**Computer Lab Exploration**

**Ecological Footprint and World Population/Statistics**

**For web links: please go to my teacher website for active links!**

[**ht**](http://teacherpages.hallco.org/webpages/lnicolella/)**tp://www.nicolellawhhs.weebly.com**

**Click on Biology, Chapter 16 Human Impact on Ecosystem and Scroll Down the Page**

1. Go to [www.earthday.org/footprint-calculator](http://www.earthday.org/footprint-calculator)
2. Select your location, United States.
3. Click Begin.
4. Click Get Started under the New User.
5. Please select your gender and other things if you would like. Then click ok.
6. Enter the detailed information so that you can get a more accurate decision. If you are not sure, use your best judgment.
7. Finish the quiz to get your ecological footprint.
8. At the end of the quiz, you will receive your footprint along with detailed information that should be recorded below:
   1. How many Earth’s are required to sustain your lifestyle if everyone on the planet lived as you do?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. How many global acres are required to sustain your lifestyle?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. How many tons of carbon dioxide are produce to sustain your lifestyle?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Diagram you pie chart below indicating food, shelter, mobility, goods, and services.
9. Click on ***explore scenarios***.
10. What are some actions you can do to lower your footprint and what would be the result if you did them? (This should be in the explore scenarios screen)
    1. Will you consider do them? Why or Why not?
11. Click the screen until you reach the screen that says ***learn about the science of foot printing***.
12. What is an ecological footprint and what does it measure?
13. What determines a good footprint calculator?
14. What are some interesting facts you discovered about footprints from reading this page?
15. Go to [www.myfootprint.org/en](http://www.myfootprint.org/en)
16. Select language, English.
17. Select country, United States.’
18. Answer the questions to the best of your knowledge. You do not need an email address.
    1. How many Earth’s do you use?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
    2. Is this the same or different than the result you go on the first quiz?
    3. If it’s different, what might cause these differences?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
19. Go to [www.census.gov/main/www/popclock.html](http://www.census.gov/main/www/popclock.html)
20. What is the current world population?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
21. What is the current U.S. population?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
22. Scroll down the page and click on the International Database.
23. Click Select Report.
24. Select Midyear Population and Density.
25. You can only select about 5 years at a time. Hold the Ctrl Key down to select multiple years.
26. In the region box, please select World.
27. You will need to scroll all the way DOWN to the bottom of the page. It says World - TOTAL FOR SELECTED REGION.
28. Fill in the following data table for years 1950-2050. I have filled in some for you.

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Population** | **Year** | **Population** |
| 1950 | 2,557,628,654 | 2000 |  |
| 1952 | 2,594,919,657 | 2004 |  |
| 1958 |  | 2008 |  |
| 1962 |  | 2010 |  |
| 1966 |  | 2012 |  |
| 1970 |  | 2016 |  |
| 1974 |  | 2020 |  |
| 1978 |  | 2024 |  |
| 1980 |  | 2026 |  |
| 1984 |  | 2030 |  |
| 1986 |  | 2034 |  |
| 1990 |  | 2038 |  |
| 1994 |  | 2044 |  |
| 1998 |  | 2050 |  |

1. Create a line graph representing this data.
   1. The x-axis should represent the following years.
   2. The y-axis should represent population numbers.
   3. Make sure to label both axes and give your graph a title.

