

Human Impact WebQuest

To know how human activities affect the biosphere

Ecological Footprint-

1. Define "Ecological Footprint":
2. .Google: Earth Day Network Ecological Footprint and click first link. Follow the directions to calculate your ecological footprint. What is your individual ecological footprint?_____

Climate change

<http://www.epa.gov/climatechange/basics/>

1. What is climate change?
2. What are the major types of physical evidence for climate change?

Global Warming

<http://www.columbia.edu/~vjd1/greenhouse.htm>

1. What is the greenhouse effect?
2. Could we survive on Earth without the greenhouse effect? Explain
3. What is global warming?
4. What are the two largest greenhouse gases? Where does each come from?
5. Explain the environmental impacts potentially faced from global warming.
6. Based on the information gathered in the above sections, are global warming and climate change the same thing? Explain.

Human population growth

<http://desip.igc.org/mapanim.html>

1. Watch the animation then answer the following questions:
2. Where in the world did the human population appear to start?
3. What was the world population in 1985?
4. What is the expected world population in 2020?

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

5. Describe the factors that affect population growth.
6. What is the formula for human population change?

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

7. What are the characteristics of a population that is growing quickly?

Invasive or non-native species

<https://sites.google.com/site/humanpopulationgrowthwebquest/home/non-native-species>

1. What is a non-native species?
2. Why are non-native species dangerous to ecosystems?
3. How were Zebra mussels introduced in the United States?
4. What impacts have the rapid growth of zebra mussels had?

Acid Rain

<http://www.clean-air-kids.org.uk/acidrain.html>

1. What is acid rain?
2. What are the main gases that cause acid rain?
3. How can acid rain affect plants and trees?
4. How can acid rain affect organisms that live in the water?
5. How can acid rain affect buildings?

Ozone Depletion

<http://envi.tropmet.res.in/kidscorner/ozone.htm>

1. What is ozone?
2. Why is the ozone layer important to life on Earth?
3. What is the difference between “bad” and “good” ozone?
4. What is ozone depletion?
5. What causes ozone depletion?
6. What causes the ozone hole?
7. How does ozone depletion impact human health?
8. What impact does ozone depletion have on plant and animal life?

Pollution

<http://kidsresearchexpress-3.blogspot.com/2009/04/types-of-pollution.html>

1. Distinguish between point-source and nonpoint source pollution.
2. Explain how DDT does not immediately harm birds.

Click on each of the 6 types of pollution, summarize and discuss environmental issues

Deforestation http://kids.mongabay.com/lesson_plans/lisa_algee/deforestation.html

1. What is deforestation?
2. List the causes of deforestation.
3. Outline the global statistics on deforestation.
4. What are the environmental consequences associated with deforestation?
5. What are the social impacts of deforestation?

Strip Mining

<http://library.thinkquest.org/05aug/00461/stripm.htm>

1. What is strip mining?
2. What are the steps of strip mining?
3. How is strip mining harmful to the environment?
4. What does it mean to reclaim the strip mined land?

biodiversity

<http://actionbiodiversity.org/2010/07/human-benefits-of-biodiversity/>

1. What is biodiversity?
2. How does biodiversity benefit human health?
3. What other ways does biodiversity help humans?
4. What is our economical relationship with biodiversity?

<http://dsc.discovery.com/tv-shows/curiosity/topics/10-surprising-threats-to-biodiversity.htm>

1. Click through the 12 slides to identify the 10 most surprising threats to biodiversity.

<http://www.biodiv.be/biodiversity/threats/>

2. What are the major threats to biodiversity?

http://www.priweb.org/globalchange/bioloss/bl_06.html

3. What methods are being used to preserve biodiversity

Energy resources

<http://www.childrensuniversity.manchester.ac.uk/interactives/science/energy/renewable/>

1. Answer the questions while clicking through the animation
2. What is a nonrenewable resource?
3. What is a renewable resource?
4. Why is the sun renewable but oil is nonrenewable?
5. How is fresh water both a renewable and a limited resource?

http://www.eia.gov/energyexplained/index.cfm?page=renewable_home

6. Summarize the 5 types of renewable energy listed on the main page.
7. What are the three energy sources most frequently consumed by the US?
8. Why don't we use more renewable energy?

<http://www.iisd.org/sd/>

What is sustainable development?

9. How can sustainable development help minimize negative impacts of human activities?