

CRITICAL THINKING ACTIVITY: CALCULATING YOUR CARBON FOOTPRINT



OBJECTIVES: Students will:

- ✓ Examine their personal and household habits and choices in relation to their carbon footprint.
- ✓ Identify which personal activities and household choices produce the most CO₂ emissions.
- ✓ Identify lifestyle changes they can make to reduce their footprint.

MATERIALS:

- ✓ Student Sheet: **CALCULATING YOUR CARBON FOOTPRINT**
- ✓ Paper/pencil or calculator
- ✓ Art materials for creating posters

PROCEDURE:

1. Ask students what the term "carbon footprint" means. Why do we care about our carbon footprints?
2. Have students calculate their carbon footprint individually using the carbon footprint worksheet as a guide. Review and clarify the math procedures.
3. Have the class share out their data and work together to identify the class high, low and average for both carbon saved and carbon emitted.
4. Ask students to think back to the questions asked by the carbon footprint calculator to see if they can figure out why the class got the responses they did. (Did the class low have the lowest footprint because they don't watch TV? Was the high so high because they drove everywhere?)
5. Brainstorm a list of possible actions individuals and groups can take to try to reduce their carbon footprint. List these ideas on the board or chart paper.
6. Ask students to think about the results of their calculations and write out a plan to address this problem individually and with their family.

Teacher Sheet 2

ASSESSMENT: Produce a carbon footprint poster- Invite students to make individual posters showing an action, or several, that they and their families can take to reduce their carbon load. When the posters are completed, display them in the classroom or hall. Post the information below for students to use as a guide.

Expository Questions & Research

- 1.) What are three actions of yours that you think you can change in order to decrease your carbon footprint?
- 2.) Pick one action of yours that affects your carbon footprint. Make this your personal pledge to reduce your carbon footprint.
- 3.) Find 3-5 facts related to your personal pledge to include in your poster.

EXTENSION: Think about what you use, consume, and discard in an average lifetime. Calculate this for every American and then for every person on Earth. Humans have left their mark on 83 percent of Earth's surface. What can we do to reduce our environmental impact?