Green Girls Curriculum
Lesson 2: Climate Change - The Stories

Lesson Duration: 2.5 hrs

Standards:
Next Generation Science Standards: MS-ESS 3-4
New York State Science Learning Standards: MS-ESS 3-4

Keywords: stakeholder, global, local, climate refugee, climate activist

Purpose:
● In climate science knowledge, students will:
  ○ Understand that climate change causes intensified natural disasters including, flood, drought, habitat loss and other environmental and social destruction

● In environmental advocacy, students will:
  ○ Understand how different stakeholders view climate change in different ways

● In socio-emotional learning, students will:
  ○ Increase in social connectedness through collective improv and role plays
  ○ Increase in self-awareness through reflection on their own climate-related experiences

Essential Questions:
● Who is impacted by climate change?
● How are different areas of the world impacted by climate change?
● How am I, in my own city, impacted by climate change?

Session Routine:

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<th>Activity</th>
<th>Time</th>
<th>Description</th>
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<tr>
<td>Opening Circle</td>
<td>25 min.</td>
<td>Question Game + Improv Game</td>
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<tr>
<td>SEL Activity</td>
<td>15 min.</td>
<td>Journal Question</td>
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<tr>
<td>Activity 1</td>
<td>1 hr</td>
<td>Getting into Character and Climate Change Mixer</td>
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<tr>
<td>Activity 2</td>
<td>20 min.</td>
<td>Writing our own climate change stories</td>
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<tr>
<td>Closing Circle</td>
<td>10 min.</td>
<td>Debrief Questions and Discussion</td>
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**Materials:**
Journals, writing utensils, costumes materials, name tags, clipboards, climate mixer question sheet, costume materials and props for role-pay, tape, markers, paper (for costumes and props).

**Some things to know/do before you start this lesson:**
- Read through each of the characters in the *Climate Change Mixer*. In order to access this file you must create a free account.

**Background:**

To understand climate change we must both understand the science and the stories behind the issue. In the last lesson we learned that climate change is a long term global issue and that humans and industry are the driving force. It is also important to understand how climate change impacts on a local scale the lives of individual people. At the global scale, effects from climate change would include sea level rise for communities living near the shore - which directly impacts NYC - intensified storms and hurricanes, droughts, heat waves or increase of rain in specific areas. Focusing on a more local level, it personally affects jobs and lives. For example, *climate refugees* refers to the displacement of people due to severe weather disaster events or the limits of natural resources. When taking in refugees, there are a lot of political laws that also come into play and may typically start to negatively impact the situation.

Another example would include policies between big companies and local communities. *Mountaintop removal* is a coal mining process that removes the tops of the mountains to reach the coal. It is a *controversial practice* due to its effects on local biodiversity, and the increase of toxic chemicals into local waterways which affects drinking water in nearby communities. In Virginia, where the economy depends on mining for coal, it becomes a personal problem for workers to decide if their jobs are more important than the land preservation and other people's homes. These are just a couple of examples in which impacts are much more personal than the known global effects from climate change events. This lesson will focus on personal stories and give students the opportunity to articulate how climate change may have impacts in their own communities.

**Assessment**
Formative:
- Thoughtful and accurate completion of the *Climate Change Mixer worksheet*
- Active participation in climate mixer activity
Summative:  
Pre/Post Survey

Opening Circle (15 minutes): The Question Game

Materials: A ball or throwable object

TELL Students: This is to turn our thinking brains on!

Implementation
Have students stand in a circle and introduce themselves with their names.

Round one: Have students throw the ball from one person to the other stating the name of the person they are throwing it to. Tell students to remember the order of who they threw it to/catched it from. (You can do this round several times to practice)

Round two: Do the next round silently, throwing in the same order and always making eye contact with the receiver.

Round three: This round students will ask each other questions in the same order they have been doing. Remember to keep eye contact! Example questions: “How do you feel about pizza?”, “What would it be like to live inside of a tomato?”, “Do you like swimming?”, “How many dogs are there on your sweater?”

Make up a silly consequence for hesitation: i.e. the person has to stand on one foot, or put on a funny hat.

Improv Game - Freeze

TELL Students- We are going to be acting as other people today during our main activity, so we are going to start off with a little acting game called Freeze.

ASK: Has anyone played it before? (allow students to describe the instructions and see link for clarification)

ENCOURAGE students to think of exciting and creative settings. Encourage students to take their time to think about their characters.

Journal Prompt

ASK students to record and answer the following in their journals:
1. What is the most beautiful place you have ever been in nature?
2. What natural resource (water, sunlight, the ocean, forests, fruit, air) do you value the most and why?

Pair and Share

**Activity 1 - Climate Change Mixer**

**ASK** students...

- Who can remind us of our lesson last week? What did we learn about the greenhouse effect and climate change?
- Based on what we learned, how do you think climate change could impact human beings?
- Has anyone here ever felt the impact of climate change in their own life or in the life of a family member?

**TELL** students...

- Today we are going to do a role-play activity in which we will all be acting as a different person affected by climate change. Some of our characters will suffer because of climate change and others will benefit from changes to the climate.

*Hand out identity cards*

- Take the next 10 minutes to read the identity of your character.
- Find a costume that fits your character and make sure it is respectful. Feel free to draw yourself a T-shirt sign, a tie, a mustache, etc! Get into character!!
- Learn your character’s identity and think about how you would introduce yourself to someone else.

*Once students are ready:*

1. Ask students to stand up and begin to circulate throughout the class to meet one another and to fill out responses on the "Climate Change Mixer Sheet."
2. Educators and youth leaders can play a character too in order to get a feel for how it’s going and how much time students need. Allow at least a half hour for students to circulate.

*Once students have spent 20 - 30 minutes circulating the room*
REFLECT:

- Whom did you meet, or what situations did you hear about, that surprised you? Did you have any “aha’s” while talking with people?
- Did anyone make you angry? Who?
- What themes seemed to come up in your conversations?
- Whom did you meet or which situations did you hear about that gave you hope?

Activity 2- Creating Our Own Climate Characters

The goal here is to have students try to connect their experiences or knowledge about climate change through acting as a climate change stakeholder. They will consider how their life experiences are connected to climate change and then create a character with experiences and emotions that may relate to their own climate change story or to one that they have learned about or can imagine.

TELL students: we just read and acted out the stories of real people impacted by climate change. As we discussed earlier, some of you may have experienced some effects of climate change in your own life. We’re going to take the next 20 minutes to spend time writing our own stories of climate change to be added into the game for other students in the future. If there is a story that you know about from your family, a friend or the media, you can write about that too.

REREAD your character’s bio. In a similar, first person style, write out your story in your journals.

Sentence starters:

My name is...
- I experienced the impact of climate change when I...
- During that time, I felt...
- If that were to happen again....
- In the future I hope that...

**If you don’t have any experience of how climate change has impacted your life or the life of anyone you know, feel free to research a story online and write about that individual. Try to research someone your age.

Give students a chance to present their stories to the class, if they choose.
**Closing Circle** - led by peer mentors or interns

**ASK** students...

What information from this lesson will be important to know 5 years from now? Why?

Whose story will you remember the longest?

Why is it important to tell these stories and our own stories about climate change? What can it teach others?