# **Human Impact WebQuest**

### To know how human activities affect the biosphere

## **Ecological Footprint-**

- 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 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.

### **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://envis.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://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?