

Human Population Growth

Problem: Has the earth reached its carrying capacity for the human population? If so what are the causes, what can/ should be done, if anything to stop human population growth, and what are the consequences if the human population continues to grow at an exponential pace?

*Worries about human population growth are not a new phenomenon. In 1798 Thomas Malthus published an essay "On the Principle of Population". He identified the fact that the human population was outpacing the production of food.

Prior to 1950, the death rate was still relatively high. This kept numbers of humans from increasing too rapidly. Occurrences including the Agricultural revolution which increased food production, and industrial revolution which improved methods of transportation, along with advances in medicine, sanitation, and nutrition have all contributed to people have longer life spans, and higher rates of reproduction.

1. What is the exact U.S. Population right now? _____
2. Where in the world did the human population appear to start? _____
3. What was the world population in 1985 _____
4. What is the projected world population for 2020? _____

Most countries are trying to reduce their growth rate.

1. With a partner think of ten reasons why a country would want to reduce it's growth rate?

Zero population growth means that as many people are being born as there are dying. TO achieve zero growth, each couple would have to have no more than two children.

Developing Countries: The growth rate of developed countries continues to stabilize, while developing countries are still showing exponentially increasing numbers of their population.

The growth rate of the U.S is moderately slow compared to that of developing countries, while it is still not at zero growth.

READ:

Read the eHow article "Concerns of Human Population"

Answer the following questions:

1. Knowing what you know about the interconnected nature of food webs, why do you think humans in the past considered themselves separate from the ecosystem?

2. Construct a food web with at least 12 organisms that includes humans as the tertiary consumers.
3. What is meant by the statement "we are seeing declines in ecosystems"?
4. Define Overpopulation:
5. What the what?? I thought pesticides and fertilizers were good things? Describe why this is not so?
6. What two approaches is the UN Millennium Project addressing in regards to human population.

Read: "What are the Worldwide Causes of Population Growth?"

1. In 1910 the world population was _____
2. In 2050 it should reach _____
3. What countries have the highest TFR?
4. Why are people in poorer countries having so many children?

Graph: Use the data to create a graph showing global human population growth

(Graph paper attached)

Read: Human Population Growth; The History of Human Population and how we began sidestepping controls over our growth rate.

1. Summarize how humans developed the capacity to expand into new habitats
2. Summarize how humans have increased out carrying capacity in existing habitats
3. Summarize how humans have sidestepped limiting factors over our growth rate?
4. Looking at the table of the 20 most populated "Urban" areas; which areas would you expect to see the highest levels of pollution, poverty, and disease?
5. Which country is responsible for the most damage to the environment?

6. If every current human agreed to only have two children per couple. Why would the population continue to grow?
7. What are some trends in slowing down the birth rate?
8. Why is educating a countries female population critical to slowing the growth rate?

