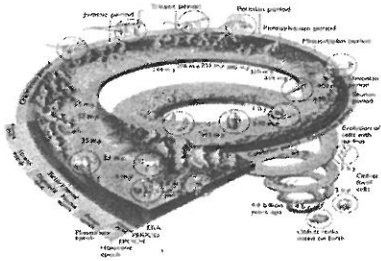
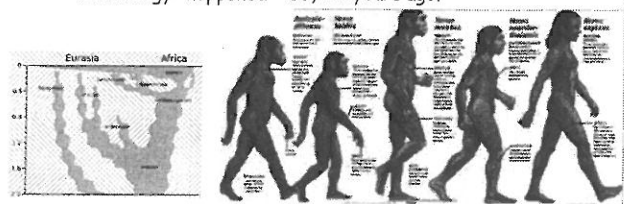


Notes: Human Population

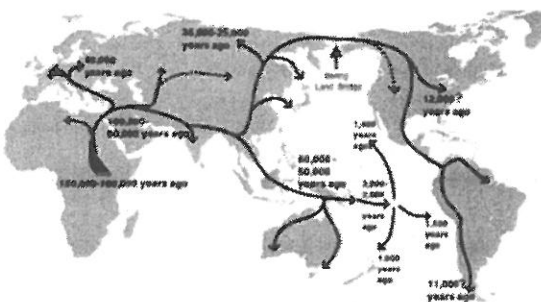
- As humans we are recent arrivals to the world:
 - Earth 4.6 billion years old
 - Human beings distant ancestors (*Homo habilis*), 2.8 mill years old



- Development of Modern Humans:
 - *Homo erectus* were the first to use fire and complex tools as well as the first hominid line to leave Africa spreading throughout Africa, Asia and Europe ~1.5 mya
 - Archaic *Homo sapiens* developed 400,000 years ago
 - Modern humans evolved further and emerged 200,000 years ago
 - The development of symbolic culture, language and specialized "technology" happened ~50,000 years ago.

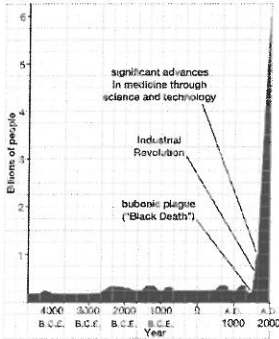


Map of Human Migration out of Africa



Let's Fast forward 50,000 more years to 4000 BCE) and a time when world population growth began to be tracked and recorded.....

Human Population Growth



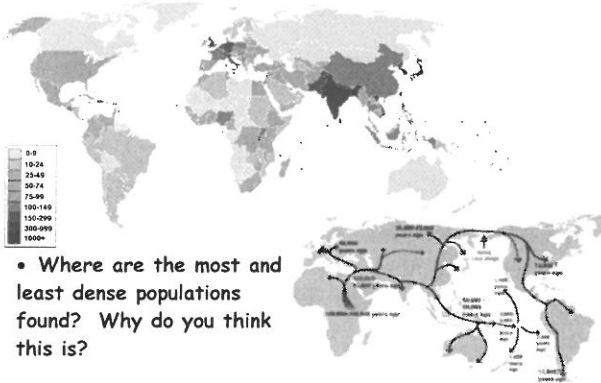
- Beginning of growth was due to agricultural advances in ~7000 BCE.
- Significant decline during "Black Death" (1400's) when 40% of Europe's population died.
- Industrial Revolution made easier living so up in population.
- Advances in medicine makes for further easier and longer lives.

• Currently the population is just over 7.3 billion, and is continually growing!

Growing Human Population

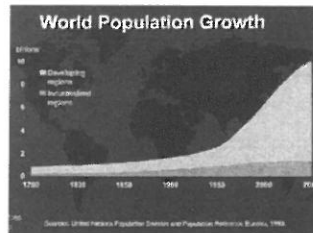
- It took the human population 2 million years to reach the 1 billion mark; however in the last 200 years we have added 5 billion to our population. We are growing at explosion rates.
- Does the human population have limiting factors applied to their ecosystems?
- Why is it difficult to apply the carrying capacity concept to the human population?

World Population Density By Country (number of people/Km²)



- Where are the most and least dense populations found? Why do you think this is?

How do these two graphs relate?



- How do you think life differs among the countries with high growth rates and low growth rates?

- What are some reasons why this might be?

