Name: Claire Ross

Unit Plan: Weeks of April 19-23 (Earth Day 4/22)

Subject/Grade Level: First

<table>
<thead>
<tr>
<th>Unit Title:</th>
<th>You Can Fight Climate Change!</th>
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| Standards: | 1.G.1: Use geographic representations, terms and technologies to process information from a spatial perspective  
1.G.2: Understand how humans and the environment interact within the local community  
  - 1.G.2.1: Explain why people change the environment (planting trees, recycling, cutting down trees, building homes, building streets, etc)  
1.C.1: Understand the diversity of people in the local community.  
  - 1.C.1.1: Compare the languages, traditions, and holidays of various cultures.  
  - 1.C.1.2: Use literature to help people understand diverse cultures.  
1.C&G.1: Classify the roles of authority figures in the home, school and community (teacher, principal, parents, **mayor**, park rangers, game wardens, etc).  
RI.1.1 Ask and answer questions about key details in a text.  
RI.1.2 Identify the main topic and retell key details of a text.  
W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide closure. |

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<tr>
<th>Objectives</th>
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| → Understand Earth’s temperature is rising causing different negative effects (rising sea levels, glaciers melting, ice melting, plant blooming time changes, animals losing their habitats)  
→ Identify Greenhouse Gases that cause the temperature to rise  
→ List changes individuals can make to protect the climate  
→ Create posters and letters to influence others to make changes |
<table>
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<tr>
<th>Key Concepts</th>
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<tbody>
<tr>
<td>→ global warming, climate change, greenhouse gases, European Union, Europe, severe weather, habitats, temperature, influence</td>
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<tr>
<th>Essential Questions</th>
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<tr>
<td>→ What is Climate Change?</td>
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<tr>
<td>→ What are Greenhouse Gases?</td>
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<tr>
<td>→ What can you do to stop the gases from warming up the Earth?</td>
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<tr>
<td>→ How can you fight climate change?</td>
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<tr>
<th>Learning Acquisition and Assessment</th>
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<tr>
<td>Students will know... (content/concepts)</td>
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<tr>
<td>→ the earth’s temperature is rising</td>
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<td>→ greenhouse gases trap heat (water vapor, carbon dioxide, methane, oxone, nitrous oxide, chlorofluorocarbons)</td>
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<tr>
<td>→ Students can stop gases from getting into the atmosphere and warming the earth</td>
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<tr>
<td>→ Students can be proactive</td>
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| Students will be able to... (skills, performance tasks)                     |
| → list 2-3 consequences of climate change                                   |
| → describe 1-2 greenhouse gases                                             |
| → list 5 or more ways to prevent greenhouse gases                          |
| → create posters, take with students and adults, write letters, share what they have learned |

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<th>Formative Assessments</th>
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<td>→ Students will do written assessments on dry erase boards (used during group time) in response to the main idea from each lesson</td>
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<td>→ Students will retell main ideas from fiction and nonfiction texts read aloud</td>
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<td>→ Students will help create class charts</td>
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<th>Summative Assessments</th>
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<td>→ Students will write an informative letter to the mayor listing ways that they have learned to prevent global warming (turning off lights when leaving a room, using the dishwasher instead of hand washing dishes, turning off devices, recycling waste, turning off the water while brushing teeth, reusing paper and encouraging parents to use reusable shopping bags,</td>
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metal straws and refillable water bottles. Children will ask the mayor to encourage citizens of Morehead City to do the same.

Learning Activities (1 week – 5 days): Lesson introduction, body, and closing

Day 1

→ **Introduction: What is Climate Change?**

See what students already know. Show students the attached BrainPop video explaining Climate Change. Discuss video with students at planned stopping points.


After the video call on students to share ‘facts’ from the video. Remind students that facts are statements that can be proven true.

As a class, write a definition to put on a chart to keep visible in the classroom throughout the study. For example, “Climate change describes a change in the average conditions — such as temperature and rainfall — in a region over a long period of time.”

Show students the NASA webpage attached below. Read through the information with the students focusing the group discussion around the graphics. [https://climatekids.nasa.gov/climate-change-meaning/](https://climatekids.nasa.gov/climate-change-meaning/)

Group Discussion: What are the effects of climate change on our planet? (rising sea levels, ice/glaciers melting, severe weather, animals losing their habitats, change in bloom times, etc)

State, “This week you are going to learn about Climate Change and ways that you can help! Lots of people in the world are working hard to help our planet. One country that wants to make things better is Europe. Remind students that Europe is a continent where people and animals live. Show Europe on GoogleEarth and remind students that you can only travel to Europe by plane or boat. Say, ‘The European Union is a team of countries (show flag) who work together. They are working on a plan to save our Earth! ‘ Read, Climate Change and the Environment’ from Let’s Explore Europe. Say, “The European Union
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<th>Day 2</th>
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| → Start by reading the definition of Climate Change. Ask students to share what they remembered from yesterday's lesson.  
|  
| → Today we are going to read a book called, “What Scorching Weather” [https://op.europa.eu/en/publication-detail/-/publication/99b715d3-47b6-4d2b-8824-a16812970a6f](https://op.europa.eu/en/publication-detail/-/publication/99b715d3-47b6-4d2b-8824-a16812970a6f) This book was written by members of the European Union who want to teach boys and girls about Climate Change and how you can help save the Earth. Remind students that the EU has a plan to save the Earth and to listen closely for ways to help.  
|  
| → Project, “What Scorching Weather” on the board and read to students making sure to address unknown vocabulary words and to ask comprehension questions along the way. After reading, ask students to give a verbal retell. Then have students list ways that Chief Fireman told Tom that he could stop the gases from getting into the atmosphere and warming up the earth. Students can list ways on their dry erase boards. Have students share their ideas and make a collective list to project on the board.  
|  
| → In teams of 4, students will play a Biodiversity Board Game. Project the game board on the screen. Explain the rules for playing. Read over the gameboard text to help with unknown words. Have game boards and dice ready for teams. [https://ec.europa.eu/environment/pubs/children/pdf/biodiversity/ENV-17-016_boardgame_A3_WEB_EN.pdf](https://ec.europa.eu/environment/pubs/children/pdf/biodiversity/ENV-17-016_boardgame_A3_WEB_EN.pdf)  
|  
| → Reconvene to talk about the game. What did you learn? What were positive ways to help the environment (causing you to move forward)? What caused you to move backwards? Why?  
|  
| → Take informal notes of students’ responses to see if anyone needs reteaching to understand key concepts.  
|  
| wants to influence other countries to also work together to stop climate change. We will learn what we can do to help!” [https://op.europa.eu/webpub/com/lets-explore-europe/en/#chapter10](https://op.europa.eu/webpub/com/lets-explore-europe/en/#chapter10)  
|  
| → Exit ticket: Draw or write something new that you learned today.  
|  
| → Main EU-related concepts/activities: Locate Europe on the map. Introduce the European Union as a team of countries who try to make life better, Show flag for visual symbol, European Green Deal |
| Day 3 | Main EU-related concepts/activities: The story book and board game are both resources from europa.eu  

→ Review the definition of Climate Change and the chart of the different ways Chief Fireman told Tom that he could help fight climate change. Remind students that the European Union wants to influence other countries to work together to stop climate change. (Show flag).  
→ Watch video [https://climatekids.nasa.gov/greenhouse-effect/](https://climatekids.nasa.gov/greenhouse-effect/) and introduce the Greenhouse Gases [https://climatekids.nasa.gov/greenhouse-cards/](https://climatekids.nasa.gov/greenhouse-cards/) Project the cards onto the board and read about each gas. Also print each card in color. Teach 1 key detail about each gas that children can remember.  
→ Call on students to pretend to be the 6 different Greenhouse Gases. Give each student a Greenhouse Gas card. Students should state who they are (which gas) and 1 detail. For example, “Carbon Dioxide- I come from volcanos!” Then give students a moment to pretend to be a superhero flying around/kicking while classmates cheer. (The gases are depicted as superheroes on the cards) Give all students an opportunity to participate. Let students pick their favorite Greenhouse Gas card to color and take home (have printed black and white copies to choose from). Tell students to discuss their Greenhouse Gas with their family.  
| Day 4 | → Read, “Over to You” (pages 28-32) of the European Union publication, Our Planet, Our Future.” This section of the magazine lists ways that students can get involved and gives personal stories of how children are fighting climate change. Have the entire magazine printed and available in the classroom library for students to access during independent reading. Advanced readers can access the magazine on iPads if multiple students are interested.  
→ Students will pick one way that he/she can fight climate change. Students will create a poster with pictures and words explaining their idea and why it is important. Students will present their poster to the class. The posters will be displayed throughout the school to encourage other children and adults to fight climate change. The posters will enlighten and inspire adults and children who were unaware of the negative effects of global warming.

→ Main EU-related concepts/activities: Students will pick tips from the provided EU list: https://ec.europa.eu/clima/citizens/tips_en

Day 5

→ Say, ‘This week we have studied climate change. We learned that there are gases in our Earth’s atmosphere that trap heat. These gases are causing our Earth’s temperature to rise. Because the Earth’s temperature is rising, we are noticing lots of different effects. Luckily there are things that we can do to prevent climate change. Remember, the European Union is working really hard to help our Earth so that all of the people and animals in our world can be happy and healthy. I have ANOTHER list of ways that YOU can help.’ Share the main ideas from page 14 of “Climate Change, What Is It All About?” discussing each point with the class. Empower the children to know that their choices are really important and can make a difference! https://ec.europa.eu/clima/sites/clima/files/docs/kh-81-08-360_en.pdf

→ ‘Today we are going to make bird feeders. We will hang them up around the school.’ Share the story of the dickcissel bird with students. Extreme weather, due to climate change, caused this bird to relocate to areas it had not lived in before. If other birds are relocating, we might need to help protect their habitats and provide food. https://climatekids.nasa.gov/extreme-weather-birds/

→ Use toilet paper rolls, bird seed, string and peanut butter (make sure there is no allergy) to make bird feeders. Hang the feeders around the school yard and observe. Continue the conversation about how climate change affects animals and habitats. Take pictures of students with bird feeders to post on the school website with a list of basic ways children can help fight climate change!

→ Main EU-related concepts/activities: Resource is from Europa.eu
Day 6

The children have learned that the choices they make matter— they can help save our planet! Remind students that the European Union wants to influence other countries to fight climate change. The children can influence their peers, families and citizens of Morehead City, NC! Making posters (day 4) to influence their school peers and teachers was a great start. Today, they will influence the mayor and their community! Show students this PebbleGo video https://site.pebblego.com/modules/5/categories/5009/articles/5218 explaining the job of the mayor. Students will then write an informative letter to the mayor about climate change and ways the citizens of Morehead City can help. Students’ letters will also count as their summative assessment for our study. Letters will be mailed to the mayor upon completion.

Resources and Materials

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<tr>
<th>Books/Articles</th>
<th>Worksheets</th>
<th>Social media accounts/other digital resources</th>
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This lesson plan has been created as part of the EUnited Teacher Fellows Program at the Center for European Studies, a Jean Monnet Center of Excellence, at the University of North Carolina at Chapel Hill. The Center for European Studies takes no institutional positions. All views represented within this plan are the author’s own.