Closing circle

As part of a closing circle to this activity, invite students to share the following: From the ideas heard, if you could put one action in place today to reduce emissions and work towards net zero, what would it be?

Extensions

Language Arts

Interview questions could be made into a story-writing or essay exercise. Students could turn these into multimedia content, such as short videos or podcasts.

Science

Students could make carbon footprint calculations to help them reflect on their own carbon emissions and brainstorm ways to reduce them on a personal level.

Lesson Three: Race to Net Zero

Overarching inquiry question(s)

How are regions of the world achieving or working on achieving net zero?

Target age group: Grades 6-8

Curricular competencies (listed in brief)

- Critical thinking (about net-zero action)
- Forming and communicating opinions
- Listening to the perspectives of others

Suggested materials:

Energy Use Trends PPT: Graph 5 Lesson 3 Country Cards

Summary (learning & pedagogical outcomes, goals, & activities in brief)

In this lesson, students will have an opportunity to learn about initiatives being implemented and policies being put in place by countries around the world. Students will also analyze the carbon dioxide emissions of various countries and consider present and historical responsibility. Students will role play being delegates from various countries. They will share and discuss ideas with one another, recording notes, answering questions, and beginning to form opinions based on their learning.



Opening

Circle opportunity

If possible, students can begin in circle (using the circle method *outlined in our framework*) with an initial question which could be either of the following:

- What is an initiative that you think would be most effective for reaching net zero? (based on previous lesson)
- What is one thing you can do to reduce carbon emissions?

Students can share their answers one by one in a circle. Answers can be repeated, and there is always the option for students to pass.

Explain that today they are going to be learning about what countries/regions from around the world are doing to reach net zero.

Graph 5

Next, show students Graph 5 in the worksheet package. This graph shows carbon dioxide emissions per country. The associated website has an interactive component which allows one to see which countries fall into each emissions level. The user can hover over any country to see the country name and emissions per capita (per person). Explain that the darker the color, the higher the emissions. Emissions are in tonnes (one tonne = 1000 kg).

Have students Talk and Turn to share their initial thoughts on this graph. Some guiding questions may include the following:

- What are some of the countries with the highest emissions levels?
- What are some countries with the lowest emissions levels?
- What does the map tell us about emissions levels in the south of the globe vs. the north?

Activity

1.The context

For this activity, students will be representatives of designated countries. They will be given a short piece that outlines what their assigned country is doing to achieve next zero. Students will be given the chance — in role as delegates — to attend a UN climate event where they will be mingling with representatives of countries from around the world.

2.The event

Students will each have a country (**Country Cards 3 worksheet package**). There may be multiple delegates from each country, ideally two or three. There is also the option for students to try finding information about a country of their choice. Students should review their country card. Delegates of the same country can gather prior, ensuring they are confident with all the details.

Before beginning the event and moving around the room, explain that while attending the UN climate event, delegates are to be learning about other initiatives being conducted by countries around the globe. Delegates should be recording the initiatives of other countries for further analysis.

Review some questions that could be asked:

- What country are you from and tell me about your country?
- How are you working towards net zero?
- What is the most important action you are initiating?
- What are your country's goals for emissions reductions?

Once everyone feels prepared, students can circulate the room and have conversations with one another, recording details.

3.Graph 5 reflection

Once there has been sufficient time for students to converse with one another, bring the delegates back to meet with those from the same country. Review what they have heard from others.

Together, review the following questions as they pertain to one of the countries in order to stimulate deeper thinking about the actions being taken and the level of responsibility for climate change/emissions levels. Pick any country to review together, referencing Graph 5.

- » What are the CO2 emissions levels per capita (per person)?
- » How do you think this country is doing on the pathway to reach net zero by 2050?
- » How do you think this country meets its responsibility as a member of the global community to reduce emissions levels by 2050?

Once this has been done together, groups can continue to answer these questions for the other countries with which they have met.

After an adequate amount of time, come together as a whole group and ask the following:

If carbon dioxide emissions are causing climate change and the impacts are felt globally, who is most responsible for fixing it?

Closing

<u>Share out</u>

Each student will share one thing they noticed, one thing that surprised them, and one wondering/question they still have. This can be done as a Turn and Talk first and then in a circle with the entire group.

Extensions

Students could do their own research on a country of their choice by referencing the Climate Action Tracker: <u>https://climateactiontracker.org/countries/canada/</u>

Resources used for info on Country Cards.

1. <u>https://earth.org/bhutan-carbon-negative-country/</u>

- 2. https://thelatch.com.au/icelands-sustainability-innovations/
- 3. <u>https://net0.com/blog/net-zero-countries</u>
- 4. <u>https://unfccc.int/news/seven-developing-countries-take-another-important-step-in-the-race-to-net-zero</u>