

Unit 2

Processes and Cycles of Population Change

Population Geography

The following information corresponds to Chapter 5 in your textbook. Fill in the blanks to complete the definition or sentence. Note: All of the following information in addition to your reading is important, not just the blanks you fill in.

Worldwide Population Trends

- Even while the global population growth rate has continued to _____, the reduction has been offset by the ever larger total on which it is based (world population is growing at >80 million people/year).
- The slowest growing countries (under 1% annual increase) lie in the economically wealthier zone extending from the _____ and Canada across Western _____ to _____ and Australia. Not all these countries are rich, in fact many nations of the former _____ are hindered by adverse political and social conditions.
- List three countries that are experiencing *negative* population growth:
- One region that is experiencing rapid population growth is _____ (>2.5%) due primarily to the end of colonialism and the failure of national economies. Another region with rapid growth is _____ (>2.3%) primarily due to cultural traditions and constricted opportunities for women.

Views on Population Growth

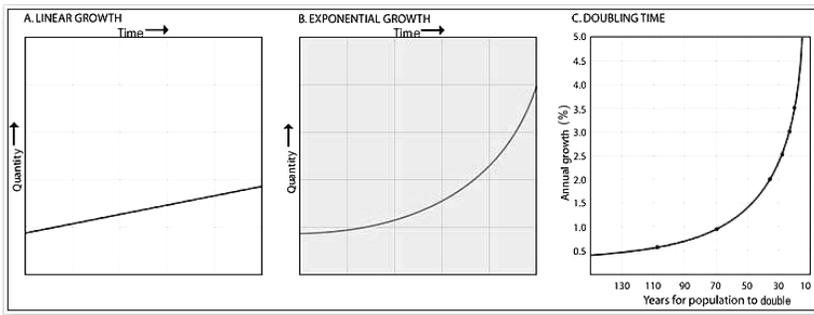
- _____ = in 1798 he published, *Essays on the Principle of Population*, which stated that:
 - Human population grows _____ (2, 4, 8, 16, ...), doubling every generation, whereas ...
 - Food production grows _____ (1, 2, 3, 4, ...). The result is that there would be mass starvation until population growth was *checked* by wars, epidemics, famines,...
 - His theories were questioned especially around the late 1800s because 1) he did not anticipate the technological and industrial improvements in _____, and 2) the _____ of population growth rates in Europe due to the industrial revolution.
 - _____ = a revival of enthusiasm for his ideas accompanied the alarming increase in world growth rates after World War II. With slight modifications, his theories can apply to today.
- _____ = German social philosopher who discussed socialist theories in the mid 1800s:
 - Population growth is *not* the primary cause of poverty and suffering (as _____ stated);
 - _____ = economic system that promotes the exploitation of _____ and the unequal distribution of _____ (land, capital, etc...) - the primary cause of poverty and suffering;
 - _____ = economic system that promotes the equal _____ of resources and the _____ obtained from economic production among the people - will solve problems for *all*.
 - _____ theories have *not* held up very well. The former USSR and China both adopted family planning policies, and have both embraced capitalist ventures (China on a limited scale).

Views on Population Growth (cont'd)

- _____ = wrote *The Conditions of Agricultural Growth* (1965), stating another theory:
 - Population growth can stimulate greater _____ in agricultural development, producing greater amounts of food (the opposing viewpoint of _____).
 - It is more realistic to view population growth as a stimulant of _____ development of technology, than to view population growth as being _____ by agricultural output.
 - One major deficiency in her theory is that intensification of agriculture in an area can lead to the _____ of nutrients in the soil, and the consequent reduction in the amount of food produced.
- _____ theory states that the world has an abundance of resources and humans will never use them all up; this is a very optimistic, yet unrealistic view.

Dimensions of Population Growth

- _____ = the level at which a national population ceases to grow. Some countries have achieved this; their major problems will involve the aged, not the young.
- _____ = the time required for a population to double in size. The formula to determine this number = $70 / \text{rate of increase}$ (this number reflects the current *trend*, it is not an absolute certainty).
- Fill in the doubling time for the table to the right:



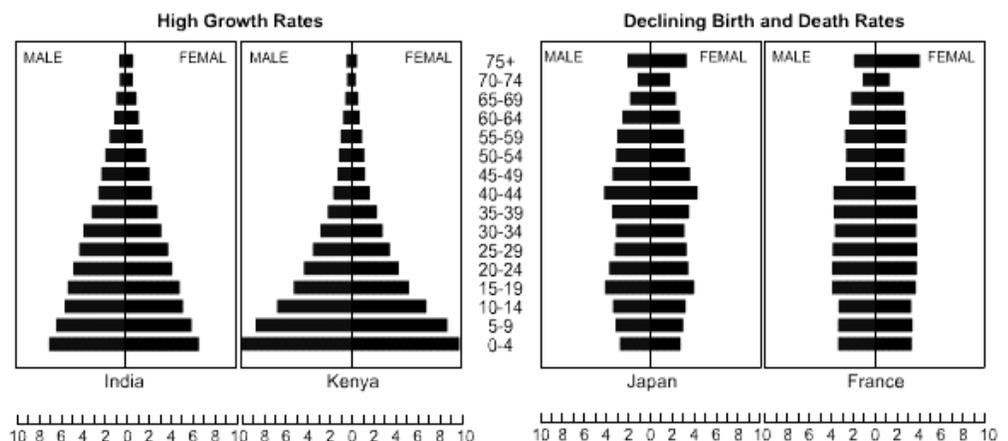
Rate of Increase (%)	Doubling Time (yrs.)	Example (1998)
0.50		Ireland
0.60		United States
1.00		China
2.00		Costa Rica
3.50		Yemen

- _____ = rapid growth of the world's population over the past century.

Population Structure

- _____ = graphic representation (profile) displaying the *composition* of a population; shows the percentages of the total population by age and sex, normally in five-year groups known as _____.
- A pyramid with a wide base and a narrow top indicates a country with relatively _____ growth rates, whereas a more rectangular "pyramid" indicates a country with relatively _____ growth rates.

Year	Population	Doubling Time
0	250 million	16 centuries
1650	500 million	170 years
2000	6 billion	35 years



Population Changes in the Past

Limits on Growth

- Epidemics and plagues: Between 1348 and 1351 Europe was ravaged by the _____, killing around a quarter of the population.
- _____ in India and China during the 18th and 19th centuries caused millions of people to perish. In Europe, unusual weather conditions (e.g. The "Little Ice Age") caused crops to fail.
- _____ also limited the population through the deaths of several men and collateral damage to the civilian populations.

Expansion of Growth

- _____ = when farming methods improved, crop yields increased, storage capacities were expanded, and distribution systems were improved; resulted in a marked increase in the growth rate of Europe beginning in the 18th century.
- _____ = greatly increased growth rates in Europe beginning in the 19th century due to improved sanitation facilities and modern medical practices (e.g. vaccination).
- During the first stages of European colonialism, the early immigrants decimated native populations through conquest, slavery, and the introduction of _____ such as smallpox. However, when European imperialism took hold beginning in the 19th century, they brought the newfound methods of sanitation and medical techniques, which greatly _____ growth rates.
- European imperialism _____ the impact of periodic natural checks on population growth that _____ had predicted.



The map above is from pgs. 66-67 from the text. Key points to ponder: Regions with the highest growth rates includes Sub-Saharan Africa, Southwest Asia, and Central America. Regions with the lowest growth rates are located across the north including the U.S. and Canada, Europe, Russia, Japan, and Australia.