

Earth Systems: Unit 12 Study Guide

es2u12 (Footprints)

Warning: some of what you learn might disturb you, it might shock you, it might make you think, and hopefully it might make you consider shrinking YOUR footprint!

Understand and Comprehend - study objectives (using the chapter 23 on Sustainable Solutions as our resource)

- Understand the gap between knowing and doing.
- Understand the concept of "Ecological Footprint" and its application in society.
- Describe and assess key approaches to sustainable solutions.
- Analyze the roles that consumption, population, and technology play in efforts to achieve sustainability. (refer back to the $I = P \times A \times T$ model)
- Explain how time is limited but how human potential to solve problems is tremendous.

Apply - **10pts** (product *see attached rubric)

- Create one of the following: [letter to the editor](#) or [letter to policy-maker](#) or [e-newsletter](#) to inform or encourage action on something you learned about during this unit or the semester

Analysis - **10pts** (product) * just the myfootprint.org for seniors

- Complete a "quick footprint" using the calculator at <http://www.myfootprint.org/> and print your results *
- Footprint Data Collection - Electric Consumption/Waste/Transportation CO2
Task: Outline a strategy for how you might minimize your footprint most effectively (in other words live more sustainably). Justify how you arrived at your decisions. This analysis should be based on the "quick" footprint results and your data collection.

Evaluate - understanding the concept of sustainability

- Case Study - List and describe approaches being taken on college and university campuses to promote sustainability (pages 867-682)
- **Cmap Quiz 10pts** (complete the Cmap using the terms and concepts provided)

Synthesis - **20pts Unit Test** * take-home for seniors

Resource:

Human Footprint (<http://channel.nationalgeographic.com/channel/human-footprint/>) * 150 word reaction/reflection

The Story of Stuff (www.storyofstuff.com)

Perils of Plastic

Union of Concerned Scientists (<http://www.ucsusa.org/>)

Sierra Club (<http://action.sierraclub.org/site/PageServer?pagename=TakeAction&JServSessionIdr006=xx4vuor8c1.app13b>)

Congress (www.congress.org)

The True Cost of Food (www.truecostoffood.org)

Understanding #2: Human activities, collective and individual, conscious and inadvertent, affect planet Earth.
from Framework for Earth Systems Education