

My Carbon Footprint

SKILLS MENU

- ▶ Questioning
- ▶ Hypothesizing
- ▶ Predicting
- ▶ Planning
- ▶ Controlling Variables
- ▶ Performing
- ▶ Observing
- ▶ Analyzing
- ▶ Evaluating
- ▶ Communicating

What is your personal greenhouse gas contribution? What impact do your day-to-day activities have on climate change?

In this activity, you will calculate your personal carbon footprint using an online carbon footprint calculator. The choices you make in your daily activities all have an impact on climate change (**Figure 1**). The energy you use at home, how you travel to school, and even the foods you eat all contribute to your carbon footprint.


SKILLS
HANDBOOK
3.B., 4.A., 4.B.

Purpose

To estimate your personal carbon footprint

Procedure

Part A

1. Use an online carbon footprint calculator to compare the carbon footprint of the following energy uses:
 - a flight from Toronto to Vancouver versus a flight from Toronto to Sydney, Australia
 - driving a small car 20 000 km in a year versus driving an SUV 20 000 km in a year
 - household electrical use of 1000 kW·h versus 2000 kW·h 

DIG DEEPER

Web Link

For links to carbon footprint calculators you can use for this activity,

GO TO NELSON SCIENCE



Figure 1 Two winter activities are shown: (a) cross-country skiing and (b) snowmobiling. Which activity would have the lower carbon footprint?

Part B

2. Using the carbon footprint calculator you selected as a guide, make a list of all the information that you need to gather. Categories may include
 - the type of transportation you use and how far you travel
 - the type of food you eat
 - how much electricity you use
 - how much energy you use to heat or cool your home
3. Use your list to gather the data you need.
4. Enter your data in the carbon footprint calculator to find your personal carbon footprint.
5. Record your results.
6. For each category, list ways you could reduce your carbon footprint. For example, you might reduce the amount of hot water you use, eat less meat, or bicycle or walk to school. Adjust your personal data to reflect these changes.
7. Return to the carbon footprint calculator. Use your adjusted data to find out what your carbon footprint would be if you made these changes.
8. Record your results.

Analyze and Evaluate

- (a) Compare your actual carbon footprint (Step 5) with your potential carbon footprint if you made the changes you listed in Step 6. How would making these changes affect your carbon footprint? **T/I**
- (b) What other changes could you consider making to reduce your carbon footprint? **T/I**

Apply and Extend

- (c) Write a letter to your local newspaper editor that persuades others to take steps to reduce your community's carbon footprint. Base your argument on your findings from this activity. **T/I C**
- (d) If everyone on Earth had a carbon footprint like yours, how many Earths would we need? **A**

UNIT TASK

Bookmark

You can apply what you have learned about estimating and lowering your carbon footprint to the Unit Task described on page 410.