



Lesson Plan: How Big is Your Footprint

Objectives:

- Increase their awareness of the impact of their choices on the Earth. This awareness is to result in a goal to reduce their personal impact (footprint).
- Learn the mean, median, mode, and standard deviation of a set of data.

Standards (Cited from Ohio's Department of Education)

- 9-12: Describe ways that human activities can deliberately or inadvertently alter the equilibrium in ecosystems. Explain how changes in technology/biotechnology can cause significant changes, either positive or negative, in environmental quality and carrying capacity. (pg. 57)
- 9-12: Identify a problem or need, propose designs and choose among alternative solutions for the problem. (pg. 52)
- 9-12: Apply appropriate math skills to interpret quantitative data (e.g., mean, median and mode). (pg. 52)
- 9-12: Read, construct and interpret data in various forms produced by self and others in both written and oral form (e.g., tables, charts, maps, graphs, diagrams and symbols). (pg. 43)

Activity:

1. Follow lesson as presented by How Big is Your Footprint Worksheet
2. Share student results with the class
3. Form a discussion based on discussion questions provided in How Big is Your Footprint Worksheet as well as student results

Assessment:

- Complete steps of Ecological Footprint Calculator
- Calculate the number of acres needed to sustain that person's choices
- Complete graph displaying mean results
- Participation in discussion

Source: Alliance to Save Energy