Name: Date Period

**Webquest – Environmental Human Impact**

# Human Population Growth

Link 1: <http://worldpopulationhistory.org/map/1/mercator/1/0/25/>

Adjust the simulation and answer the following questions.

1. Where in the world did human civilizations first appear?
2. What was the world population in **1800**?
3. What was the world population in **1950**?
4. What is the world population **today**?
5. What is the expected world population in **2050**?

***Click on the white diamond shapes along the red “Food & Agriculture” line to see examples of Milestones***

1. Identify at least three examples of *Food and Agriculture Milestones* which may have led to a significant **increase**

in the human population.

***Click on the white diamond shapes along the blue “Health” line to see examples of Milestones***

1. Identify at least three examples of *Health milestones* which may have led to a significant **decrease** in the human population.
2. Find (make your Social Studies teachers proud!) and click on the “**Effects of the Industrial Revolution**.” ***(Hint: it’s just before 1800 along the green “Science and Technology” line)*** Explain how this milestone led to the exponential growth of the human population.

Link 2: <https://sites.google.com/site/humanpopulationgrowthwebquest/home/human-population-group-a>

1. Below are the four factors that affect population growth. ***Describe each.***

|  |  |
| --- | --- |
| **Birth Rate** |  |
| **Death Rate** |  |
| **Immigration** |  |
| **Emigration** |  |

1. What is the formula for ***human population change***?
2. When using the formula for population change, what does it mean when your answer is a **positive number**?
3. When using the formula for population change, what does it mean when your answer is a **negative number**?

# Global Warming and Climate Change

Link 3: <http://climate.nasa.gov/interactives/climate-time-machine>

1. This series of visualizations shows how some of Earth’s key climate indicators are changing over time. Click on each indicator, drag the toolbar, and record your general observations.

|  |  |
| --- | --- |
| **Sea Ice** | **Sea Level** |
|  |  |
| **Carbon Dioxide** | **Global Temperature** |
|  |  |

Link 4: <https://19january2017snapshot.epa.gov/climatechange/climate-change-basic-information_.html>

1. How much has ***Earth’s temperature changed*** over the past century? How much is it projected to **rise** over the next century?
2. Define **Global Warming**:
3. Define **Climate Change**:
4. What are four changes in weather and climate that have occurred?
5. **Greenhouse gases, such as carbon dioxide, are not bad**. In fact, they are necessary or our world would be too

cold to live in! So what’s the problem? *Summarize the connection between human activities and climate change.*

# Natural Resources

Link 5: <https://creately.com/diagram/example/honm1oi7/Non-renewable%20vs%20Renewable%20Resource>

1. Complete the venn diagram to gain a better understanding of renewable and nonrenewable resources.

**RENEWABLE RESOURCES**

**NONRENEWABLE RESOURCES**

**Definition:**

**Definition:**

**Environmental Impact:**

**Environmental Impact:**

**Examples:**

**Examples:**

Link 6: <https://www.brainpop.com/games/sortifynaturalresources/>

1. This playful assessment will test your understanding of Earth’s resources. Sort tiles into buckets to score points. Clear the whole board to win. Be strategic when you choose your labels – difficult labels are worth more points 
   1. What was your original Sortify score:
   2. Play again to improve your score. What was your new score?

# Pesticide Use

Link 7: <http://npic.orst.edu/>

1. Select ***THREE examples*** of pesticides you have used (or would consider using) and write a brief description of each. You can get a description by clicking on the name of the pesticide.
2. Under the **Health & Environment tab**, select a category under Environment.
   1. Which category did you select?
   2. What is something you have learned regarding pesticide usage in this area?

***Pollution***

Link 8: <http://oceanservice.noaa.gov/education/kits/pollution/02history.html>

1. Improved sanitary conditions and less disease were important factors in making cities healthier places to live, and helped encourage people to move to urban areas. *Why was pollution a major drawback to these advances*?
2. Identify the names of the US policies that significantly decreased pollution in our country.

a. ***1972 -***

b. ***1990 –***

1. What is the difference between **point source pollution** and **nonpoint source pollution**? You may have to click the links on the side of the webpage.
2. Why is nonpoint source pollution so *difficult to control?*