

Welcome to the *My Hobby Our Climate* activity, designed to make the connection between climate change and our personal lives. This activity will bring to light what students care about and what students can do now to ensure what they value today will be available in the future. **Caution: For some youth, talking about climate change can be stressful and emotional when they make the connection that climate change is impacting and will continue to impact their future.** We encourage you to explore <u>The Climate Change Conundrum Cartoon</u> and activity to help support students.

In this activity, students look at the climate crisis through a different lens: their hobbies. They meet five Canadian teenagers with different hobbies who are all being affected in one way or another by climate change. After hearing about the teenagers' concerns, your students will discuss why these consequences of climate change are occurring and offer some solutions. This activity profiles five teenagers and ends with a sixth teenager: themselves.

This resource is a conversation starter and meant to be introspective, where students take time to think about what they care about and what they can do for their future. For each blank space, we provide an example explanation and solutions. This list is not exhaustive – the goal of the activity is for students to get creative with solutions that would work for them.

Educational Objectives

Students will learn:

- The impacts of climate change
- How these impacts are happening
- The impact of climate change on the lives of Canadians
- Nature-based solutions and everyday behavioural solutions to climate change

Time: 45 Minutes

Format

- Alone, students should ask themselves: what are things they care about? What are things they value in their lives?
- Then, engaging in conversation with other students (in pairs or groups), they will find solutions or explain the science behind the consequence for each character of the activity. Specifically, they fill in the blank.
- Last, they can draw themselves, or share with others what they enjoy doing and see if what they value is being affected by climate change, and brainstorm possible solutions.

ANSWER SHEET

PART 1: For the following climate solutions, write an "N" if the solution is nature-based or a "B" if the solution is behaviour-based:

- Conserving wetlands (N)
- Carpooling to school (B)
- Planting trees (N)
- Changing from coal to solar energy (B)
- Protecting coral reefs (N)
- Buying local products (B)
- Raising awareness (B)
- Asking school administration to stop selling plastic water bottles (B)
- Creating a green roof garden (N)

PART 2: Meet these five teenagers, listen to their concerns and help them understand how their concerns are related to climate change – and what can they do about it. (Fill in the blank.)



Want to keep the conversation going on climate change? Check out our other resources at **ducks.ca/teachingclimatechange**





EXAMPLE: MEET WILLIAM

Location: Toronto, Ontario

Hobbies: "I love to spend time outdoors in the city, whether at the skatepark or riding my bike. But in the summertime, it's becoming more frequent that we have lingering heatwaves. This makes it difficult to hang outside. Sometimes there's smog that looms over the city for multiple days. That's when I catch up on Netflix."

Explain how this consequence is related to climate change:

Greenhouse gases naturally trap heat, making the temperature "just right" for life on earth. However, recent human activities have released extra CO_2 into the atmosphere, trapping additional heat and causing more frequent heatwaves.

What can this youth do to help reduce or stop this problem? Put yourself in their shoes – what would you do?

Examples of solutions:

- Plant trees in the city to create shade and cooler zones (join a planting

event or get permission to plant trees in a local park).

- Talk to members of the Toronto city council about creating new green

spaces or wetlands.

- Support wetland conservation in a local park, ravine or conservation area.



MEET NUKILIK

Location: Resolute Bay, Nunavut

Hobbies: "I enjoy going hunting with my dad to catch seals. It feeds my whole family and our neighbours, plus it's so rich in nutrients and is way cheaper than buying food at the store up here! However, hunting on the ice is becoming more and more dangerous. Accidents are becoming more frequent as skidoos go through the ice. Going seal hunting is starting to become too risky."

Explain how this consequence is related to climate change:

Example of explanation:

Climate change is causing the ice to melt from two directions. First from

above, because of the warmer air. Secondly, from underneath the ice,

because the ocean's water is also warming up. This results in thinning

of the ice sheet.



What can Nukilik do to help reduce or stop this problem? Is there anything they can do to adapt?

Example of adaptation: New technologies can improve safety on the ice. Smartlce allows communities to monitor ice thickness and snow along their traditional routes. The system gathers and relays information collected into colour-coded, intuitive maps that can be downloaded onto computers or mobile devices to help people plan their travel across the ice. For more information, read the complete article in the link below.¹

1 Thompson, J. (2018, June 5). Finding safe routes across melting Arctic ice with new tech and Inuit knowledge. The Narwhal. https://thenarwhal.ca/finding-safe-routes-across-meltingarctic-ice-with-new-tech-and-inuit-knowledge



MEET ALEXANDRA

Location: Lake Winnipeg, Manitoba

Hobbies: "I love to spend the summers at the lake! You can jump in to cool off and you can go fishing! But sometimes we can't swim in the lake because of algae blooms, which can be toxic to humans and animals. They say they're caused by too much nutrients entering the lake from things like fertilizers or leaky septic tanks. I don't understand why, but apparently warmer temperatures are making the problem worse."

Explain how this consequence is related to climate change:

Because of the combined effects of climate change (increased water temperature) and nutrient runoff, the eutrophication of Lake Winnipeg is getting worse (more occurrences of algae blooms).

What can Alexandra do to help reduce or stop this problem? Put yourself in their shoes – what would you do?

Examples of solutions:

- Protect and restore wetlands in the Lake Winnipeg watershed to filter out
 - the nutrients and pollutants from water before it enters the lake.
- Promote the responsible use of fertilizers talk about the issue with your

friends, family and local politicians.

- Raise awareness about wetlands as a tool to filter out nutrients and

store carbon.

- Promote constructed wetlands to treat stormwater and effluent before

they reach the lake.





MEET LIAM

Location: Kamloops, British Columbia

Hobbies: "During my summer holidays, I spend time at my grandparents' house in Kamloops. I love it there! I can go mountain biking and hiking! But I've noticed over the last couples of years that I'm ending up inside a lot because of wildfires. The smoke gets blown in and the air quality is bad – sometimes public health recommends staying inside. When that happens I feel trapped, and cabin fever gets to me."

Explain how this consequence is related to climate change:

Climate change is making conditions drier (droughts, extreme heat, and declining snowpack) and increasing thunderstorms. This is a perfect combination to increase wildfires.

What can Liam do to help reduce or stop this problem? Put yourself in their shoes – what would you do?

Examples of solutions:

- Advocate for local climate policies, such as reaching carbon neutrality
 - in your city with your local environmental organization or to your

local politicians.

- Create signs to educate fellow citizens about fire bans.
- Take the lead to make your community a FireSmart member.
- Get politically active and vote for candidates with strong climate plans





MEET CHARLIE

Location: Lunenburg, Nova Scotia

Hobbies: "My favourite pastimes are reading a book at the beach and hanging out with my friends! But I'm worried that we might lose our beach. I've noticed we have more intense and frequent storms and have heard about sea level rise... After storms, the beach looks terrible and some homes get flooded or damaged by the waves. Luckily it hasn't happened to us yet."

Explain how this consequence is related to climate change:

There are two consequences happening in this scenario. One is sea level rise, which is a consequence of Arctic ice melting, as discussed in Nukilik's example. The second consequence is stronger storms. **Explain why storms are stronger:**

Example of explanation:

A direct result of climate change is warmer air and ocean water, which

causes the water cycle to accelerate and intensify. This is because hot

air can hold more vapour, and hot water evaporates more quickly than

colder water. Now that the sky holds and releases more water, we see

stronger storms as a result.

What can Charlie do to help reduce or stop this problem? Put yourself in their shoes - what would you do?

Examples of solutions:

- Ask the members of your city council to develop a sea level rise adaptation plan for your community.
- Join a local environmental group and advocate for immediate climate action.
- Promote the restoration of coastal wetlands to help buffer homes from storm surges.
- Create signs at the beach raising awareness about sea level rise.

