ECOLOGICAL FOOTPRINT   NAME __________________________

Are you living sustainably? or are you taking more than your "fair share"? Take the ecological footprint survey to find out.

ASSIGNMENT: Take the ecological footprint survey and answer the following questions.
Useful info: Multiply hectares by 2.471 to convert to acres; divide acres by 2.471 to get hectares. A hectare is 100 meters by 100 meters (about the size of a football field, including the end zones).

YOUR ECOLOGICAL FOOTPRINT RESULTS

1. If everyone lived like you, we’d need ________ Planet Earths to provide enough resources. (2 pts)

2. To support your lifestyle, it takes ________ global acres of the Earth’s productive land. (2 pts)

3. Now convert your global acres from question 2 into global hectares by dividing by 2.471 and then rounding the result to the nearest tenth (e.g., 21.6 acres / 2.471 = 8.74 which rounds to 8.7 global hectares). The number of global hectares is your ecological footprint.

   Your Ecological Footprint = ________ global hectares (4 pts)
   Use this number when answering questions asking for your footprint in the rest of the assignment.

4. How your ecological footprint breaks down (hold cursor over each pie section): (2 pts)

<table>
<thead>
<tr>
<th>Percent</th>
<th>Services</th>
<th>Food</th>
<th>Goods</th>
<th>Mobility</th>
<th>Shelter</th>
</tr>
</thead>
</table>

1
INFORMATION FROM THE WEBSITE

Go to Footprint Science > Glossary to define the following terms. Give the exact definition from the glossary, and put quotes around it. Hint: you can copy and then paste special as unformatted text and then add the quotation marks.

5. Define ecological footprint. (2 pts)

6. Define biocapacity. (2 pts)

7. Define overshoot. (2 pts)

8. Let’s make sure you understand those definitions (put in parentheses BOTH choices that apply). Footprint is to Biocapacity as… (4 pts)
   a. Demand is to Supply
   b. Supply is to Demand
   c. Income is to Expenditure
   d. Expenditure is to Income
Go to Footprint Science > Data and Results > Data Table. I suggest saving the file to your hard drive.

9. List the country with the highest ecological footprint and the country with the lowest ecological footprint and their footprints (in hectares). (Hint: I have the data as a link from our class website and then you should sort the rows from highest to lowest footprints) (4 pts)

<table>
<thead>
<tr>
<th>Highest Country</th>
<th>Footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lowest Country</th>
<th>Footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Fill in the table below. Use global hectares (round to nearest one decimal point). (6 pts)

<table>
<thead>
<tr>
<th></th>
<th>World</th>
<th>U.S.A.</th>
<th>Your Personal Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecological Footprint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biocapacity</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td># of Planets needed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remember that the # of planets is determined by dividing the footprint by biocapacity.

THOUGHT QUESTIONS

11. By how many percentage points does your ecological footprint differ from the average person’s in the U.S. (use global hectares for both numbers)? [From your footprint, subtract the U.S. average footprint. Take that number and divide it by the U.S. average footprint. Multiply that number by 100. Round to the nearest one decimal point.] Show your work (5 pts).

_______ %

12. Specifically give two reasons why you think your ecological footprint is higher (or lower) compared to the average person’s in the U.S.? (2 pts)

13. Compare your ecological footprint to the 1.7 global hectares that would be your global “fair share” of Earth’s biocapacity. You are taking (1 pt)
   a. more than your “fair share”
   b. less than your “fair share”
   c. equal to your “fair share”
14. If everyone lived like you, the maximum number of people who could be supported by Earth forever is

_________ billion people (round to nearest tenth; therefore one billion would be 1.0 billion).

Show your work below (4 pts). Hint: Use the number of people on Earth today (see
http://www.census.gov/) and the number of planets from question 1.

15. In fact, the average person in the world is taking 59% more (2.7 vs. 1.7) than their “fair share”. What
are 4 major consequences (of many) of overshooting Earth’s biocapacity as we are? Hint: check out
“Footprint Basics” and then “World Footprint.” (4 pts)

16. State two specific things you could do to reduce the overshoot that you think would have the most
impact? (2 pts)

17. State two specific things a country could do to most reduce the overshoot that would have the most
impact? (2 pts) [Hint: The ecological footprint for a country is calculated by multiplying population,
consumption, and efficiency. Global biocapacity is calculated by multiplying area by sustainable
yield].

QUOTE FROM THE WEBSITE
“The Ecological Footprint is a resource accounting tool that helps countries understand their ecological
balance sheet and gives them the data necessary to manage their resources and secure their future…. It
is almost certainly the case that countries and regions with surplus ecological reserves—not the ones
relying on continued ecological deficit spending—will emerge as the robust and sustainable economies
and societies of the future.”
I urge you to look around the website to learn more about this important topic.