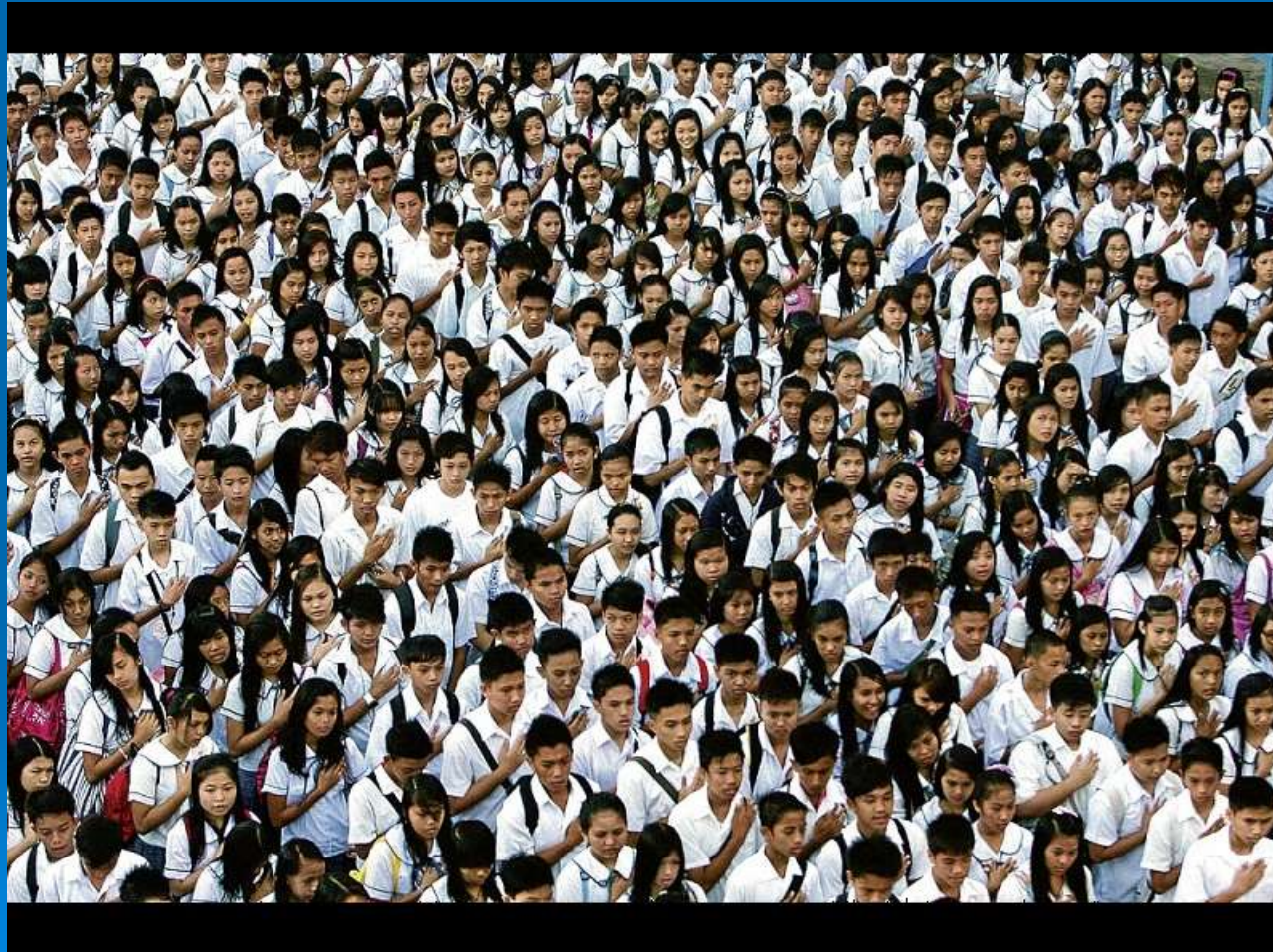


Population



Lesson Objectives

- Students will be able to describe two main reasons why the world's population is rapidly increasing.
- Students will be able to explain some of the problems that rapid population growth is causing.

Counting People: Population



- Population is the total number of people who live in a particular place.
- Geographers study population to understand where people live and why they live there.

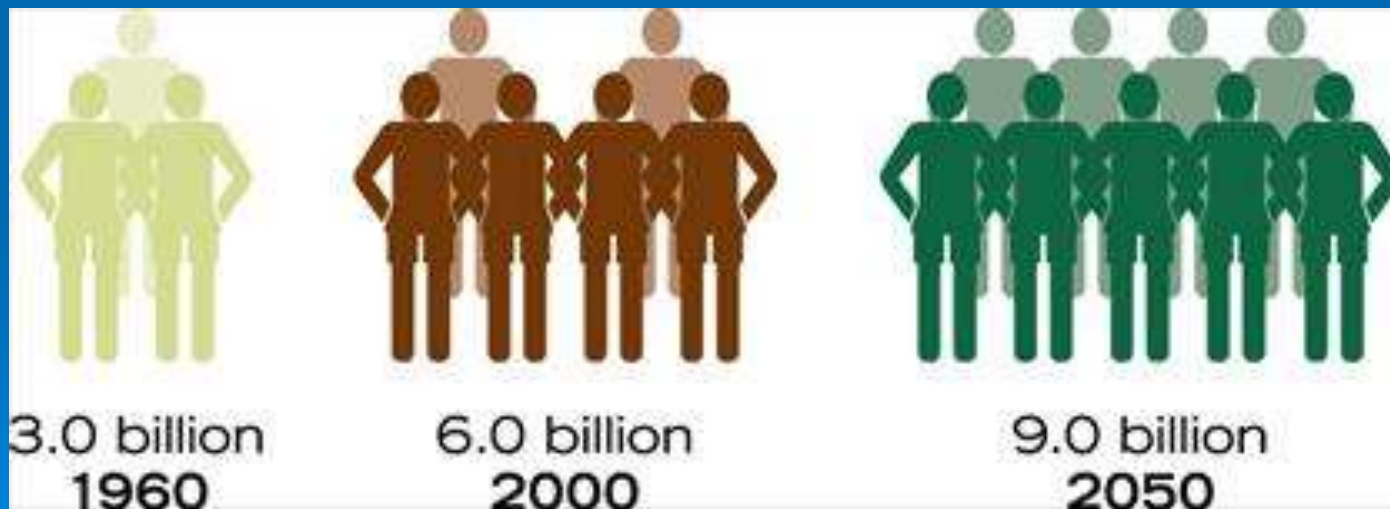
Demography

- The study of population is called demographics.
- Scientists who study demographics are called demographers.



How fast is the World Growing?

- The world's population increases by about three people every second. That's nearly 200 people a minute, 10,000 people an hour, and 240,000 people a day.



Population Data

Average Family Size

The average number of children in a family in a particular culture group or region.

Birth Rate

The number of babies born per year per thousand people.

Death Rate

The number of people who die per year per thousand people.

Doubling Time

The time needed for a population to increase 100 percent (double)

Life Expectancy

-The average number of years people live.

Population Growth Rate

-How quickly a population grows each year, measured by percentage.



2000 POPULATION DISTRIBUTION IN THE UNITED STATES



Population Pyramid

is a bar graph that depicts a total population by breaking it down into age groups and gender.

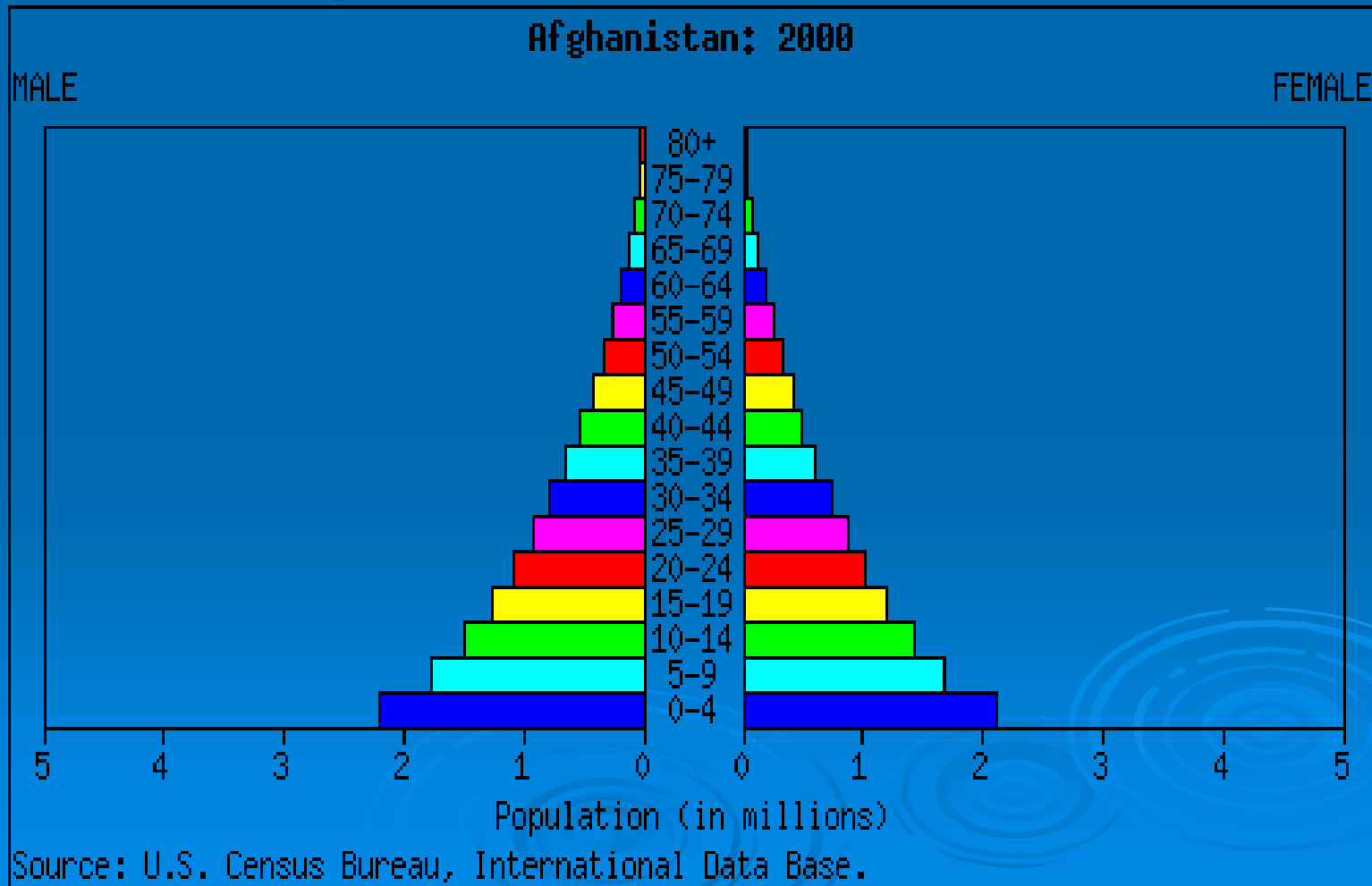
Population Density

Means how close together people live in a particular place.

To find population density, divide the number of people in a place by the total area of that place.

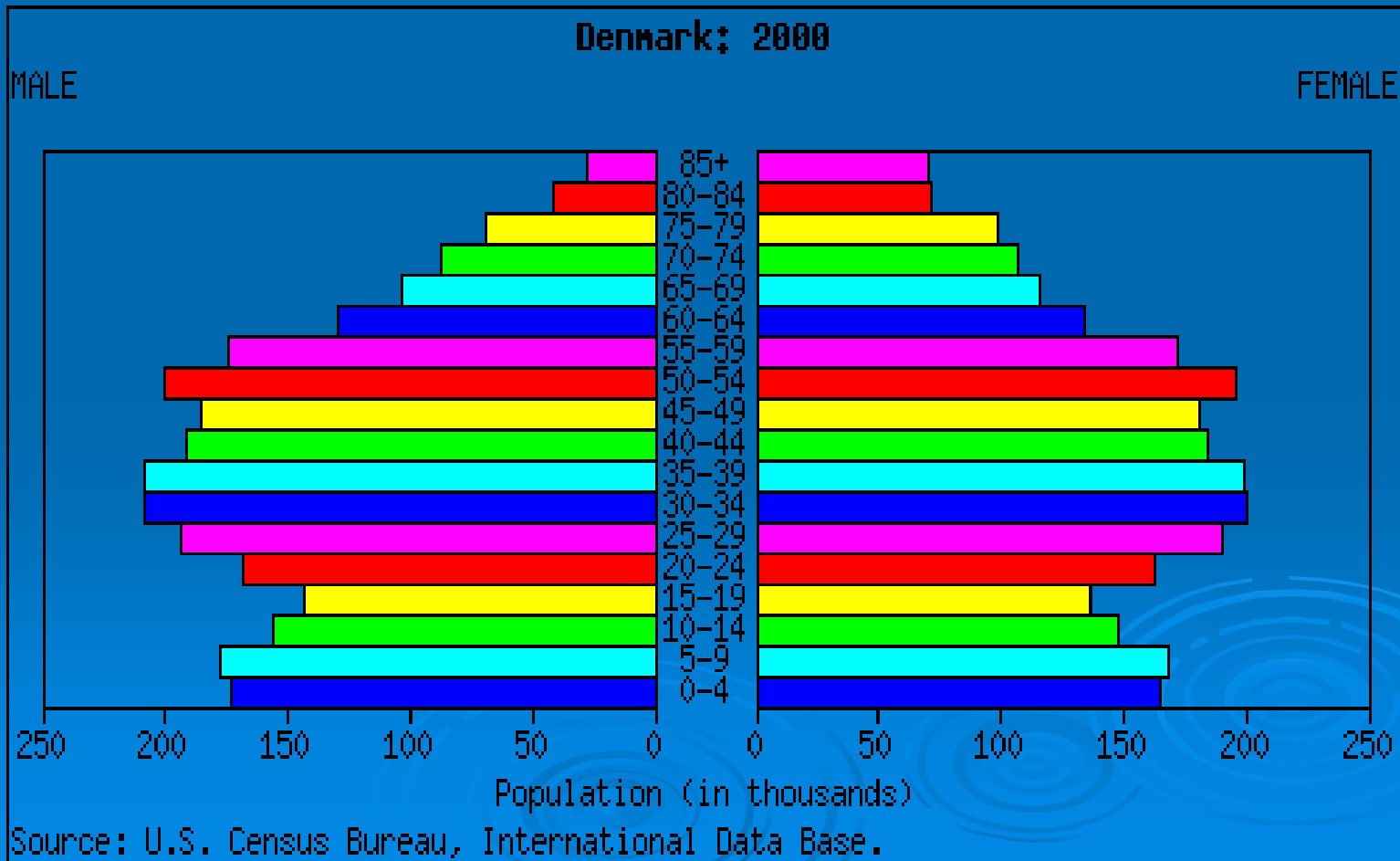
Population Pyramid: Afghanistan

- How many females in your age group?
- How many males?



Population Pyramid: Denmark

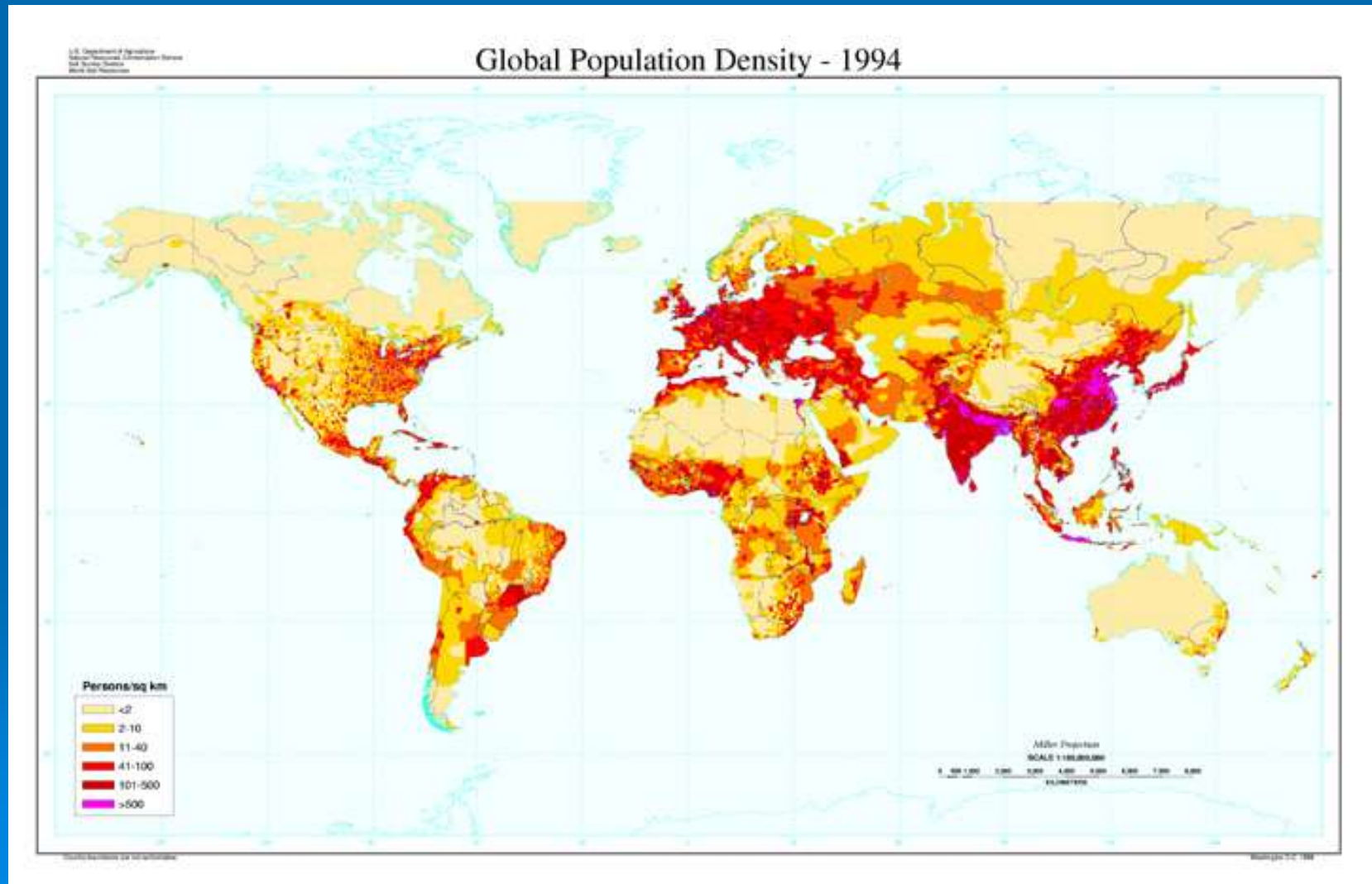
- How many females in your age group?
- How many males?



Hong Kong –one of the most densely populated places in the world.



Population Density



Largest Countries

By Area (sq. miles)

- Russia 6,592,800
- Canada 3,851,809
- China 3,732,396
- USA 3,691,795
- Brazil 3,286,470
- Australia 2,966,136

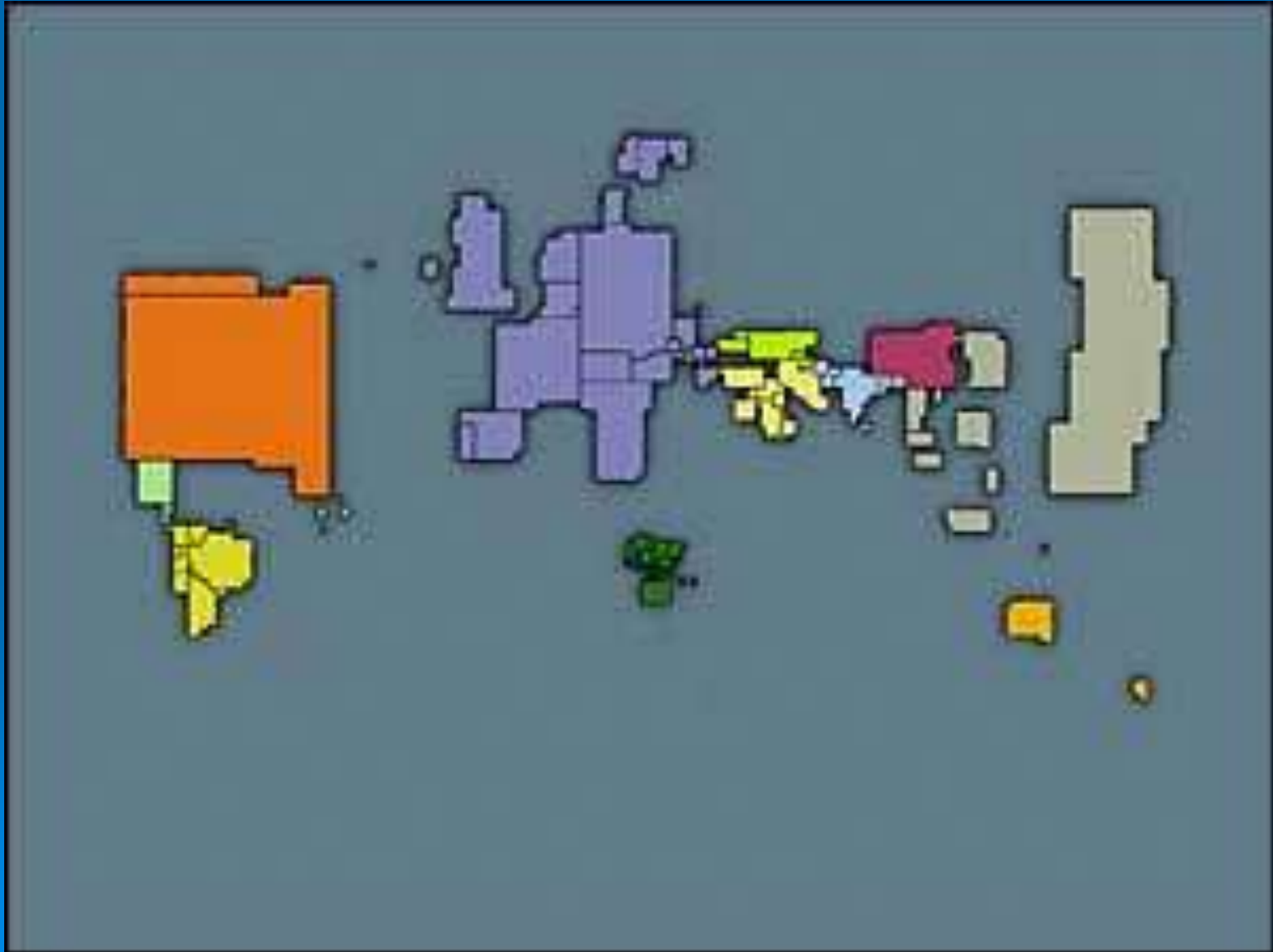
By Population

- China 1.3 billion
- India 1.2
- USA 314 million
- Indonesia 237
- Brazil 194
- Pakistan 181

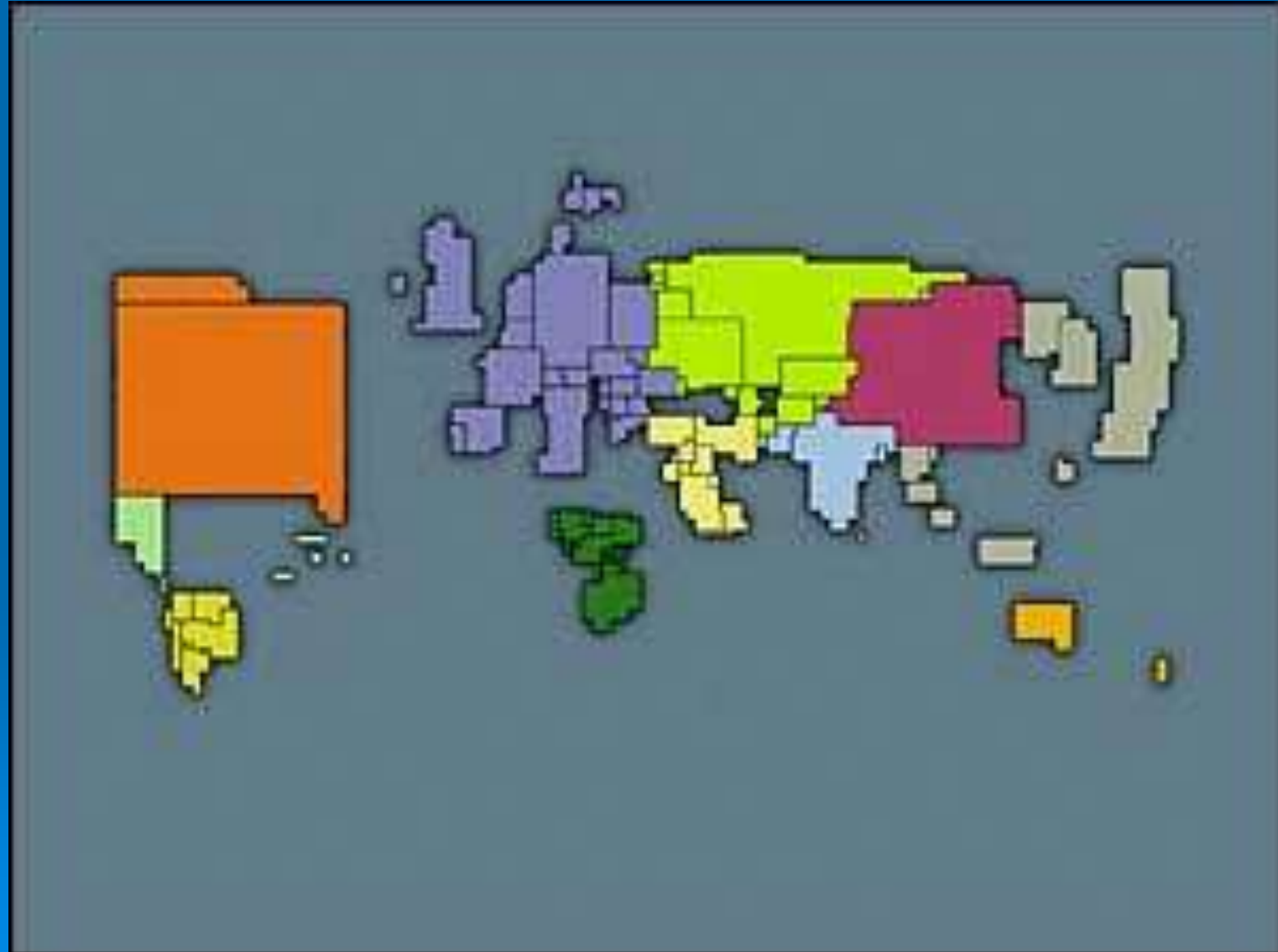
distribution of the world's population



distribution of the world's wealth



global CO2 emissions



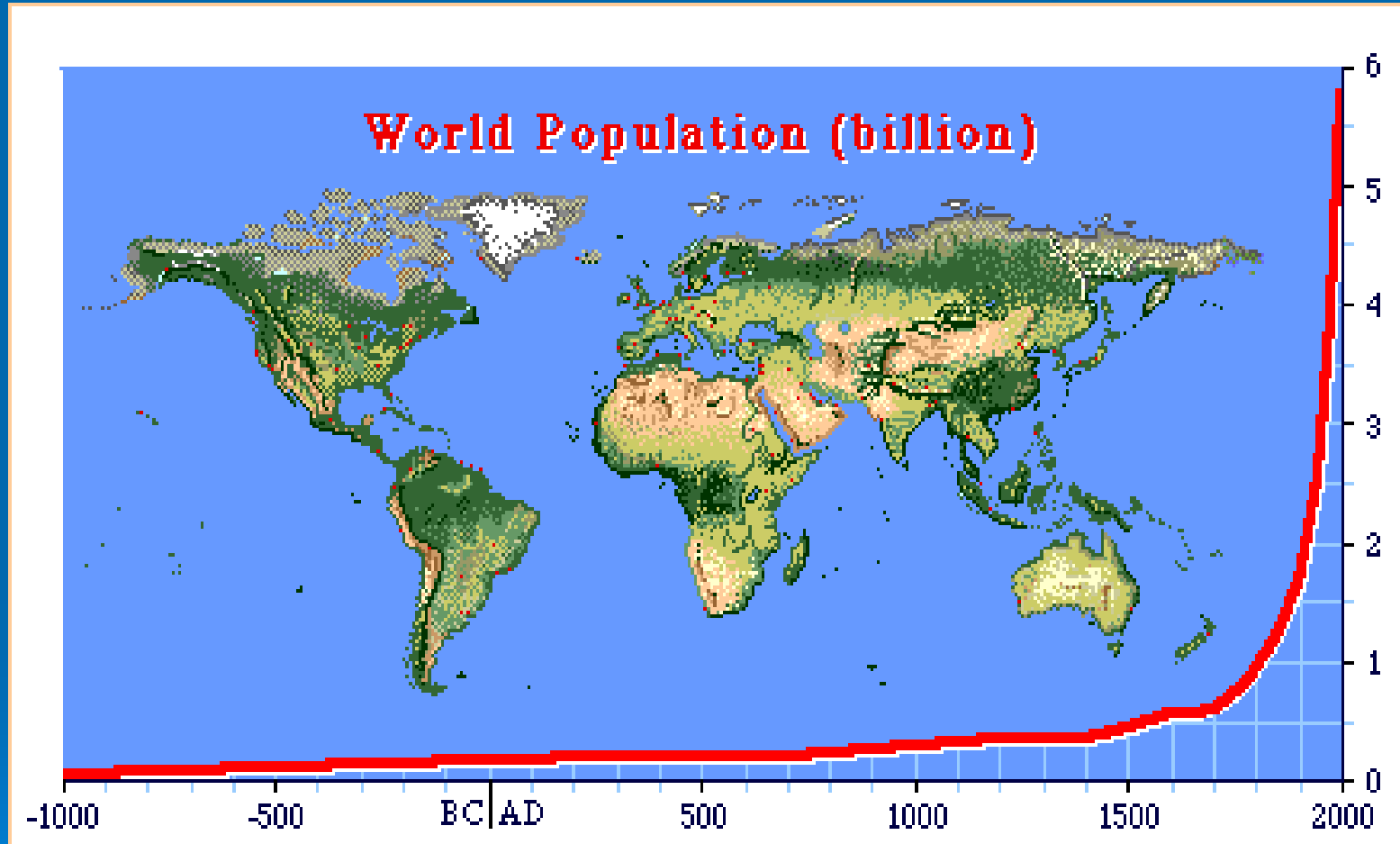
Doubling

- Imagine that all the years from A.D. 1 to the year A.D. 2000 took place in just 24 hours. Now you have an imaginary clock to measure how fast the world's population is growing. The list below shows that the Earth's population doubled several times in those 24 hours.

12:00 a.m.	200 million people in the world
7:48 p.m.	Population doubles to 400 million
10:12 p.m.	Population doubles to 800 million
11:00 p.m.	Population double to 1.6 billion
11:35 p.m.	Population doubles to 3.2 billion
11:59 p.m.	Population will double to 6.4 billion

During the 24 hours, how many times has the world's population doubled. How long did it take for the world population to double the first time? The last time?

B.C. to 2000 World Population



What was the world's population in 1800?

A. 1.5 Billion

B. 1 Billion

C. 3 Billion

D. .5 Million

Reasons for Population Growth

- Farming methods have greatly increased the world's food supply.
 - Green Revolution – protect crops, less water, new fertilizers, and new varieties.



Reasons for Population Growth

- Scientific Advancements in Medicine and Health.
 - Surgery
 - Vaccines
 - Preventative
 - Antibiotics



The Challenges of Population Growth

- Using resources faster
- Shortage of fresh water
- Shortage of energy
- Scarcity of food
- Not enough money to purchase food
 - People of India spend 80% of money on food.
 - United States less than 10%



The Challenges of Population Growth



- People can't find jobs. Perpetual Education Fund – LDS church
- Not enough schools to educate the growing number of children
- Public services like transportation and sanitation are inadequate.
- Deforestation – India and Pakistan
 - Lack of trees affect the supply of clean air.

How much grain do...

- Americans consume?
approximately 2,000 lbs/year.
- poorer people like Indians consume?
approximately 400 lbs/year.
- Americans consume directly (food grains)?
only 150 lbs. (most is fed to livestock)
- Indians consume directly (feed grains)?
almost all: little can be spared for animals.



- Some countries use more than their fair share of resources
- It takes 5 times as much soil, water, & fertilizer to feed a person in the U.S. than in places like India!



Urban vs. Rural

- Half of the earth's people live in cities and towns. This is called urban.



- The other half live on farms or in countryside villages. This is called rural.



Urban Words

- **City, or metropolis** – a large or important town.
- **Megalopolis** – very big city, having cities grow into each other. Wasatch Front, New York,
- **Suburbs** – residential districts lying just outside a city. Referred to sometimes as bedroom communities.
 - Eagle Mtn, Ranches, Saratoga Shores?