

Carbon Footprint

Summative Assessment

Small Group or Individual Work

1. Review the Carbon Footprint Assessment Rubric
2. Think of one thing you use every day that you think contributes to carbon dioxide emissions. Here are some ideas:
 - Food item
 - A mode of transportation
 - A favorite object (toy, sports equipment, book, etc.)
 - A piece of clothing

3. Draw the item in the center of a large sheet of paper or a poster.

Think of what it took to produce that item:

- What parts is it made of?
- What materials are those parts made of?
- Did the production of the item result in greenhouse gas emissions (methane, carbon dioxide or nitrous oxide)?
- Did any part have to be transported from somewhere else?
- Was energy used to make it?
- Were carbon sinks (like oceans, soils or forests) harmed to make it?

5. Now, draw these connections around your central picture, starting with the parts your item is made of. For example, a hamburger is made of a meat patty, a bun, lettuce, and tomato. Your hamburger would be in the center of your page. Surrounding it would be pictures of the meat, bun, lettuce and tomato. Draw lines to connect these parts to the central picture.

6. Now think about what each of those parts are made of and what was required to make them. To produce the meat, forest land might have been cleared for grazing (that releases CO₂ to the atmosphere) > Cows release methane, which is a another greenhouse gas. To drive the cow from the pasture to a feedlot requires transportation, which relies on fossil fuels (which release CO₂). More transportation was required to drive the cow from the feedlot to the slaughterhouse (more CO₂ release). The meat might have been wrapped in plastic, which comes from petroleum, a fossil fuel that releases greenhouse gases....

You get the picture!!!

7. On the back of your beautiful piece of art work, list 5 ways that this item could be produced (or used) in a more climate-friendly way.

Extensions: Choose an item that is produced in the U.S.A and compare it to the same item produced in another country. Compare the carbon footprint of an item produced today to a similar item produced 50 years ago. Compare the production of a food based item seasonally.