



Grade Level: Middle School

Subject Correlation: Social Studies, Geography, Math, Macroeconomics

Objectives: Students will gain a perspective on comparative consumption habits in developing and developed countries and the effect that mass consumption has on natural resources and on the Ecological Footprint of a country and an individual. **Students will be able to:**

1. Describe some cultural and social differences between people living in developed and underdeveloped countries.
2. Compare the use of resources between these two types of societies.
3. Identify some ways in which humans positively and negatively affect the environment.
4. Recognize problems associated with human use of natural resources.

Teacher Preparation: Print enough copies for individuals or groups of students of the following documents (The maps are reproduced at the end of this lesson, but here are links to the originals.):

Page 10 and 11 of the [Living Planet Report](#) with Ecological Footprint information

[World Map showing Gross National Income per capita](#)

[World Map showing CO2 emissions](#)

Also, use pictures from the Picture File, supply, or have students bring in several pictures of typical scenes and activities of western lifestyle, as well as contrasting pictures of indigenous populations or people living in developing countries.

Length: One class period.

Outline (with times)

10 minutes

- In small groups or as a class, have students read “*The Ecological Footprint*” and study the graphs on page 10 of the *Living Planet Report*. Students will learn that a person or country’s ecological footprint is based on the amount of natural resources directly or indirectly consumed combined with the amount of pollution produced.

20 minutes

- Still in small groups, using the two pages from the *Living Planet Report*, the GNI per capita world map and the CO2 emissions world map, students will deduce that western lifestyles use many more natural resources

than other lifestyles, as well as produce more global warming gasses and pollution. In small groups, ask the students to answer the following questions. (*Teacher may need to spend some time discussing what is the Gross National Income [average income per person] and the significance of carbon dioxide emissions [most common greenhouse gas].*):

1. Which countries emit the most CO₂? (Specific countries or high, medium, low income countries)
2. Which countries have the largest ecological footprint? (Specific countries or high, medium, low-income countries)
3. Do you see a correlation between a country's wealth, CO₂ emissions, and the size of its ecological footprint?
4. How do consumption habits in different countries affect their ecological footprint?
5. Is it possible for Americans to live a sustainable lifestyle (with a manageable ecological footprint) in a modern world using modern technology? If so, how? (What kind of sacrifices will this require? How would the average American lifestyle change?)

Additional Activities (something extra for students to think about)

Ask students to consider the following statistics written on the board in front of the class (Source, UNDP 1998):

The wealthiest fifth of the world's population:

- Accounts for 86% of total private consumption expenditures, while the poorest fifth account for only 1.3%;
- Consumes 45% of all meat and fish, while the poorest fifth consume only 5%;
- Consumes 58% of total energy, while the poorest fifth consume less than 4%;
- Consumes 84% of all paper, while the poorest fifth consume only 1.1%; and
- Owns 87% of the world's vehicle fleet, while the poorest fifth own less than 1%

- Ask students what they think about the level of resource consumption in different parts of the world. Ask what the world would be like if everyone consumed as much as in western lifestyles. Would the earth be able to support this? How does energy use by one fifth of the world's population living in western countries affect others? What would our lives be like if we lived a lifestyle similar to indigenous populations or other people living in developing and undeveloped countries?

- Ask students to reach a conclusion about the use of energy and resources in different societies.

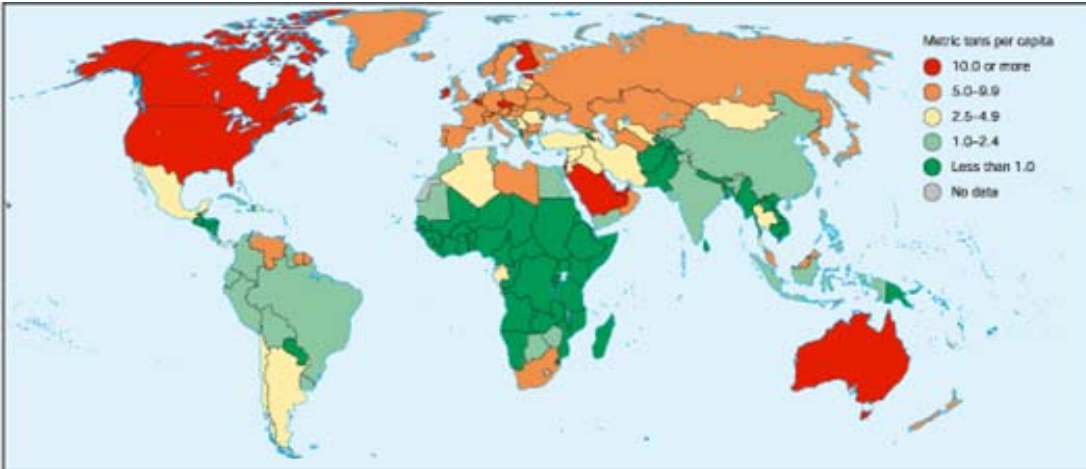
Homework Assignment:

Students can write essays or letters to the editor describing their thoughts on inequity in the use of natural resources, waste production, and pollution production around the world. How do lifestyles in one part of the world affect people living in other parts of the world? Who should be responsible and accountable and how?

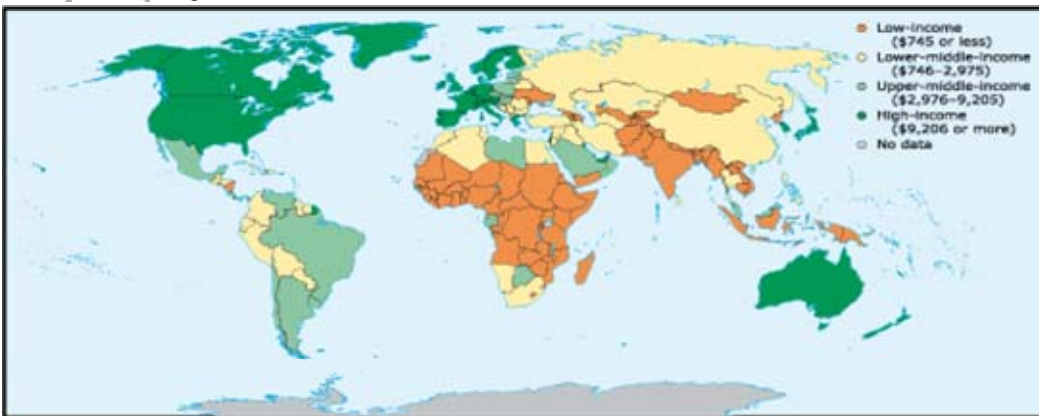
Teachers may want to research environmental organizations operating in their communities. Find organizations by conducting a Web search or looking on [Earth Day Networks' database of environmental organizations](#) by location. Inquire into hot local environmental topics and what can be done about them. How can your students get involved? Invite a volunteer from a local environmental group to speak to your class.



Carbon dioxide emissions, 1999



GNI per capita, 2001



Have and Have-Not