

Name: _____

Date: _____

Period: _____

Biology: Ecology Webquest

Part 1: Biodiversity

<http://www.worldwildlife.org/fun/games.cfm>

Click on the biodiversity game icon and play four rounds. Record the answer and a brief description of each round below:

1. Round 1: _____

2. Round 2: _____

3. Round 3: _____

Now, click on the link that says 'quizzes'. Take the Biodiversity IQ test. The test doesn't have an end, but has a bunch of questions in random order. For the first 4 questions you miss, write down the correct answer below:

4. _____

5. _____

6. _____

7. _____

Part 2: Resources

<http://www.myfootprint.org/>

Take the ecological footprint quiz. If you are not driving yet, estimate the transportation based on the person who drives you around the most. Be patient when you first enter the site- after you select United States and English, it will go very fast.

1. How many acres of bioproductivity do you use per year for food? _____

2. How many acres for mobility? _____

3. How many acres for housing? _____

4. How many acres for goods and services? _____

5. How many planets would we need if everybody lived like you? _____

6. What is the average usage for person in the United States? _____

Under 'Comments and Questions,' click on "What about other species?"

7. Enter the % of the planet you think should be set aside to preserve biodiversity: _____

8. How many acres would every person need to live off of for this to happen? _____

9. How many planets would we need at our current usage? _____

Part 3: Biomes

<http://library.thinkquest.org/11353/ecosystems.htm?tqskip1=1>

Define Biome: _____

Define Ecosystem: _____

Select 4 Biomes and summarize their key features:

1.

2.

3.

4.

Part 4: Resource Cycles

Water Cycle

<http://observe.arc.nasa.gov/nasa/earth/hydrocycle/hydro1.html>

Enter the website and click through the tutorial to find definitions to the following:

1. Condensation:

2. Precipitation:

3. Infiltration:

4. Evapotranspiration:

Sketch the animated water cycle from the second slide here:

Carbon Cycle

http://www.epa.gov/globalwarming/kids/carbon_cycle_version2.html

5. Watch the 5 scenes from the carbon cycle video, and answer questions about each scene.

Scene 1: Where are the 7 places carbon is stored?

Scene 2: What three processes are occurring to drive the carbon cycle?

Scene 3: How is carbon cycled on land?

Scene 4: How is carbon cycled in water?

Scene 5: How do combustion and deforestation affect the carbon cycle?

Sketch a carbon cycle from one of the scenes here:



Nitrogen Cycle

<http://www.mi.mun.ca/mi-net/enviro/enviro1.htm>

6. What is the name of the process that allows plants to receive nitrogen? _____

7. When nitrogen is returned to its gas form, what is the process called? _____

8. How do animals get their nitrogen? _____

Part 5: Populations and Communities

Producers, Consumers, and Decomposers

<http://www.nhptv.org/natureworks/nwepecosystems.htm>

1. Read the page and name the four essential parts of an ecosystem:

2. What is a producer? _____

3. What is a consumer? _____

4. What is a decomposer? _____

5. Click on herbivore. What word is used to describe the relationship between bees and flowers?

6. Click on Carnivores. How do carnivores keep balance in a community?

7. Click on Decomposers. What are three decomposers?

Populations

<http://www.nhptv.org/natureworks/nwep12.htm>

Read the paragraph on populations, then click on limiting factors.

8. List three non-living (abiotic) things that limit population size:

9. List three living (biotic) things that limit population size:

10. How can human impact affect population size?

11. How can predator-prey relationships affect population size?