**Ecological Footprint Discovery**

Directions: Follow the instructions below. Create a word document that answers all questions in red. All answers MUST be in your OWN words and in complete sentences. NO cutting & pasting. When complete, upload your assignment at [www.rustscience.com](http://www.rustscience.com).

Visit the website 􀃆 [http://www.footprintnetwork.org/en/index.php/GFN/](http://www.footprintnetwork.org/en/index.php/GFN/%20)

* Click on the Personal Footprint link under the Footprint Basics Tab at the top of the page.
* Click on the Overview link from the left side menu.

1. **Describe what an ecological footprint is and what it measures.**

* Click on the World Footprint link from the left side menu.

**2. Describe the growth of the world ecological footprint from 1960-2008.**

**3. Describe and explain the two potential ecological footprint models for the year 2050.**

**4. What is overshoot?**

* Find the drop down menu on the right side that says Country Trends.
* Select China

**5. What year was the China’s ecological footprint and biocapacity equal?**

**6. Describe the growth trends of the ecological footprint and biocapacity prior to the year in questions #5, and also describe the trend after this year.**

- Click the link for Country Factsheet

**7. What are the three major factors that account for an individual’s ecological footprint (in hectares per person)?**

**8. List the ecological footprint for a Chinese citizen in the following years- 1961, 1976, 1991, 2008.**

**9. How many planets would we need if everyone consumed like China?**

* Find the drop down menu at the top that says Country Trends.
* Select United States of America.

**10. What year was the United States’ ecological footprint and biocapacity equal?**

**11. Describe the growth trends of the ecological footprint and biocapacity prior to the year in questions #10, and also describe the trend after this year.**

- Click the link for Country Factsheet

**12. What are the three major factors that account for an individual’s ecological footprint (in hectares per person)?**

**13. List the ecological footprint for a U.S. citizen in the following years- 1961, 1976, 1991, 2008.**

**14. How many planets would we need if everyone consumed like the United States?**

* Find the drop down menu at the top that says Country Trends.
* Select Japan.

**15. How does Japan’s ecological footprint compare to its biocapacity in general?**

**16. When will Japan’s biocapacity and ecological footprint equalize?**

- Click the link for Country Factsheet

**17. How does a Japanese citizen’s ecological footprint compare to someone from the U.S. in the year 2008?**

* Find the drop down menu at the top that says Country Trends.
* Select Columbia.

**18. How does Columbia’s biocapacity compare to its ecological footprint overall?**

**19. What do you think this says about Columbia’s long term sustainability compared to the U.S. or Japan?**

- Click the link for Country Factsheet

**20. Estimate the average ecological footprint (in hectares per person) for a resident of Columbia from 1961 to 2005.**

* Find the drop down menu at the top that says Country Trends.
* Choose a country of your choice.

1. **What country did you choose?**
2. **Do you think the country you chose is considered undeveloped, moderately developed or developed?**
3. **Describe the general trend of the ecological footprint for your chosen country from 1960-2008.**
4. **Do the results of the ecological footprint for the country you chose surprise you? Why or why not?**

* Click on the Carbon Footprint link under the Footprint Basics Tab at the top of the page.

**25. How much of the ecological footprint is represented by the “Carbon Footprint”?**

**26. Typically the carbon footprint refers to emissions. How is the carbon footprint here utilized in a different way as incorporated into the model?**

**27. How do carbon emissions exemplify, or illustrate, the “tragedy of the commons”?**

* Click on the Personal Footprint link on the left side menu.
* Click Take the Quiz
* Select China as your location
* Select English
* Answers all questions as honestly as possible.
* When you are finished, print a copy of your Personal Footprint.
* Do NOT press finish, LEAVE THE PAGE OPEN or you will have to repeat the quiz.
* Answer the questions below.

**28. What was your ecological footprint according to the model in terms of the number of Earth’s necessary to sustain you lifestyle? Did this surprise you? Why or why not?**

**29. How many global acres of Earth’s productive area are required? Tons of Carbon Dioxide?**

**30. List the percentage breakdown for each of the five categories in the pie chart for your ecological footprint.**

- Click on the Explore link for How do I Change My Footprint.

- Choose a goal percentage to reduce your footprint.

- Click on explore scenarios.

- Change two things in your quiz to reduce your footprint.

**31. Describe the two actions you chose, and the effect on your ecological footprint.**

**32. Which country are you closest to in terms of your new goal footprint?**

Upload your questions on the class website, and turn in your Personal Footprint print out to Ms. Rust. Make sure your name is on your paper!