Demographics

Demography is the scientific study of population.

Demographers look statistically as to how people are distributed spatially by age, gender, occupation, fertility, health, etc.
Population Density

- Density is the number of people occupying an area of land.
- Almost 90% of all people live north of the equator; only 10% live in the Southern hemisphere.
- More than half of all people live on 5% of the land, and almost 90% live on less than 20%.
- Most people live in areas close to sea level.
- Approximately 2/3 of the world’s population is concentrated within 300 miles of the ocean.
- 1/5 of all humans live in East Asia (Eastern China, Japan, the Korea’s, and Taiwan).
Population Cartograms
World Map of Organic Agriculture (hectares)
Population Increases

- Populations increase or decrease according to various conditions.
- In times of war, disease, and famine, populations have decreased.
- In times of peace, health, and plenty, populations have increased.
- **Crude Birth Rate (CBR)** is the total number of live births in a year for every 1,000 people.
- **Total Fertility Rate (TFR)** is the average number of children a woman will have throughout her childbearing years (ages 15-49).
Worldwide these numbers are dropping dramatically (worldwide TFR is 2.7).

Natural Rate of Increase (NRI) of a population is the difference between the number of births and number of deaths during a specific period.

Natural means is a country’s growth rate excluding migration of people in and out of said country’s borders.

Doubling time is the number of years needed to double a population, assuming a constant NRI.
Population Decreases

- **Crude Death Rate (CDR)**, also called the mortality rate, is the number of deaths in a given year for every 1,000 people.

- **Life expectancy** is the age a child can expect to live if current mortality rates hold.

- **Infant Mortality Rate (IMR)** is the number of deaths among infants under one year of age for each 1,000 live births in a year.

- **Birth Dearth** is when a country’s CDR is greater than the CBR. Many European countries are facing Birth Dearth.
Country Population Density

ARITHMETIC DENSITY (PERSONS PER SQUARE KILOMETER)

- 250 and above
- 100–249
- 25–99
- 10–24
- Below 10

Copyright © 2008 Pearson Prentice Hall, Inc.
The Total fertility rate (TFR) is the number of children an average woman in a society will have through her childbearing years. The lowest rates are in Europe, and the highest are in Africa and parts of the Middle East.
Fig. 2-8: The crude birth rate (CBR) is the total number of births in a country per 1000 population per year. The lowest rates are in Europe, and the highest rates are in Africa and several Asian countries.
Life Expectancy at Birth

Fig. 2-11: Life expectancy at birth is the average number of years a newborn infant can expect to live. The highest life expectancies are generally in the wealthiest countries, and the lowest in the poorest countries.
Infant Mortality Rates

Fig. 2-10: The infant mortality rate is the number of infant deaths per 1000 live births per year. The highest infant mortality rates are found in some of the poorest countries of Africa and Asia.
Fig. 2-12: The crude death rate (CDR) is the total number of deaths in a country per 1000 population per year. Because wealthy countries are in a late stage of the Demographic Transition, they often have a higher CDR than poorer countries.
In the United States

- An official census is constitutionally mandated every 10 years.
- Everyone in the USA is counted.
- It is important to know the race, age, sex, ethnicity of a population.
- The demographic data provides valuable information on population changes.
- The Baby Boom was from 1946 to 1964 with peacetime and prosperity, increasing marriages and fertility.
- The Baby Bust was from the 1960’s to 1970’s; female baby boomers sought increasing education, job opportunities, later marriages.
Migration

- **Immigration** is migration to a location.
- **Emigration** is migration from a location.
- **Net Immigration** is difference between number of immigrants and emigrants.
- A **push factor** induces people to move out of their present location.
- A **pull factor** induces people to move into a new location.
Internal Migration is migration within a country or state (California to Texas).

Interregional is movement from one region to another (North to South).

Intraregional is within one region (Alabama to Georgia).

International Migration is permanent movement from one country to another.

Voluntary Migration is choosing to move of one's own free will.

Forced Migration is being compelled to move not by choice (building of Three Gorges Dam in China moved over 2 million).
World Net Migration
U.S. Net Migration

Source: U.S. Census Bureau, 2005-07 American Community Survey (ACS)
Three-Year Public Use Microdata Sample (PUMS) File.
Which region do most immigrants come to the US from, and why? What do you know about that region which would explain why they would migrate to the US? Do you think they move because of push factors, pull factors, or both?
Migration Within A Region

- Rural to Urban: declining agriculture jobs and increasing factory jobs led to people moving to cities.
- Urban to Suburban: housing developments allowed people to leave cities to escape crime, pollution, and overcrowding.
- Suburban to Urban: younger people, especially without children, have begun to move back to cities to partake in city life and have a reduced commute.
US Immigration Patterns

1\textsuperscript{st} Era, initial settlement of colonies, English and Africans.

2\textsuperscript{nd} Era, immigration from Europe.

- From 1820 to 1930, 3.5 million British and 4.5 million Irish migrated to the U.S.
- From 1850 to 1930, about 5 million Germans migrated to U.S., 1880s were peak years.
- During the late 1800’s there was a demand for factory labor (migrants from Northern and Western Europe).
- The European depression of the 1890’s brought immigrants from South and Eastern Europe (Italy and Russia).
Figure 3.
Largest Ancestry: 2000

(Data based on sample. For information on confidentiality protection, sampling error, non-sampling error, and definitions, see www.census.gov/prod/cen2000/doc/sf3.pdf)

Ancestry with largest population in state see categories below

Ancestry with largest population in county
- African American
- Asian
- Native Hawaiian
- Other Asian
- Other
- Other Hispanic
- Other Hawaiian
- Other Pacific Islander
- Other

Source: U.S. Census Bureau, Census 2000 special tabulation. American FactFinder at factfinder.census.gov provides census data and mapping tools.

OTHER:
- Chinese (San Francisco County, CA)
- Cuban (Miami-Dade County, FL)
- Dominican (New York County, NY)
- Filipino (Kauai and Maui counties, HI)
- French Canadian (Androscoggin County, ME)
- Hawaiian (Kauai County, HI)
- Japanese (Hawaii State; Honolulu County, HI)
- Polish (Luzerne County, PA)
- Portuguese (Bristol County, MA and Bristol County, RI)
Characteristics of Migrants

- **Gender**: women constitute 55% of US immigrants, men traditionally migrate for jobs, women for jobs or to follow husband.

- **Kinship**: people with family or friends who have migrated encourage others to move.

- **Education**: seeking higher levels of education leads to more long-distance moves.

- **Brain Drain**: is when those with education in developing countries will leave the country to work and never return.
Migration To The U.S.
Where Immigrants Settle

MIGRANTS FROM THESE COUNTRIES
5,000—9,999  over 10,000

- To California
- To Illinois
- To Florida
- To New York
- To Texas
- To New Jersey
- To Arizona

Copyright © 2008 Pearson Prentice Hall, Inc.
Immigration obstacles

- Immigrations policies-laws, visa and green card restrictions limit immigration.
- US quota laws limit the maximum number that can immigrate to the US from each country in a year. The quota does not apply to refugees.
- **Guest workers** are persons who can migrate temporarily to a country for work, such as in Western Europe (France/Germany) and the Middle East.
- These works are protected by minimum wage laws, labor unions, and other programs.
- The USA does not have this program.
## Table 2-2 | World Population and Growth Rates

<table>
<thead>
<tr>
<th>DATE</th>
<th>ESTIMATED POPULATION</th>
<th>PERCENT AVERAGE YEARLY GROWTH IN PRIOR PERIOD</th>
<th>NUMBER OF YEARS IN WHICH POPULATION DOUBLES AT CURRENT GROWTH RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>400,000 B.C.</td>
<td>500,000</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>8000 B.C.</td>
<td>5,000,000</td>
<td>0.001</td>
<td>59,007</td>
</tr>
<tr>
<td>A.D. 1</td>
<td>300,000,000</td>
<td>0.05</td>
<td>1,354</td>
</tr>
<tr>
<td>1750</td>
<td>795,000,000</td>
<td>0.06</td>
<td>1,250</td>
</tr>
<tr>
<td>1800</td>
<td>985,000,000</td>
<td>0.43</td>
<td>163</td>
</tr>
<tr>
<td>1850</td>
<td>1,266,000,000</td>
<td>0.51</td>
<td>136</td>
</tr>
<tr>
<td>1900</td>
<td>1,656,000,000</td>
<td>0.54</td>
<td>129</td>
</tr>
<tr>
<td>1950</td>
<td>2,516,000,000</td>
<td>0.81</td>
<td>85</td>
</tr>
<tr>
<td>2000</td>
<td>6,080,000,000</td>
<td>1.75</td>
<td>40</td>
</tr>
</tbody>
</table>

Copyright © 2008 Pearson Prentice Hall, Inc.
A country’s population can be displayed by age and gender.

Normally shows the percentage of total population in 5 year age groups.

Youngest are at the bottom, oldest at the top.

Females on right, males on left side of pyramid.
Population Pyramid Comparison

United States

Mexico
The first cases of avian flu in this outbreak were reported in Southeast Asia.
Fig. 2-26: The highest HIV infection rates are in sub-Saharan Africa. India and China have large numbers of cases, but lower infection rates at present.
Population Policies

- Restrictive population policies to influence overall growth rate

- **Eugenics** is a set of beliefs and practices that aims at improving the genetic quality of the human population; United States; Germany; Japan.

- In 1979, China enacted “one child policy”.

- Penalties and incentives were enacted to encourage only one child, and fines were imposed on couples who had more than 1.

- Increased **female infanticide** because male children are valued more than females and they wanted their only child to be a boy.
India is a federation of states, just like the U.S., and cannot impose its will on the states.

The government uses advertising and persuasion to encourage families to have fewer children.

Before 2050, India will overtake China as the most populous country because India cannot come up with a coordinated effort to slow population growth.
The End