, have the students break into groups of four. Allow enough time for each student to present their ideal community map to their group. During group time, have each group member check the presenter's map for each key map feature listed on the board. If the presenter is missing a key feature, his/her group should alert him/her to the missing feature and the presenter should add the feature to his/her map.
4. After the students have completed their ideal community maps, ask them why is it useful to create maps? Why is it good to have maps that display information other than just showing us north and south or the locations of cities? Tell the students that in order to answer these questions we will be examining historic maps of Baltimore City. These maps will show us how Baltimore City has changed over time. Tell the students that we will also be creating new maps of our own neighborhood. To do this activity, the students will need to become familiar with using a compass.
5. Show the students a compass and pass one out to each group. Have the students practice finding north, south, east and west in the classroom.
6. If there is time, take students outside to practice using a compass. Students can break into teams and work together to complete a compass treasure hunt in their school yard.

<p>Maryland SC Standards (4th and 5th Grade):</p> <p><i>Standards are presented in the following format:</i></p> <p><i>(Grade)Standard.Topic.Indicator.Objective – Objective Statement</i></p>	
<p>Science</p>	
<p>Standard 1.0 Environmental Issues:</p> <p>Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.</p>	<p>Applying Evidence and Reasoning:</p> <p>(4)(5)1.B.1.a – Develop explanations using knowledge possessed and evidence from observations, reliable print resources, and investigations</p> <p>Communicating Scientific Information:</p> <p>(4)(5)1.C.1.a – Make use of and analyze models, such as tables and graphs to summarize and interpret data.</p> <p>(4)(5)1.C.1.c – Construct and share reasonable explanations for questions asked.</p> <p>Technology:</p> <p>(4)(5)1.D.1.c – Explain that models, such as geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and stories can be used to represent objects, events, and processes in the real world, although such representations can never be exact in every detail.</p>
<p>Social Studies</p>	
<p>Standard 3.0 Geography:</p> <p>Students will use geographic concepts and processes to examine the role of culture, technology, and the environment in the location and distribution of human activities and spatial connections throughout time.</p> <p>Standard 6.0 Social Studies Skills and Processes:</p> <p>Students shall use reading, writing, and thinking processes and skills to gain knowledge and understanding of political, historical, and current events using chronological and spatial thinking, economic reasoning, and historical interpretation, by framing and evaluating questions from primary and secondary sources.</p>	<p>Using Geographic Tools:</p> <p>(4)3.A.1.a – Construct and interpret a variety of maps using map elements</p> <p>(4)3.A.1.b – Use photographs, maps, charts, graphs, and atlases to describe geographic characteristics of Maryland/United States.</p> <p>(4)3.A.1.c – Identify and locate natural/physical features and human-made features of Maryland such as Appalachian Mountains, Piedmont Plateau, and Atlantic Coastal Plain (modified for local environment study)</p> <p>Acquire Social Studies Information:</p> <p>(4)(5)6.D.1.c – Locate and gather data and information from appropriate non-print sources, such as music, artifacts, charts, maps, graphs, photographs, video clips, illustrations, paintings, political cartoons, interviews, and oral histories</p> <p>(4)(5)6.D.2.a – Gather data</p>

	<p>Analyze Social Studies Information:</p> <p>(4)(5)6.F.1.a – Interpret information in <u>maps</u>, charts, and graphs</p>
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Module 9 • Lesson 3 • Tracing our History

Action Synopsis

This lesson will use a series of historical maps to identify the changes that have occurred in the city over time.

Time

1 session (each session is 1-1.5 hours)

Desired Outcomes

Students will:

- Use historical maps to understand how Baltimore City has changed over time by

What You'll Need

For Each Student

- Copy of City of Baltimore Historic Waterways Map
- Copy Sanborn map
- Copy Sachse's map
- Copy of Historical Neighborhood Stream Map
- Worksheet: *How our Neighborhood has Changed Over Time*

Preparing for the Lesson

Leaders will:

- Become familiar with the maps you will use during this lesson
- Make enough copies for each student of the worksheet: *How our Neighborhood has Changed Over Time* and the map handouts.
- Gather any materials you may already have or have access to relating to the history of your school's neighborhood or Baltimore City in general. You may research historical documents at the Pratt Free Library or through other sources such as the Maryland Historical Society and the Baltimore City Historical Society.

New Vocabulary

None for this lesson

Assessments

- Completion of worksheet: *How Baltimore City Has Changed Over Time*.

Lesson Sequence

1. Begin lesson by passing out the historical maps of your school's neighborhood. Go through each map and discuss each map briefly. Have the students look at the oldest map first and identify the area where their school currently exists (if your school parcel is not depicted on the map, select a landmark that students will recognize such as a park or church). Have them identify any structures that are on the current school property. Next, have them look at the second oldest map. Again, have them locate the area where their school currently exists. Have them identify any changes that have occurred between the oldest map and this one. Finally, pass out the Historical Neighborhood Stream Map. Locate the stream on the map. Ask the students if the stream still exists today? The answer is yes. The stream exists underground. When the buildings were constructed, the stream was buried so we no longer see it.
2. Now, have the students look at the Sanborn map again. Ask them to identify the environmental/natural resources that existed at the time of the map's creation. They should identify any trees, streams, farms, lakes, etc. that they can find. Do any of these resources still exist today? We will find out when we map our neighborhood.
3. Have the students use the maps to complete the worksheet: *How our Neighborhood Has Changed Over Time*.
4. Take time to review the worksheet: *How our Neighborhood Has Changed Over Time*. Use any extra time this week to add any other interesting Baltimore City historical components to this lesson that you may have researched on your own.

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Science	
<p>Standard 1.0 Environmental Issues:</p> <p>Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.</p>	<p>Applying Evidence and Reasoning:</p> <p>(4)(5)1.B.1.a – Develop explanations using knowledge possessed and evidence from observations, reliable print resources, and investigations</p> <p>Communicating Scientific Information:</p> <p>(4)(5)1.C.1.a – Make use of and analyze models, such as tables and graphs to summarize and interpret data.</p> <p>(4)(5)1.C.1.c – Construct and share reasonable explanations for questions asked.</p> <p>Technology:</p> <p>(4)(5)1.D.1.c – Explain that models, such as geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and stories can be used to represent objects, events, and processes in the real world, although such representations can never be exact in every detail.</p> <p>Environmental Issues:</p> <p>(4)6.B.1.a – Identify and describe that human activities in a community or region are affected by environmental factors:</p> <ul style="list-style-type: none"> - Presence and quality of water - Soil type - Temperature - Precipitation
Social Studies	
<p>Standard 3.0 Geography:</p> <p>Students will use geographic concepts and processes to examine the role of culture, technology, and the environment in the location and distribution of human activities and spatial connections throughout time.</p>	<p>Using Geographic Tools:</p> <p>(4)3.A.1.a – Construct and interpret a variety of maps using map elements</p> <p>(4)3.A.1.b – Use photographs, maps, charts, graphs, and atlases to describe geographic characteristics of Maryland/United States.</p> <p>(4)3.A.1.c – Identify and locate natural/physical features and human-made features of Maryland such as Appalachian Mountains, Piedmont Plateau, and Atlantic Coastal Plain (modified for local environment study)</p> <p>Geographic Characteristics of Places and Regions</p> <p>(4)3.B.1.c – Describe how geographic characteristics of a place or</p>

<p>Standard 6.0 Social Studies Skills and Processes:</p> <p>Students shall use reading, writing, and thinking processes and skills to gain knowledge and understanding of political, historical, and current events using chronological and spatial thinking, economic reasoning, and historical interpretation, by framing and evaluating questions from primary and secondary sources.</p>	<p>region change over time and affect the way people live and work.</p> <p>Movement of People, Goods, and Ideas:</p> <p>(4)3.C.1.a – Explain how geographic characteristics influenced settlement patterns in Maryland and the United States.</p> <p>(4)3.C.1.b – Explain how changes in transportation and communication led to the growth and development of towns and cities in Maryland and United States.</p> <p>(4)3.C.1.d – Describe the transportation and communication networks for the movement of people, goods, and ideas to, from and within Maryland such as Bay Bridge, National Road, B & O Railroad, the Port of Baltimore, and C & O Canal.</p> <p>(4)3.C.1.e – Identify the reasons for the movement of peoples to, from, and within Maryland and the United States.</p> <p>Modifying and Adapting to the Environment:</p> <p>(4)3.D.1.b – Describe ways and reasons people in Maryland and the United States modify the natural environment and the consequences of modifications.</p> <p>(4)3.D.1.c – Explain how the growth of communities and suburbs have had consequences on the environment, loss of farmland, and pollution.</p> <p>(4)3.D.1.d – Describe how land use and urban growth are influenced by governmental decisions.</p> <p>Acquire Social Studies Information:</p> <p>(4)(5)6.D.1.c – Locate and gather data and information from appropriate non-print sources, such as music, artifacts, charts, maps, graphs, photographs, video clips, illustrations, paintings, political cartoons, interviews, and oral histories</p> <p>(4)(5)6.D.2.a – Gather data</p> <p>Analyze Social Studies Information:</p> <p>(4)(5)6.F.1.a – Interpret information in <u>maps</u>, charts, and graphs</p>
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Module 9 • Lesson 4 • Mapping our Community, Part I

Action Synopsis

Students work in groups to map their assigned portion of the school neighborhood. Students determine appropriate map symbols for their legend.

Time

1-2 sessions (each session is 1.5 hours)

Desired Outcomes

Students will:

- Create a map of the environmental features of their neighborhood using proper map features

What You'll Need

For Each Group

- Clipboards
- Pencils
- Blank sheets of paper
- 8.5 x 11 copy of blank Neighborhood Map
- Compass

For Whole Class

- Large Blank Neighborhood Map

Preparing for the Lesson

Leaders will:

- Solicit help from volunteers to supervise groups of students as they walk their assigned block
- Make copies of sample legend symbols found in Leader Tools.

New Vocabulary

- None for this lesson

Assessments

- Student's ability to map the environmental features of their assigned block

Lesson Sequence

1. Begin today's lesson by telling your students that they are going to map the environmental features of their neighborhood. They will each be assigned a portion of the neighborhood to map. Once the data collection activity is complete, the class will return to the classroom and design their own map of what they found outside.
2. As a class, have the students decide what environmental features of their neighborhood they will be mapping such as **parks, gardens**, sources of water, sources of pollution, healthy habitats, **storm drains**, pavement, **trees, bushes**, buildings, trashcans/dumpsters, recycle bins, **bird's nests, vacant lots** etc. The students should first decide what information they want to display. Remind them that their map must be very clear so people viewing their map will be able to understand the information that is displayed.
3. Tell the students that for each feature they map, they must come up with a symbol for that feature and include that symbol in their map legend (see Leader Tools for sample symbols). They must also use their compass to determine which direction is north and display a north arrow on their map. As a class, they will decide on a map title.
4. Break into groups and pass out one blank neighborhood map sheet to each group and a clipboard and pencil. Each group will be assigned a different block to map. The groups should walk along their block and draw and take notes on what they see using the symbols agreed upon in the classroom. The goal of this project is for the students to identify the environmental features of their community such as trees, parks, gardens, they can also identify the locations of houses, their schools, other businesses, bus stops, bike racks, cross walks, vacant lots. They can be general with their symbols (such as one symbol for all plants), or specific (such as separate symbols for deciduous trees, evergreen trees, bushes, etc.)
5. The information they collect outside will be used to create a large map that will be displayed for the entire school. The map will need to show direction, a legend, a title, author and date; students can use a compass to figure out which direction on their map points north.
6. Once all the groups have finished mapping their block, have one person from each group present their findings to the rest of the class.

Module 9 • Lesson 4 • Mapping our Community, Part II

Action Synopsis

Students will use the data they collected in the field to create a large school community map displaying the school neighborhood's environmental features.

Time

1 session (each session is 1-1.5 hours)

Desired Outcomes

Students will:

- Create a map of their school neighborhood using the information they collected in the field
- Display proper map features on their map
- Write a description of their map to be displayed alongside their large scale map in the school building.

What You'll Need

For Each Student

- Data students collected in the field from the previous lesson

For Each Group

- Large Blank Map of Neighborhood
- Pencils
- Crayons
- Blank sheets of paper
- Scissors
- glue

Preparing for the Lesson

Leaders will:

- Talk to your principal to locate a wall inside the school where the students can display their finished map

New Vocabulary

- None for this lesson

Assessments

- Students' abilities to create a large map from the data they collected in the field

Lesson Sequence

1. During this lesson, the students will create a large map displaying the environmental features of their neighborhood. Have students use the legend symbols they agreed upon to fill in the large map. They should also label important features of their maps such as the name of their school, names of parks, street names, etc. Make sure their map includes all the *Map Features* discussed in the previous lesson. Encourage the students to make their maps colorful.
2. To create the legend and legend symbols, students may either 1) draw directly on the map, or 2) use the legend symbols provided in Leader Tools, cut them out and paste them on the large scale map (recommended). This will limit the amount of drawing done directly on the map and may help keep the presentation of the map neat. The legend itself can be created on a separate sheet of paper and attached to the large scale map later.
3. Have one group work on a written description of the map to be hand written or typed and placed next to the map. The written description should include a description of the protocols for developing the map, why the students created the map, who the audience is, and what the students hope to achieve in creating the map. It should also include who others can contact for more information regarding the information displayed on the map.
4. Display your map in a prominent location within the school!

Maryland SC Standards (4th and 5th Grade): <i>Standards are presented in the following format: (Grade)Standard.Topic.Indicator.Objective – Objective Statement</i>	
Science	
<p>Standard 1.0 Environmental Issues:</p> <p>Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.</p>	<p>Applying Evidence and Reasoning:</p> <p>(4)(5)1.B.1.a – Develop explanations using knowledge possessed and evidence from observations, reliable print resources, and investigations</p> <p>Communicating Scientific Information:</p> <p>(4)(5)1.C.1.a – Make use of and analyze models, such as tables and graphs to summarize and interpret data.</p> <p>(4)(5)1.C.1.c – Construct and share reasonable explanations for questions asked.</p> <p>Technology:</p> <p>(4)(5)1.D.1.c – Explain that models, such as geometric figures, number sequences, graphs, diagrams, sketches, number lines, maps, and <u>stories</u> can be used to represent objects, events, and processes in the real world, although such representations can never be exact in every detail.</p> <p>Environmental Issues:</p> <p>(4)6.B.1.a – Identify and describe that human activities in a community or region are affected by environmental factors:</p> <ul style="list-style-type: none"> - Presence and quality of water - Soil type - Temperature - Precipitation
Social Studies	
<p>Standard 3.0 Geography:</p> <p>Students will use geographic concepts and processes to examine the role of culture, technology, and the environment in the location and distribution of human activities and spatial connections throughout time.</p> <p>Standard 6.0 Social Studies Skills and Processes:</p> <p>Students shall use reading, writing, and thinking processes and skills to gain knowledge and understanding of political, historical, and current events using chronological and spatial thinking, economic reasoning, and historical interpretation, by framing and evaluating questions from primary and secondary sources.</p>	<p>Using Geographic Tools:</p> <p>(4)3.A.1.a – Construct and interpret a variety of maps using map elements</p> <p>(4)3.A.1.b – Use photographs, maps, charts, graphs, and atlases to describe geographic characteristics of Maryland/United States.</p> <p>Acquire Social Studies Information:</p> <p>(4)(5)6.D.1.c – Locate and gather data and information from appropriate non-print sources, such as music, artifacts, charts, maps, graphs, photographs, video clips, illustrations, paintings, political cartoons, interviews, and oral histories</p> <p>(4)(5)6.D.2.a – Gather data</p>

	<p>(4)(5)6.D.2.b – Make and record observations</p> <p>Organize Social Studies Information:</p> <p>(4)(5)6.E.1.c – Find relationships between gathered information</p> <p>(4)(5)6.E.1.d – Display information on various types of graphic organizers, maps, and charts</p> <p>Analyze Social Studies Information:</p> <p>(4)(5)6.F.1.a – Interpret information in <u>maps</u>, charts, and graphs</p>
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Module 9 • Lesson 5 • Culminating Activity: Environmental Rights Letter

Action Synopsis _____

Students will express their knowledge about their neighborhood and their environmental rights by writing a member of government to discuss these topics.

Time _____

2 sessions

Desired Outcomes _____

Students will:

- Prepare a letter to a chosen member of government discussing the issue of environmental rights in their community.

(Variation – If media resources are available, students may develop a video addressed to a government representative discussing the issue of environmental rights in their community.)

What You'll Need _____

For Each Student

- Pencil
- Graphic Organizer
- Friendly Letter Handout *(NOTE: You will need to highlight each line on the worksheets for each student.)*
- KidsGrow folders with previous work
- Letter sized envelopes (1 per student)
- Folder paper (students may also type their letters if computer resources are available)
- Chart paper

For Whole Class

- Crayons and/or markers for students to illustrate their letters (optional)

Preparing for the Lesson

Leaders will:

- Review the “Background for Teachers” section at the beginning of Module 9.
- Create a list of government representatives based on the background information and useful websites provides. This list should be on chart paper and posted for the students to choose from.
- Make copies of the graphic organizer and letter template for each student.
- Make copies of the Letter Template Worksheet “Friendly Letter Format for Environmental Rights Letter” and **highlight the lines** on each sheet.
- Check with Pearline Tyson at the Parks and People Foundation regarding postage requirements for mailing student letters.
- Draw a sample envelope on the board or chart paper showing students how to address an envelope for their letters.

Assessments

This activity serves as a performance assessment for Module 9.

Lesson Sequence

Session 1

1. Begin the lesson with a brief discussion. Ask the students:
 - “What is an environmental right?”
 - “What are our environmental rights?”
 - “What would you do if you found that you were not getting one of those rights?”Allow several student answers.

2. Present the chart showing the list of government representatives. Read this list aloud. Ask the students if they recognize anyone on that list. If students recognize someone, have them share what they know about that person.

Explain to the students that every city has a government, just as every state has a government, and our country has a government. People that work in our city government focus on things affecting our neighborhoods.

3. Ask the students how we could get people from this list involved in our neighborhood.
4. Allow students to go to their desks. Distribute the graphic organizers. Explain to the students that they will be writing letters to their local representatives to discuss their neighborhood and the environmental rights of people living there. First, they should organize their ideas using the graphic organizer.

Review each part of the graphic organizer. Students should provide a basic description of their neighborhood in the “My Neighborhood” box. This could include where their neighborhood is located (West/East Baltimore, District, Ward, etc.) and what elementary school the student belongs to.

They can describe the aspects of their neighborhood that support their environmental rights in the “What I Like About My Neighborhood Environment” section, including parks, playgrounds, etc. Students should focus on areas of need in the “Things That Could Be Improved in My Neighborhood” section. Finally, students should conclude by completing the “Why My Neighborhood is Important to Me” section.

Variation:

The graphic organizer can be completed as one group on chart paper as a brainstorm activity. Students can either transfer the information onto their own organizers, or use the chart to write their letters.

Allow 45 – 60 minutes for this activity. Completed graphic organizers can be placed in student folders.

Session 2

1. Pass out student folders. Distribute the worksheet “Friendly Letter Format and Template.”

2. Explain to the students that they will continue their Environmental Rights letters by writing a draft of their letter. Review the Letter Format descriptions with the students as well as the outline that follows. Show the student the **highlighted lines** where they will be writing. Remind the students that they have already come up with their ideas for the letters using the graphic organizers, but that they will transfer these ideas in complete sentences onto the template.

Allow the students 30 – 35 minutes to write their letters. Assist the students in sentence development and spelling as needed. As each student finishes their template, help them make corrections in spelling and grammar as best you can.

3. Distribute folder paper to each student as they finish their letter template. Point out to the students that they are to copy **ONLY** the information written on the highlighted lines. Allow the students to include a drawing if they would like to illustrate their letters.

Allow at least 20 – 25 minutes for this activity.

Variation: Students can type their letters if computer resources are available.

4. Have students complete envelopes for their letters so that they can be sent to their representatives.

Maryland SC Standards (4th and 5th Grade):	
<p><i>Standards are presented in the following format:</i></p> <p><i>(Grade)Standard.Topic.Indicator.Objective – Objective Statement</i></p>	
Science	
<p>Standard 1.0 Environmental Issues:</p> <p>Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective.</p>	<p>Environmental Issues</p> <p>(4)6.B.1.a – Identify and describe that human activities in a community or region are affected by environmental factors:</p> <ul style="list-style-type: none"> - Presence and quality of water - Soil type - Temperature - Precipitation
Social Studies	
<p>Standard 1.0 Political Science:</p> <p>Students will understand the historical development and current status of the fundamental concepts and processes of authority, power, and influence, with particular emphasis on democratic skills and attitudes necessary to become responsible citizens.</p>	<p>The Foundations and Functions of Government</p> <p>(4)1.A.3.a – Analyze perspectives and policies in Maryland regarding historic and current public issues.</p> <p>(4)1.A.3.b – Explain the effect that regional interests have on shaping government policy in and around Maryland, such as Chesapeake Bay issues, availability of land for mining, land use.</p> <p>Individual and Group Participation in the Political System</p> <p>(4)1.B.2.a – Identify various sources of information that are available to citizens to make political decisions.</p> <p>(4)1.B.2.b – Analyze ways people can participate in the political process including voting, petitioning elected officials, and volunteering.</p> <p>(5)1.B.2.a – Analyze the usefulness of various sources of information used to make political decisions.</p> <p>(5)1.B.2.b – Compare ways people can participate in the political process including voting, petitioning elected officials, and volunteering.</p> <p>Protecting Rights and Maintaining Order</p> <p>(4)(5)1.C.1.a – Describe responsibilities associated with certain basic rights of citizens, such as freedom of speech, religion, and press, and explain why these responsibilities are important.</p>
<p>Standard 6.0 Social Studies Skills and Processes:</p> <p>Students shall use reading, writing, and thinking processes and skills to gain knowledge and understanding of political, historical, and current events using chronological and spatial thinking, economic reasoning, and historical interpretation, by framing and evaluating questions from primary and secondary sources.</p>	<p>Write to Learn and Communicate Social Studies Understanding</p> <p>(4)(5)6.B.2.a – Identify form audience, topic and purpose</p> <p>(4)(5)6.B.2.b – State a clear opinion or position</p> <p>(4)(5)6.B.2.c – Support the opinion or position with facts and/or data</p>

Module 9: Ecological History

Worksheets and Handouts

Grades 4 and 5

Key Features of Maps

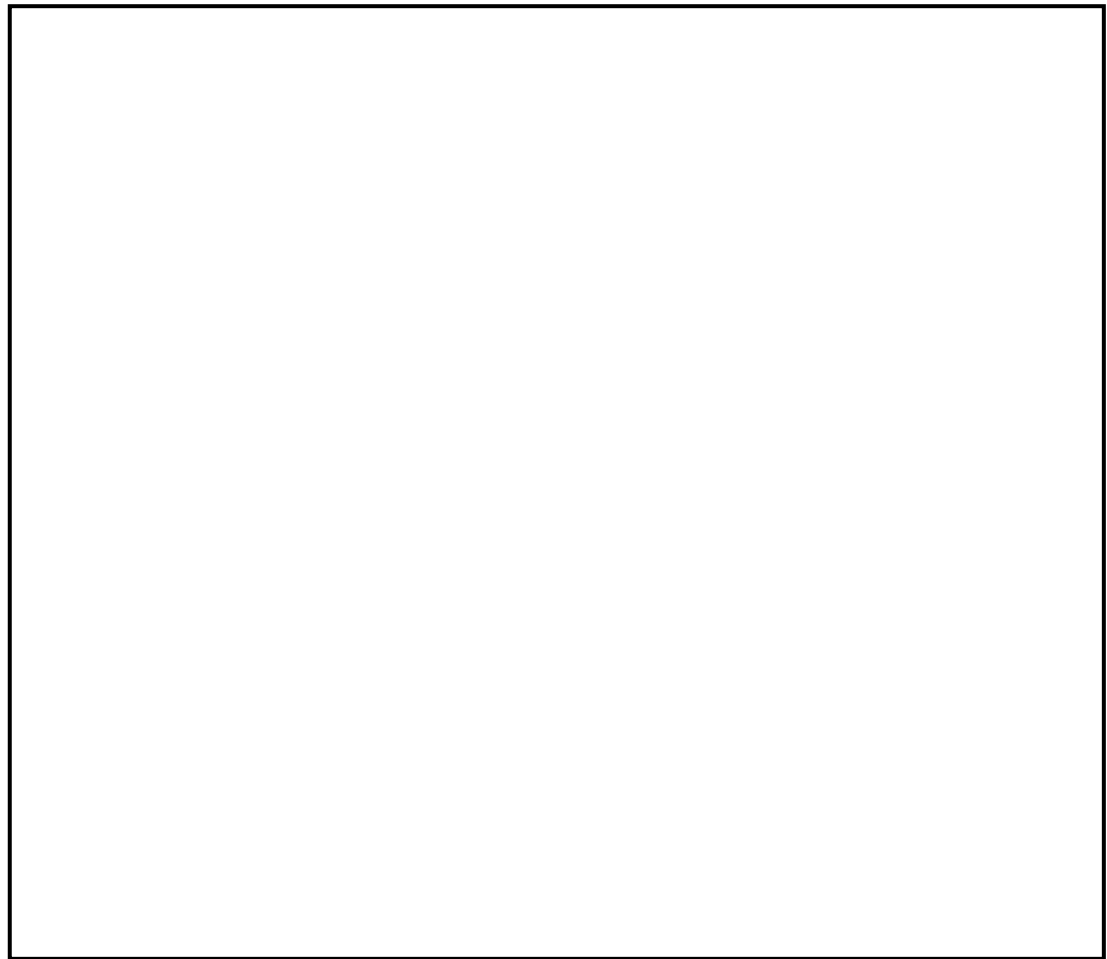
Complete the following worksheet using the drawing of your *Ideal Community*.

Title of Your Map: _____

Author (Your Name): _____

Date: _____

Legend:



Please add a north arrow to your map.

Please add labels to your map explaining your drawing.

How Our Neighborhood Has Changed Over Time

Name: _____

Date: _____

Step 1: Find the location of your school on each map. Draw an X over the location of your school on each map.

Step 2: Look at the neighborhood around your school on each map. List three things shown on your historic maps that no longer exist today in your neighborhood.

1)

2)

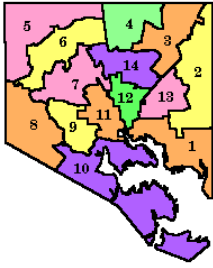
3)

Step 3: Use the Maps from this module to answer the following true/false questions:

- 1) In 1869, my school neighborhood had farms _____
- 2) In 1890 or 1901, my school building was already constructed _____
- 3) In 1869, there was a park near my school that still exists today

- 4) There use to be an above-ground stream right near my school _____

Graphic Organizer for Environmental Rights Letter



What I Like About My Neighborhood Environment

My Neighborhood

Things That Could Be Improved in My Neighborhood

Why My Neighborhood is Important to Me

Friendly Letter Format for Environmental Rights Letter

- Directions:**
1. Read about each part of a letter.
 2. Use your graphic organizer to write your letter on each line of the outline.

Heading: Check to make sure you have the correct information on the correct line. It should be on the right side of the paper. See below.

first line - street number and street name

second line - town or city, state and ZIP code

third line - the date

Greeting: Dear So-and-so, (remember your comma!)

Introduction: This part is intended to get the person to want to continue reading and to give the person an idea as to why you're writing. You would usually start out talking about the person to whom you're sending the letter (it's polite). Then you might want to give some information about you and why you're writing. This can all go in one paragraph, or, if it's too long and doesn't "go" in one paragraph, make the decision to separate it. Use your graphic organizer for this section and write about:

My Neighborhood

Body: This is the main part of the letter. It gets to the point of why you're writing. Change paragraphs and indent each time you change the topic you're talking about. This is the longest part of the letter.

Use your graphic organizer for this section and write about:

What I Like About My Neighborhood Environment

Things That Could Be Improved in My Neighborhood

Conclusion: Wrap it all up. Be clever. Use your graphic organizer for this section and write about:

Why My Neighborhood is Important to Me

Closing: Choose an appropriate closing, and sign your name. Make sure this lines up with the heading. Only the first word is capitalized. (Ex: *Yours truly,*)

Signature: Usually in cursive.

Heading

Greeting

Dear _____,

Introduction

Body

Conclusion

Thank you, _____, for taking the time to read my letter.

Closing

_____,

Signature

Module 9: Ecological History

Journals

Grades 4 and 5

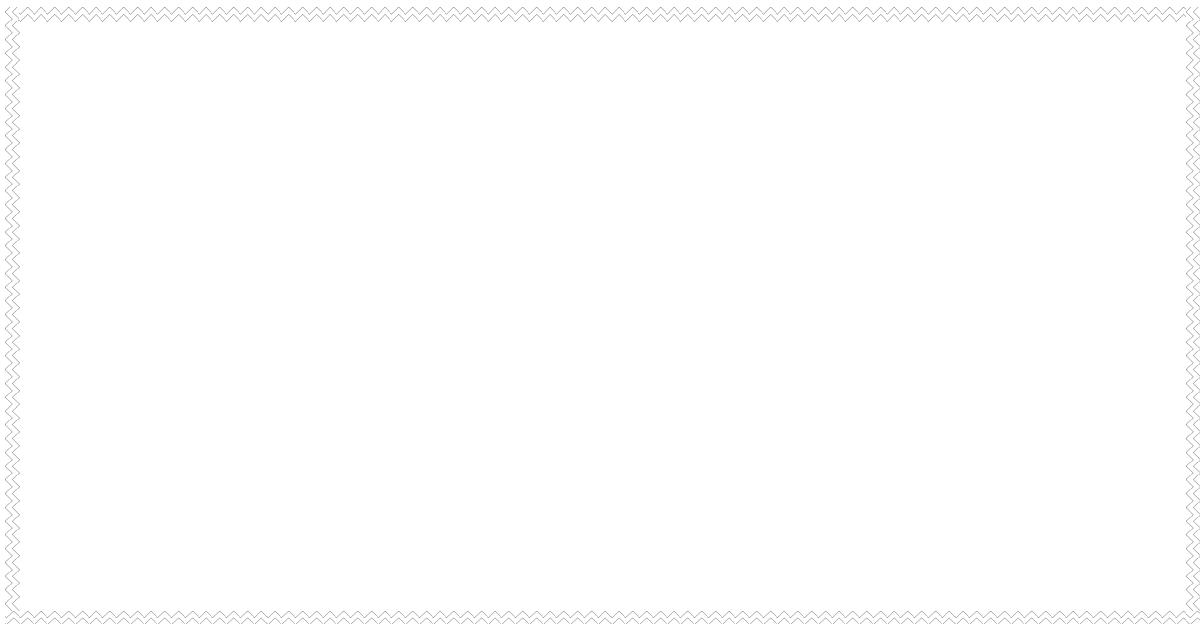
Lesson 1 Journal:

What do you think it means to have environmental rights?

Name: _____

Directions: Think about the words “environmental rights”. Describe what you think it means to have environmental rights in the space below.

Drawing:



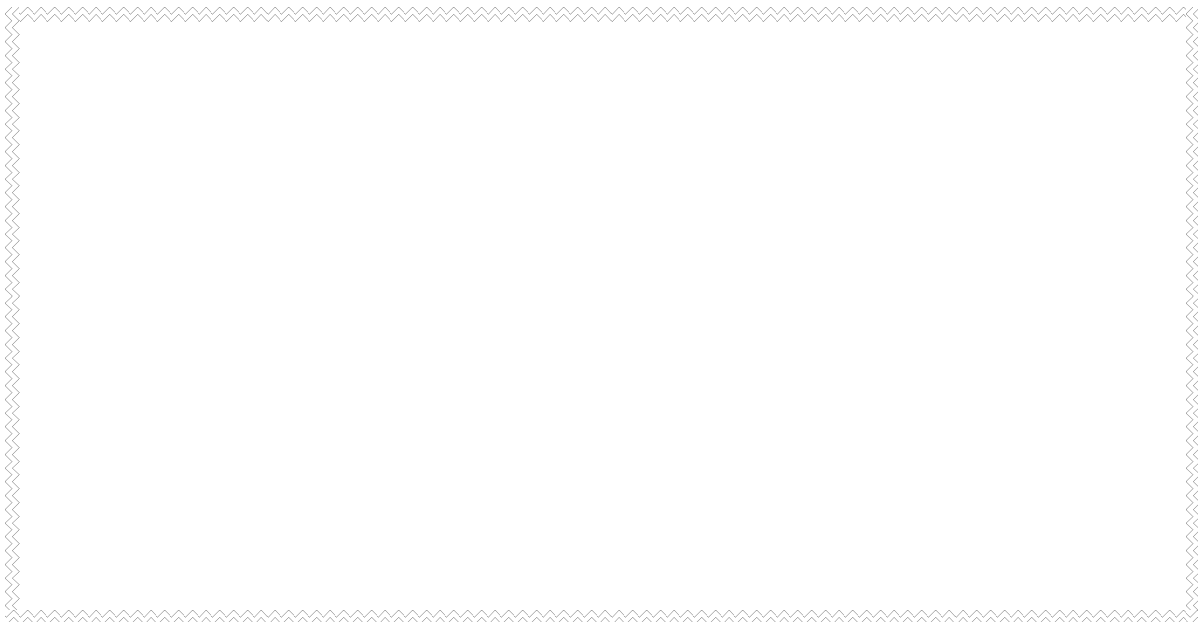
Lesson 3 Journal:

What do you think your neighborhood looked like 100 years ago?

Name: _____

Directions: Use your imagination to describe your neighborhood 100 years ago. Think about what may or may not have been there, such as streets, parks, or buildings. Describe your neighborhood's past below.

Drawing:



Lesson 5 Journal:

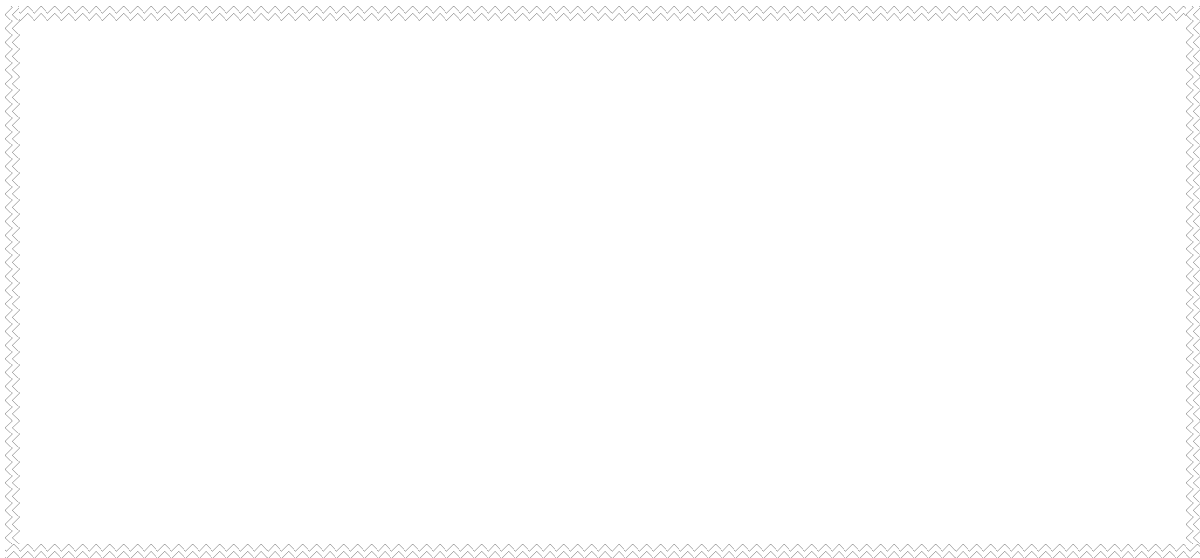
What do you think your neighborhood **WILL** look like in 100 years?

Name: _____

Directions: Now that you've studied your neighborhood in the past and present, use your imagination to describe your neighborhood in the future. What will it look like in 100 years? **Will the environment be healthy?**

Describe your neighborhood's future below.

Drawing:

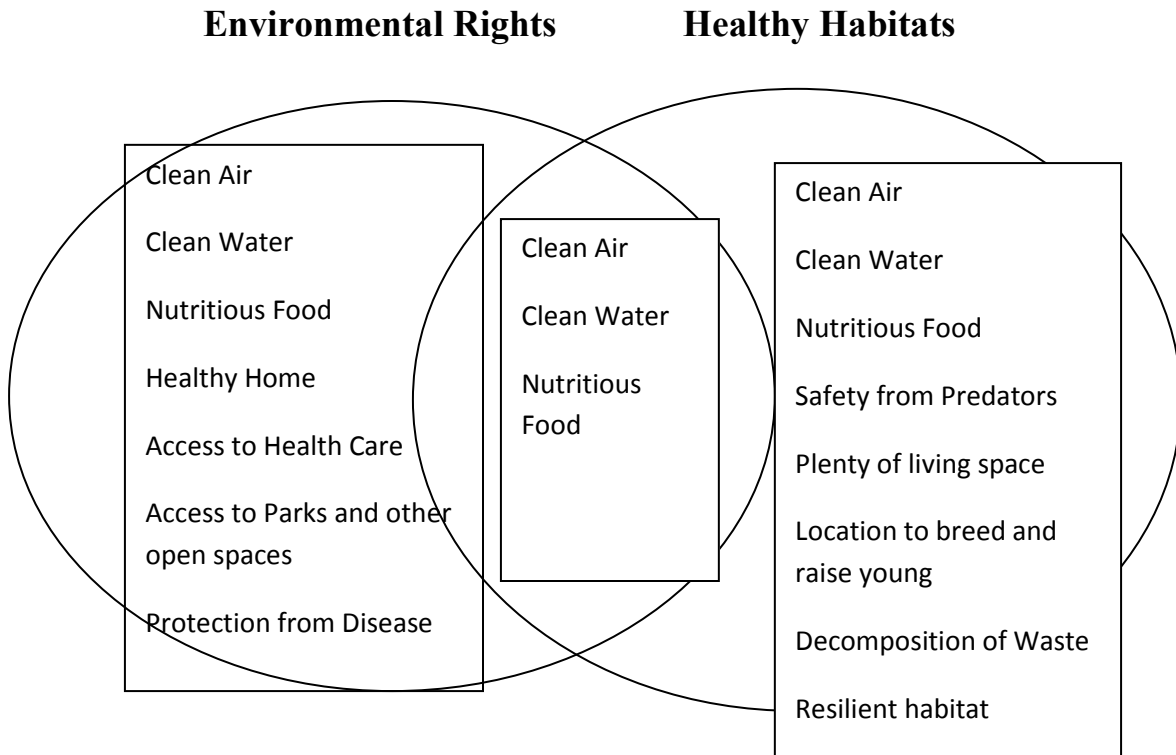


Module 9: Ecological History

Leader Tools

Grades 4 and 5

Linking Environmental Rights to Healthy Habitats – Venn Diagram



Sample Compass Game 1 (more appropriate for younger students)

Groups of 4-5 (depending on number of compasses available)

Have group members stand in a line one behind the other. Line up each group side by side. The person in the front of each line should hold the compass. Yell out a direction. The first group member must use their compass and turn their body in the direction you called. The first person to do so and raise their hand gets a point for their team. Switch through the line so each group member gets at least one turn with the compass. The directions can be as simple as north, south, east and west or as complicated as using specific degrees, depending on the ability of your class.

You should be familiar with the correct direction of each direction you call out to make sure you are awarding the points correctly.

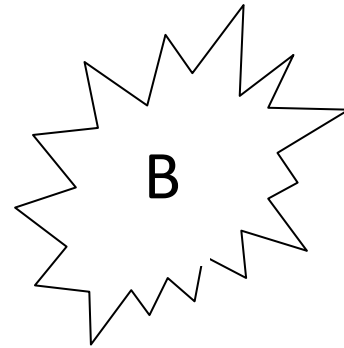
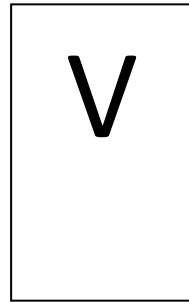
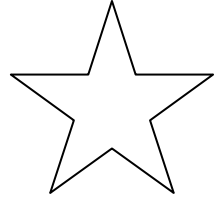
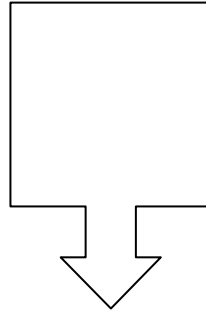
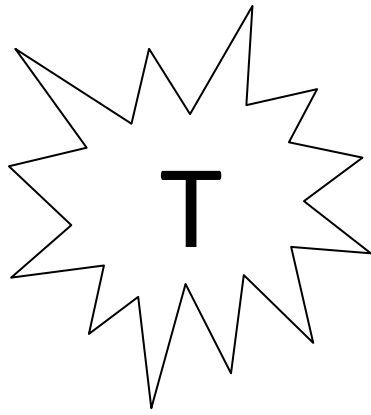
Sample Compass Game 2 (more appropriate for older students)

If you have more time, you can design a schoolyard compass treasure hunt. Before class begins, go outside with your compass and create a treasure hunt in the school yard. To do this, choose a starting point in the schoolyard and a starting direction with your compass and walk several paces in that direction. Mark your end spot with something fairly permanent, that the students will be able to find later. You may want to use permanent things in the school yard such as playground equipment, trees, benches, etc. Make sure to record your direction and number of steps between each endpoint. At each end point, place a sheet of paper with a letter on it. The idea is that, if the students perform the treasure hunt correctly, they will record letters until they have spelled out a word. For instance, if you have seven end points, you could spell the word COMPASS, placing one letter at each end point. You may use any word you like. Repeat this procedure until you have mapped out a path that your students can follow using compass direction.



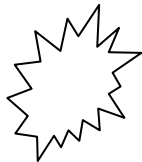
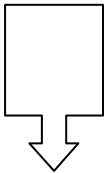
Break your students into groups depending on the number of compasses available. Give each student a sheet of paper with the directions and number of paces between each endpoint. Have the students take turns using the compass. Tell the students that at each endpoint, there will be a letter. They should record the letter on a piece of paper. Their goal is to come up with the correct word.

For a real challenge, jumble the letters and have the students unscramble the word once they have completed the treasure hunt.

Sample Legend Symbols



Legend

Tree		Bird's Nest	
Bush			
Storm Drain		Vacant Lot	