



# How Big Are Your Carbon Feet?

Students will learn about the concept of carbon footprints and calculate their own.



## Learning outcomes

By the end of this activity, students will:

- ✓ calculate their carbon footprint and explain its importance
- ✓ compare and contrast standards of living in Canada and those in developing countries (option 1)
- ✓ determine ways to decrease their carbon footprint (option 2)

## Complete **ONE** of the following options.

You will only be able to submit work and get credit for one option.

### Option 1

**Calculate your carbon footprint and compare it with that of someone in the developing world**

Students will explore the concept of a carbon footprint. Students will then calculate their carbon footprint and that of someone in a developing country and compare the two.

### Option 2

**Calculate your carbon footprint and make changes to reduce it**

Students will explore the concept of a carbon footprint, calculate their yearly carbon footprint and create a picture informing others how to reduce or offset their carbon footprints.

## Important

Please respect all school and governmental guidelines and restrictions surrounding COVID-19. Review the 2021 CDC COVID-19 policy [here](#). This challenge does NOT require students to participate in an in-person event.





# How Big Are Your Carbon Feet?

## Option 1

Calculate your carbon footprint and compare it with that of someone in the developing world

Students will explore the concept of a carbon footprint. Students will then calculate their carbon footprint and that of someone in a developing country and compare the two.

## Materials

Computers with Internet access for research, pens, pencils, paper.

## Proof to be submitted

A Venn diagram highlighting similarities or student responses indicating a reflection comparing and contrasting their results.

## Activity

Ask your students to define “carbon footprint” and “carbon offset” (see the Carbon Offset worksheet for the Get Growing challenge for help). Have students use one of the carbon calculator websites provided to calculate their yearly carbon footprint on their own. Have select students share their results with the class and discuss common trends in the class’s results.

Next, explain to your students that they will be calculating the yearly carbon footprint of a person about their age living in a developing country and comparing that person’s footprint with their own. Have students research the lifestyle of a person living in a developing country and then estimate that person’s annual carbon footprint, record their results and comment on how the results are similar or different.

In a Venn diagram or in paragraph form, have students compare and contrast the differences between the two footprints, describing how their lifestyles differ, what they learned, how they feel and what they can do to reduce their carbon footprint.

## Example Carbon Calculators

- [Global Footprint Network](#)
- [World Wildlife Fund](#)
- [The Nature Conservancy](#)
- [Good planet foundation](#)
- [Carbon Footprint calculator](#)
- [Conservation International](#)
- [Zero Footprint Youth Calculator](#)



### Teacher tip

There are many carbon calculators you can use online. Before doing this activity, find a carbon calculator that will work with your entire class to ensure results are consistent. Check out the Classroom Energy Diet Challenge blog for a list of possible calculators.



[Classroom Energy Diet Challenge](#)



[Energydiet.ca](#)



# How Big Are Your Carbon Feet?

## Option 2

### Calculate your carbon footprint and make changes to reduce it

Students will explore the concept of a carbon footprint, calculate their yearly carbon footprint and create a picture informing others how to reduce or offset their carbon footprints.

## Materials

Computers with Internet access for research, pens, pencils, paper, Footprint worksheet (attached).

## Proof to be submitted

Photos of student carbon footprints.

## Activity

Ask your students to define “carbon footprint” and “carbon offset” (see the Carbon Offset worksheet for the Get Growing challenge for help). Have students use one of the carbon calculator websites provided to calculate their yearly carbon footprint on their own. Have students share their results with the class and discuss common trends in the class’s results and what can be done to decrease their carbon footprint.

Distribute one Footprint worksheet (attached) to each student and have students share ideas for how people can lower their carbon footprint. Encourage students to use coloured pencils to draw pictures and make their footprint as bright as possible. If possible, compile all the footprints together and create a display to share what your class learned.

## Example Carbon Calculators

- [Global Footprint Network](#)
- [World Wildlife Fund](#)
- [The Nature Conservancy](#)
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- [Conservation International](#)
- [Zero Footprint Youth Calculator](#)

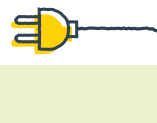
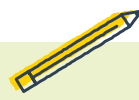


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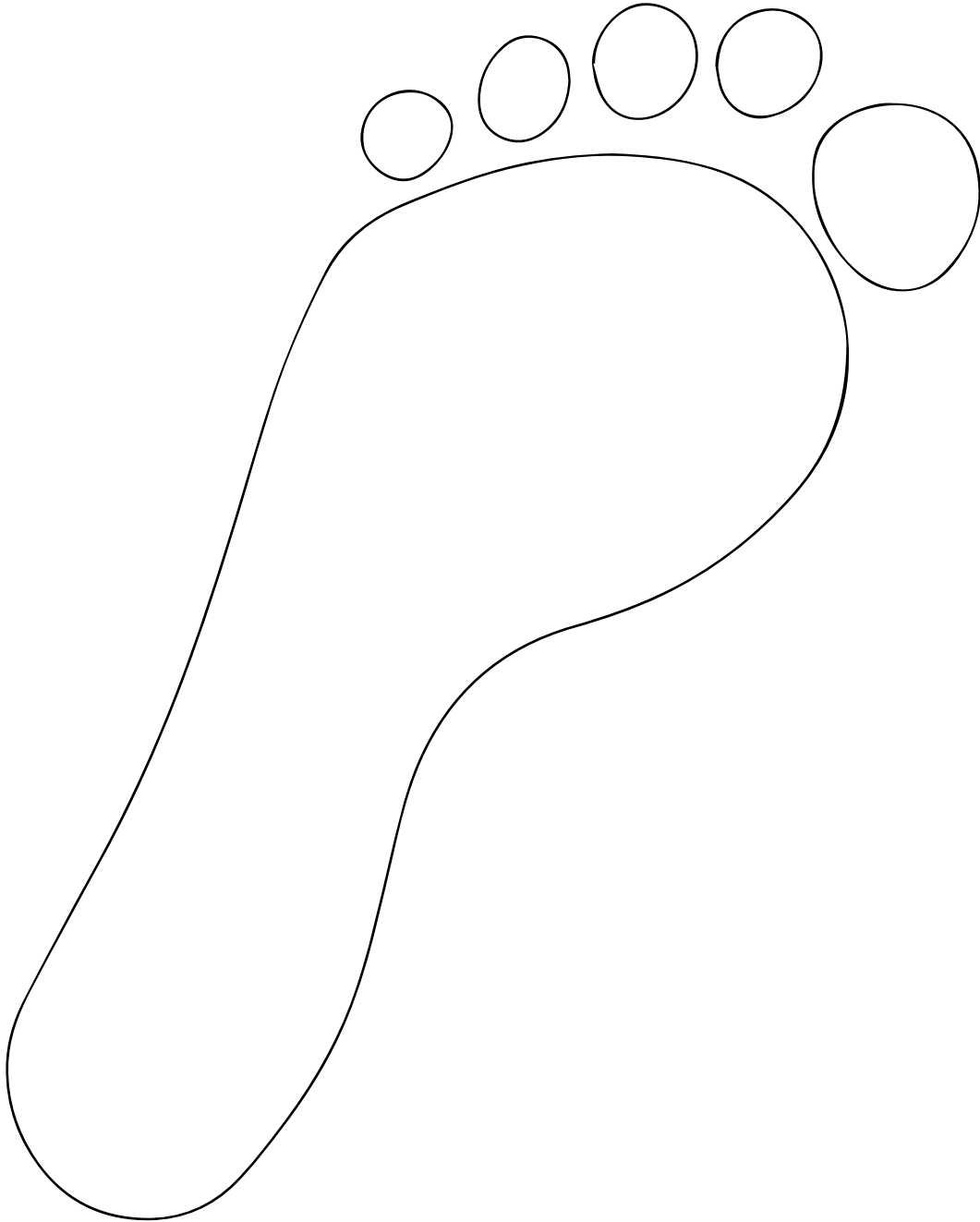


# How Big Are Your Carbon Feet?

Name \_\_\_\_\_

Date \_\_\_\_\_

## Footprint worksheet



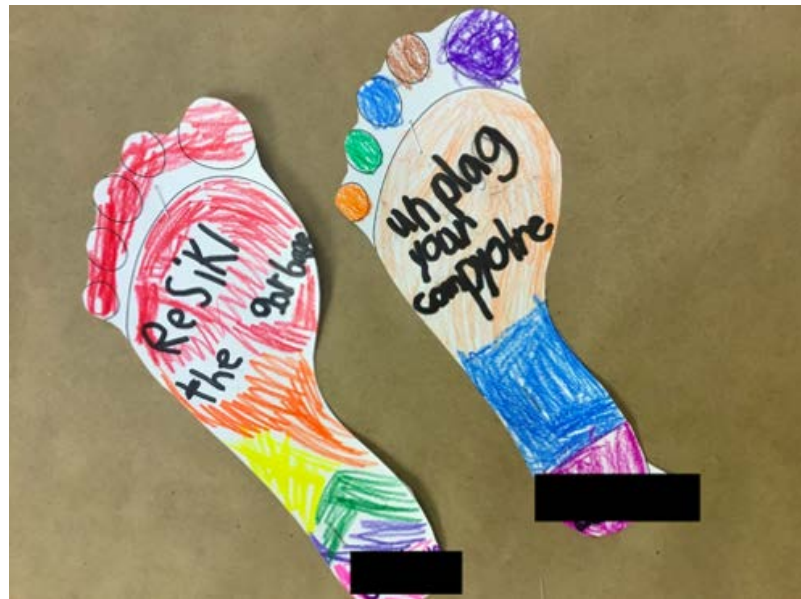


# How Big Are Your Carbon Feet?

Examples from previous years of how this challenge can be completed:

## Example 1

The Nobles Heart classroom coloured in their templates listing the ways they can reduce their carbon footprints.

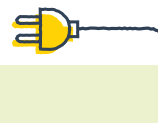
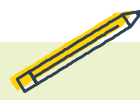


## Example 2

The Climate Actionators completed their carbon footprint templates in different ways, showing how they can lower their footprints.



Classroom Energy Diet Challenge



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