

## Population

The number of individual organisms living in an area at the same time



## Population Density

A measure of how populated an area is

**Lower Pop. Density** = more space per organism, resources & mates are harder to find

**Higher Pop. Density** = less space, resources are easier to find, competition increases, more disease, more predators

## Higher or Lower Pop. Density?

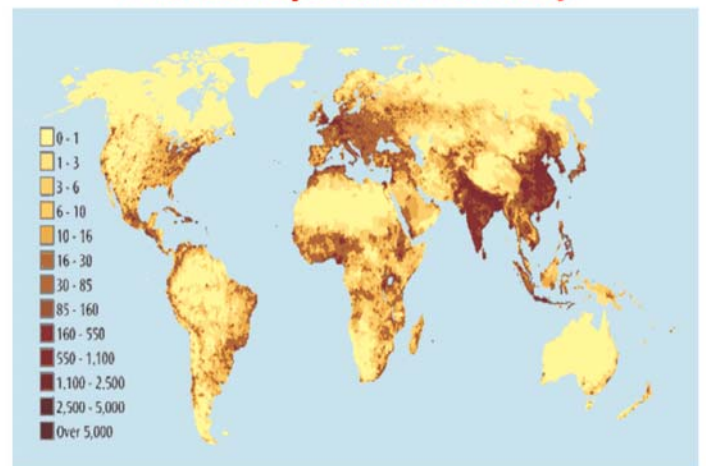
Larger organisms =



Smaller organisms =



## World Population Density



## Population Distribution

How organisms are arranged in an area

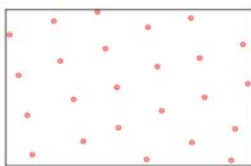


**Random Distribution:**  
Organisms not arranged in a pattern

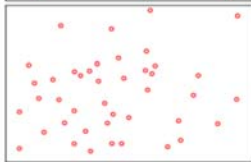
**Uniform Distribution:**  
Organisms evenly spaced

**Clumped Distribution**  
Organisms grouped near resources

Uniform



Random



Clumped

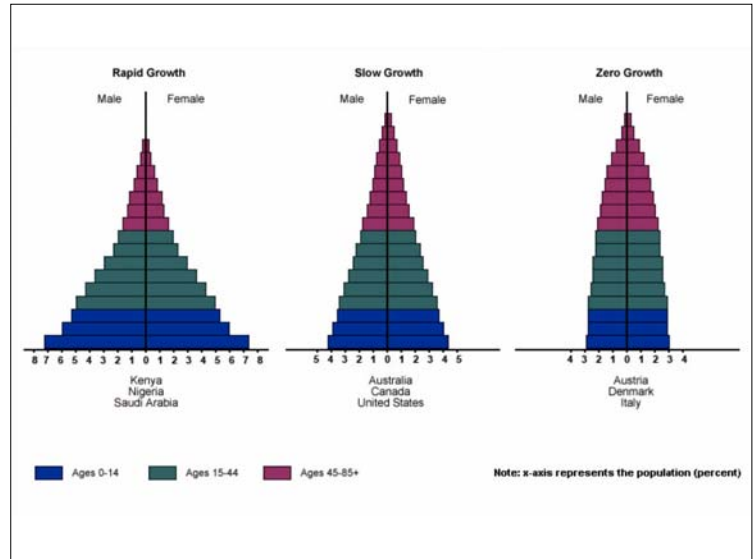


## Population Age:

- Relative age of organisms living in population
- Can be used to predict the future of a population

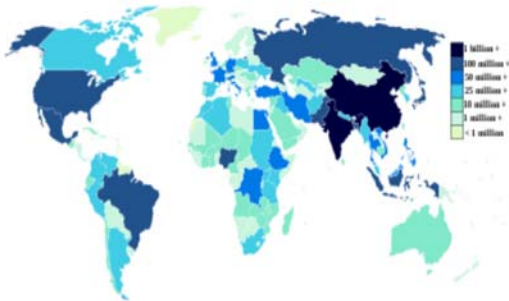
## Population Sex Ratio:

- Proportion of males vs. females
- Ideal ratio is 50:50



## Population Growth

The trends (+ or -) of the population of an area



From 1800 to today the population has grown from 1 billion to 7 billion