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Honors Program

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Environmental Activism

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NEBRASKA HONORS PROGRAM
CLC EXPANDED LEARNING OPPORTUNITY CLUBS
INFORMATION SHEET

Name of Club: Environmental Activism

Age/Grade Level: Grades 6-8

Number of Attendees: (ideal number)

Goal of the Club: (learning objectives/outcomes)

To educate students about the importance of the environment through feats of activism and community.

Resources: (Information for club provided by)

No One is Too Small to Make a Difference by Greta Thunberg

Content Areas: (check all that apply)

- Arts (Visual, Music, Theater & Performance)
- Literacy
- STEM (Science, Technology, Engineering & Math)
- Social Studies
- Wellness (Physical Education, Health, Nutrition & Character Education)

Outputs or final products: (Does the club have a final product/project to showcase to community?)

Tree planting

Introducing your Club/Activities:

An after school book club that follows Greta Thunberg's book of speeches *No One is Too Small to Make a Difference*, as well as uses hands-on activities to teach the importance of environmental activism.

General Directions:

Read a new chapter each week and discuss the themes present.

Tips/Tricks:

Be flexible and respect the opinions of others,

LESSON PLAN WORKSHEET: WEEK 1

(copy table as needed)

What is your environmental ethic?

**Lesson Activity
Name:**

1. Establish rules
 2. Environmental ethic
 3. Vocabulary definitions
 4. Book read-out-loud and discussion
 5. Weekly news article
-

Length of Activity:

1. 5 minutes
 2. 15 minutes
 3. 10 minutes
 4. 20 minutes
 5. 10 minutes
-

Supplies:

1. None
 2. Paper and pencils
 3. None
 4. Book
 5. News articles (will be provided)
-

Directions:

- Set up expectations for the club: sit at the front of the classroom, be respectful of other students' beliefs and ideas, and listen to the feedback of other students.
Explain the structure of each meeting: each meeting will consist of reading a chapter of the book, discussion questions, a weekly news article and an activity.
 - The students will create and write their own environmental ethic. This will include the following questions:
 - What is the environment?
 - What is an ethic?
 - What would these words mean together?
 - To give the students a better understanding of what the club is about, the following terms will be defined:
 - Sustainability – effective, efficient, economic, equitable and environmentally/socially responsible use of resources to meet our needs that considers the long-term implications of our choices today on the future of Earth's life support systems and the implications that this use has on all stakeholders involved
 - Paris Agreement – created by the United Nations Framework Convention on Climate Change (UNFCCC) where all parties must put forth their best efforts to combat the effects of climate change; keep the global temperature below 2 degrees Celsius; 187 out of 197 parties have ratified the agreement
 - Intergovernmental Panel on Climate Change (IPCC) – United Nations body for assessing the science related to climate change; created to provide policymakers
-

with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options
The students will be given an opportunity to add their own concepts and understanding to create discussion.

- The students will read Chapter 1: Our Lives Are In Your Hands, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - Greta states that a year and two months have passed since the world's scientists agreed our world has, essentially, three years to live. Why do you think more people haven't heard about this?
 - Greta states that, "in Sweden, we live our lives as if we had the resources of 4.2 planets." Have you ever heard of a "carbon footprint" or the "cut-off date"?
 - Activity: calculating your impact
 - Video: https://www.youtube.com/watch?v=g_aguo7V0Q4
 - Why is it important that we handle this problem together?
 - Pay attention to the strong words she uses. What language does Greta use to inspire the listeners/readers?
 - "Our future is in your hands." Greta concluded her speech with this line. What will it take to inspire those in charge of our future?
 - The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
-

Parts of activity that worked:

Students worked together to create a group environmental ethic that incorporated each student's ideas.

Parts of activity that did not work:

Our site coordinator had not received the book copies for the students, which led to us having to read to the students. The students became restless during this activity.

LESSON PLAN WORKSHEET: WEEK 2

(copy table as needed)

Discovering the carbon cycle?

Lesson Activity

Name:

1. Weekly news article
 2. Vocabulary definition
 3. Book read-out-loud and discussion
 4. Carbon cycle mapping
 5. Carbon cycle role-play
-

Length of Activity:

1. 10 minutes
 2. 10 minutes
 3. 15 minutes
 4. 10 minutes
 5. 15 minutes
-

Supplies:

1. News articles (will be provided)
 2. None
 3. Book
 4. Whiteboard and markers
 5. Ping pong balls
-

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
 - The following term will be defined:
 - Sustainable development – development that meets the needs of the present without compromising the ability of future generations to meet their own needsThe students will be given an opportunity to add their own concepts and understanding to create discussion.
 - The students will read Chapter 2: Almost Everything is Black and White, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - Do you remember when you first heard of climate change? What was that experience like? Did you take any actions to combat it?
 - What are fossil fuels? Give examples of how they are used.
 - Greta uses the word “emissions” frequently in her speeches. Do you know what these emissions are or where they come from?
 - Greenhouse gases – CO₂, methane (CH₄), nitrous oxide (N₂O), water vapor
 - Greta mentions that there are already greenhouse gases “locked in the system”. What does this mean?
 - There is a period of lag between when emissions are released and when their effects can be felt. Therefore, reducing emissions is the best solution, but the effects of our emissions now will still be felt in the future.
 - Have you heard about sustainable development?
-

- This issue demands action now. Greta says that “the climate crisis has already been solved.” What does she mean by this? Why do you think people haven’t been willing to change?
- The students will create a diagram of the carbon cycle to better understand where carbon comes from and how it moves to different locations during its “lifetime.”
 - Carbon flows between different reservoirs where it is then stored, including the atmosphere, oceans, and life on land.
 - A good starting point is atmospheric carbon. This carbon is taken in by plants in the form of carbon dioxide (CO₂), then broken down and incorporated into the plant’s growth in a process called photosynthesis. The carbon is passed to different organisms up the food chain until death, where microscopic bacteria and fungi break it down. This carbon can go back into the atmosphere or stay stored in the ground.
 - Another carbon sink is the ocean. Carbon is exchanged between water and air and is kept at a balance. Phytoplankton and cyanobacteria in the oceans act the same way that plants do on land by using CO₂ to begin the food chain. In fact, 50% of the world’s photosynthesis happens in oceans by these tiny organisms.
 - One final carbon sink is carbon stored in fossils. This carbon can be stored for thousands to tens of thousands of years, where it slowly leeches into the soil or becomes a form of fossil fuel.
 - The movement of carbon between these reservoirs keeps everything balanced. The issue is the extra carbon being released by human activity.
- Using the diagram from the previous activity, the students will use ping pong balls to represent the different pieces of carbon in the environment. The students will be given the opportunity to “travel” as carbon, moving to other places that their piece of carbon would move to.

Parts of activity that worked:

It was very beneficial for the students to get out of their seats and move around the classroom during the carbon cycle role-play. Concepts were easily understood.

Parts of activity that did not work:

Since it was early in the club, students were reluctant to start discussions.

LESSON PLAN WORKSHEET: WEEK 3

(copy table as needed)

Understanding your impact

Lesson Activity

Name:

1. Guess that animal
 2. Weekly news article
 3. Book read-out-loud and discussion questions
 4. Carbon Footprint Activity
-

Length of Activity:

1. 15 minutes
 2. 10 minutes
 3. 20 minutes
 4. 15 minutes
-

Supplies:

1. None
 2. News articles (will be provided)
 3. Book
 4. Computers
-

Directions:

- Students will hear an assortment of endangered animal trivia and will have to guess the animal species. Then, they will discuss the situations that made these species endangered and why they are important.
 - The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
 - The students will read Chapter 5: Our House Is On Fire, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - Greta begins this speech with iconic line, “our house is on fire.” What is our house? Is this literal or figurative?
 - Why do you think the media has been staying away from stories about climate change?
 - Students will use the website: <https://www.footprintnetwork.org/resources/footprint-calculator/> to calculate their average carbon footprint in a year, as well as how many “planets-worth” of resources they consume in a year.
-

Parts of activity that worked:

The students enjoyed playing Guess That Animal and were engaged the entire time.

Parts of activity that did not work:

The students did not understand the purpose of the carbon footprint activity, and instead turned it into a competition of whose number was highest.

LESSON PLAN WORKSHEET: WEEK 4

(copy table as needed)

Completing a waste audit

Lesson Activity Name:	<ol style="list-style-type: none">1. Weekly news article2. Vocabulary definition3. Book read-out-loud4. Waste audit <hr/>
Length of Activity:	<ol style="list-style-type: none">1. 10 minutes2. 5 minutes3. 10 minutes4. 35 minutes <hr/>
Supplies:	<ol style="list-style-type: none">1. News articles (will be provided)2. None3. Book4. Clear garbage bags for use in all the waste and recycling bins, large secure container to store the bags collected, protective clothing for the waste audit team: latex-free gloves <hr/>

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
 - The following term will be defined:
 - Waste audit – a thought-out process that is used to determine the amount and types of Waste produced by a party. Completing a Waste audit will provide valuable information that will benefit the party in many waysThe students will be given an opportunity to add their own concepts and understanding to create discussion.
 - The students will read Chapter 3: Unpopular, out-loud, popcorn-style Following the reading, the following discussion questions will be asked to facilitate discussion:
 - She states throughout the book that Sweden, although it is a small country, has a large impact on climate change around the world. What impacts do you think our country has on global climate change?
 - Why is it so undesirable to be unpopular? If the facts are there and the solutions are in progress, why do they go unnoticed?
 - Greta alludes to the fact that people with money also have power. What could be done if these individuals used their money and influence toward this cause? What can we do to convince them to do so?
 - She brings up her future children. What emotions would the mention of children and grandchildren evoke in her listeners?
 - Greta concludes this speech with the line, “the real power belongs to the people.” Greta us using her power to make a statement. What are other ways that we the people can gain power to make a difference?
-

- The students will begin by weighing each trash bag before beginning to sort to determine percentages after sorting (what percent should go to a landfill, what percent could be recycled, etc.). The students will then sort the waste into categories: waste (must go to a landfill), recycling (paper, plastic, aluminum, glass), compost (fruit peels, paper towels, milk cartons, soiled cardboard). If time allows, the students will calculate percentages and ensure materials end up where they are supposed to go. If time runs out, percentages can be calculated during the following club period.
-

Parts of activity that worked:

All but one student were open to the idea of touching trash and willing to participate.

Parts of activity that did not work:

We did not have as much trash to sort through as we thought we would, so the activity did not last as long as expected.

LESSON PLAN WORKSHEET: WEEK 5

(copy table as needed)

Differing environmental perspectives

Lesson Activity Name:	<ol style="list-style-type: none">1. Weekly news article2. Vocabulary definitions3. Book read-out-loud and discussion questions4. Environmental perspectives <hr/>
Length of Activity:	<ol style="list-style-type: none">1. 10 minutes2. 10 minutes3. 20 minutes4. 20 minutes <hr/>
Supplies:	<ol style="list-style-type: none">1. News articles (will be provided)2. None3. Book4. None <hr/>

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss.
- The following terms will be defined:
 - Ideology – a system of ideas and ideals, especially one which forms the basis of economic or political theory and policy
 - Intrinsic value – a person’s perception of the value something carries; some things have value simply because they exist
 - How does this relate to the environment?
 - Anthropogenic – originating in human activity (specifically related to the environment)

The students will be given an opportunity to add their own concepts and understanding to create discussion.

- The students will read Chapter 7: You’re Acting Like Spoiled, Irresponsible Children, out-loud, popcorn-style. The following discussion questions will be asked:
 - What is the purpose for Greta’s school strikes? Are they effective?
 - What do you feel is more effective: hope or fear?
 - Over 1500 scientists worldwide have agreed that climate change is not only happening, but its effects are accelerating. Greta has associated her face and her actions with this research. Why do you think people find her more persuasive than the research of thousands of scientists?
 - People tend to become set in their ways. What will it take to create a new attitude toward the environment?
 - Greta says that the people that refuse to act will become the “villains” in our history books. Why?
 - Greta says that she is protecting her future and the future of everyone around her. She encourages people to get on board to “speed up the process.” Related to the
-

question above, why aren't people panicking? What will it take to make people panic?

- Students will discuss the different points of view and ideologies of famous conservatives. After these views are discussed, students will create a “spectrum” of these ideologies. One wall of the room will represent “Utilitarian” and the opposite wall will represent “Intrinsic.” Students will then fall into place between the two based on their environmental ideologies. For example, students that feel humans who feel the environment should be left alone will be closer to the “Intrinsic” side.
 - Anthropogenic » Biocentric
 - Utilitarian » Intrinsic
 - Ralph Waldo Emerson (1803-1882): Romantic-Transcendentalism
 - There is a divine spirit in nature and every living soul; this spirit comes from God.
 - Author, poet and philosopher: one of his greatest works was an essay called “Nature” that represented the views of transcendentalists.
 - John Muir (1838-1914): Preservation Ethic
 - All things in nature carry intrinsic value and should be preserved. Rather than having their resources extracted.
 - Known as the “father of the national parks,” Muir published essays about environmental activism. He protected national parks such as Yosemite and Sequoia National Park from human activity.
 - Gifford Pinchot (1865-1946): Resources Conservative Ethic
 - Natural areas should be managed in a way that resources can be extracted in a way that will allow “the greatest number of people for the longest time.” Resources can be taken as long as future generations can use them too.
 - First head of the U.S. Forest Service; the federal government must regulate public lands and provide for the management of the resources those lands had to offer.
 - Aldo Leopold (1887-1948): Evolutionary-Ecological Land Ethic
 - There exists a community between humans and other living organisms; there are relationships between all species.
 - Humans, rather than dominating the environment, should be stewards to the living world.
 - Author, scientist, philosopher and professor. He pioneered the science of wildlife management.
 - He is best known for publishing *A Sand County Almanac* which expressed his environment views and created a movement for conservation.

Parts of activity that worked:

The students were willing to foster discussion with each other and were respectful of their peers' opinions.

Parts of activity that did not work:

Students found it difficult to differentiate between the perspectives presented to them. In the future, it would be beneficial to write the perspectives out for them instead of reading them aloud.

LESSON PLAN WORKSHEET: WEEK 6

(copy table as needed)

Using your voice: applying activism to social media

Lesson Activity

Name:

1. Weekly news article
 2. Vocabulary definitions
 3. Book read-out-loud and discussion questions
 4. Social media post
-

Length of Activity:

1. 10 minutes
 2. 10 minutes
 3. 20 minutes
 4. 20 minutes
-

Supplies:

1. News articles (will be provided)
 2. None
 3. Book
 4. Markers, colored pencils, other decorative supplies
-

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
 - The following terms will be defined:
 - Sustainable Development Goals: 17 goals set by the United Nations, setting an agenda for achieving global peace and prosperity. Adopted in 2015, all nations involved have pledged to do what they are capable of to reach the goals, which are:
 - a. No poverty
 - b. Zero hunger
 - c. Good health and well being
 - d. Quality education
 - e. Gender equality
 - f. Clean water and sanitation
 - g. Affordable and clean energy
 - h. Decent work and economic growth
 - i. Industry, innovation, infrastructure
 - j. Reduced inequalities
 - k. Sustainable cities and communities
 - l. Responsible consumption and production
 - m. Climate action
 - n. Life below water
 - o. Life on land
 - p. Peace, justice, strong institutions
 - q. Partnership for the goals
-

The students will be given an opportunity to add their own concepts and understanding to create discussion.

- The students will read Chapter 9: Cathedral Thinking, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - Greta begins her speech with the familiar words “I want you to panic.” What thoughts/emotions does that evoke? Why is this strong language important?
 - What do you think Greta means by the phrase “cutting corners”?
 - Do any of the statistics that Greta lists sound familiar to you?
 - Why do houses need a firm foundation? What is our current foundation?
 - Students will use an Instagram post template to create a post about environmental activism. The goal of this activity is to use visuals and words to catch and keep people’s attention about a topic of their choosing. Each student will present to the class, explain what methods they used to grab their classmates’ attention and describe why the issue they chose is important.
-

Parts of activity that worked:

The students created thoughtful and unique images displaying their creativity towards using social media as a tool.

Parts of activity that did not work:

During the discussion of the sustainable development goals, the students drifted off topic and it was difficult to bring them back.

LESSON PLAN WORKSHEET: WEEK 7

(copy table as needed)

The importance of environmental equity

Lesson Activity

Name:

1. Weekly news article
 2. Vocabulary definitions
 3. Book read-out-loud and discussion questions
 4. Equity lesson
-

Length of Activity:

1. 10 minutes
 2. 10 minutes
 3. 20 minutes
 4. 20 minutes
-

Supplies:

1. News articles (will be provided)
 2. None
 3. Book
 4. Handouts (will be provided)
-

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
- The following terms will be defined:
 - Pollution – material in the natural environment that doesn't belong there, and that damages the environment and living things, including people
 - Inequality – unfairness; a situation in which some people gain privileges simply because they are members of a group defined by race, wealth, sexual orientation or other factors. Those who aren't members of those groups are denied same privileges
 - Environmental justice – the fair treatment of people of all races, cultures, incomes and educational levels with respect to the development and enforcement of environmental laws, regulations and policies
 - Environmental racism – the disproportionate impact of environmental hazards on people of color

The students will be given an opportunity to add their own concepts and understanding to create discussion.

- The students will read Chapter 11: Can You Hear Me?, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - Greta claims to “speak on behalf of future generations.” What do you think that she means by this?
 - Greta says she was “fortunate to be born in a time and place where everyone can dream big.” What about this day and age makes this possible? Could a 16-year-old girl have made the same impact 50 years ago as Greta is making now?
 - What is climate equity?
 - She questions if we can hear her. Why is this?
-

- What would the effects be if global temperatures rose 1.5 to 2 degrees Celsius?
 - She speaks of implementing a new mindset – one focusing more on the environment than on money – why is this difficult?
 - “You don’t understand what we are talking about.” Is fear a motivator or a paralyzer?
- The students will begin by talking about pollution, some of its causes and effects. Then the students will be given a chart to fill in the people who are affected by pollution and why this is the case. After filling out the chart, the students will be asked to look through their lists and see if there are any affected groups for reasons other physical health. Examples include people of lower income. If not already on the list, the students will add “members of race and ethnic minority groups,” as these populations are more likely to be exposed to pollution. The students will then look at provided maps of air pollution in minority areas. They will answer the following questions:
- What two kinds of information does the map show?
 - What do the yellow dots represent?
 - What do the different shades of blue represent?
 - What do you notice about where the yellow dots are concentrated?
 - Write a sentence or two summarizing what the map shows.
 - Write a sentence or two explaining why the situation that the map shows exists.
 - What is unfair about the situation the map shows? Why might it be difficult for the people in the polluted areas to move somewhere less polluted?
 - Read the definition of environmental justice. What would a more environmentally just situation look like on the map?

Next the students will apply these maps to their own community. They will think about the following questions:

- What source(s) of pollution exist? For example, does a major highway cut through your town, exposing residents to a lot of noise and fumes? Is there a landfill or a hazardous waste disposal area? Is there a power plant that is noisy and puts smoke into the air?
- Who lives in the areas where these pollutants are concentrated? Is there a pattern similar to what you saw on the map?
- Are there any organizations or individuals in your area talking about the situation being unjust?
- What would a more environmentally just situation look like in your community?

Parts of activity that worked:

Students identified their favorite lines from the chapter and sparked their own discussions without our help.

Parts of activity that did not work:

Environmental equity was a difficult topic to grasp and may have worked better with a group of older students.

LESSON PLAN WORKSHEET: WEEK 8

(copy table as needed)

The impact of plastics on marine life

Lesson Activity

Name:

1. Weekly news article
 2. Two truths and a lie
 3. Book read-out-loud and discussion questions
 4. Plastics and marine life
-

Length of Activity:

1. 10 minutes
 2. 10 minutes
 3. 20 minutes
 4. 15 minutes
-

Supplies:

1. News articles (will be provided)
 2. None
 3. Book
 4. Handouts (will be provided)
-

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
 - The students will be tasked to write down three facts about themselves: two true ones and one false one. The students will then take turns reading their facts to each other, and their classmates will guess what the false fact is. This lesson will be used as an introduction to the book reading, which discusses people using false information about climate change.
 - The students will read Chapter 13: You Can't Simply Make Up Your Own Facts, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - What are the tipping points that Greta mentions?
 - Why do you think people “disagree” with these facts? It is easier to ignore something than to take action?
 - What is a CO2 budget?
 - Greta refers to herself and other young activists as “the bad guys who have to tell people these uncomfortable things.” Why do you think people choose to place blame and scorn on her and others?
 - The CO2 budget is global. What does this mean when it comes to emissions from large and small countries?
 - “You cannot solve a crisis... without seeing the full picture.” What is the full picture?
 - Greta says that some countries have declared emergencies, but the measures being taken to combat the crisis are allusions. Why is this?
 - The students will begin by discussing their daily uses of plastic. A handout will be given describing the different kinds of plastic that exist. A majority of them aren't accepted in recycling and end up in landfills. The different shapes of plastic will be listed:
-

One-dimensional: line, rope, strapping bands

Two-dimensional: sheets, bags

Reticulated: netting, six-pack rings

Hollow-bodied: bottles, fishing floats

Small particles: Styrofoam, pellets used in making plastic objects

Angular: boxes, crates

The students will then discuss the marine zones in which animals might live and feed in each of these zones. The students will then be given a worksheet to decide what plastics are eaten by which animals.

Parts of activity that worked:

The students enjoyed the Two Truths and a Lie game and got to know their classmates better.

Parts of activity that did not work:

The discussion of the chapter became political despite our efforts to steer students away.

LESSON PLAN WORKSHEET: WEEK 9

(copy table as needed)

Using your voice: impacting your school and community

Lesson Activity Name:	1. Weekly news article 2. Book read-out-loud and discussion questions 3. Locker signs
Length of Activity:	1. 10 minutes 2. 25 minutes 3. 25 minutes
Supplies:	1. News articles (will be provided) 2. Book 3. Paper, markers, colored pencils, etc.

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
 - The students will read Chapter 14: Wherever I Go I Seem To Be Surrounded By Fairy Tales, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - This speech was given a little over a year after Greta began her strikes for climate. She states that she misses her sister and her dogs, and would like to go home, but her dreams keep her persistent. What do you think is her motivator to keep going?
 - It would be easier to accept these fairy tales and simply fall asleep. What keeps you going? What are your passions that you stand by?
 - Greta insists we focus on the problem at hand and not the dream-like solutions. Is it easier for our vision to be clouded by dreams?
 - We all know the feeling of not wanting to get out of bed in the morning when it would be easier to fall back asleep and resume our dreams. How is the climate crisis similar?
 - Why is change difficult? Why do you think people see distancing themselves from a problem as a solution?
 - Greta says that a 50 percent chance for avoiding irreversible global damage cannot be morally defended. Do you believe we have a moral obligation to future generations to protect them?
 - This speech was given in front of the United States Congress. Greta calls out the U.S. for being the biggest carbon polluter in history. Does this action speak to you in a certain way?
 - This issue cannot be made into a political issue. Why?
 - Humans are part of the biosphere, but so is every other living thing on the planet. Why should we protect them? Do these organisms hold value? (Intrinsic value: something that holds value simply because it exists)
-

- Students will create signs to hang on their lockers to display what they have learned in the club. They can choose any topic covered or a combination of several topics. Then they will present their sign to the class and explain their reasoning behind their ideas.
-

Parts of activity that worked:

N/A

Parts of activity that did not work:

N/A

LESSON PLAN WORKSHEET: WEEK 10

(copy table as needed)

Making a difference

Lesson Activity Name:	1. Weekly news article 2. Book read-out-loud and discussion questions 3. Tree planting
Length of Activity:	1. 10 minutes 2. 10 minutes 3. 40 minutes
Supplies:	1. News articles (will be provided) 2. Book 3. Trees (will be provided)

Directions:

- The students will be given a short news article about a recent environmental occurrence to read and discuss. Topics to discuss: why did this happen, possible solutions, emotional response.
 - The students will read Chapter 16: We Are The Change and The Change Is Coming, out-loud, popcorn-style. Following the reading, the following discussion questions will be asked to facilitate discussion:
 - Greta begins her speech with several aspects that Canada and Sweden have in common. What are some things that every nation has in common when it comes to the climate crisis?
 - For many years, people have ignored the issue, instead of choosing to listen to the “empty words” of their world leaders. Why do you think that is changing today?
 - Greta claims that certain people who tell us not to worry are the ones that created the crisis. Do you think there is any truth to this?
 - “Let children be children.” Why do you think that we “children” are doing more about this issue than adults?
 - Greta and many young activists like her have been told their message will never be heard or that they will never make an impact. What examples prove this wrong?
 - Climate strikes, Time Magazine’s Person of the Year, numerous awards, books and articles written about her
 - Overall discussion:
 - What were the themes of the book?
 - What were your favorite chapters or phrases?
 - Is there anything that still confuses you that you want to discuss or learn about more in detail?
 - How will you use this information moving forward?
 - Students will plant trees provided by the Natural Resource Districts under their guidance. Basic steps for tree planting include:
 - Locate all underground utilities prior to digging.
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- Identify the trunk flare.
 - The trunk flare is where the trunk expands at the base of the tree. This point should be partially visible after the tree has been planted.
- Dig a shallow, broad planting hole.
 - Holes should be 2-3 times wider than the root ball, but only as deep as the root ball.
- Remove the containers or cut away the wire basket.
 - Inspect container tree root balls for circling roots. Straighten, cut, or remove them.
- Place the tree at the proper height.
 - Take care to dig the hole to the proper depth – and no more. If the tree is planted too deep, new roots will have difficulty developing because of a lack of oxygen.
- Straighten the tree in the hole.
 - Before backfilling, have someone view the tree from several directions to confirm it is straight.
- Fill the hole gently, but firmly.
 - Pack soil around the base of the root ball to stabilize it. Fill the remainder of the hole, firmly packing the soil to eliminate air pockets that may dry out roots. Further reduce air pockets by watering periodically while backfilling. Avoid fertilization at the time of planting.
- Stake the tree, if necessary.
 - Studies have shown that trees establish more quickly and develop stronger trunk and root systems if they are not staked at the time of planting.
- Mulch the base of the tree.
 - Mulch is organic matter spread around the base of a tree to hold moisture, moderate soil temperature extremes, and reduce grass and weed competition.
- Provide follow-up care.
 - Keep the soil moist, but not water-logged. Water trees at least once a week, barring rain, and more frequently during hot, windy weather.

Parts of activity that worked:

N/A

Parts of activity that did not work:

N/A
