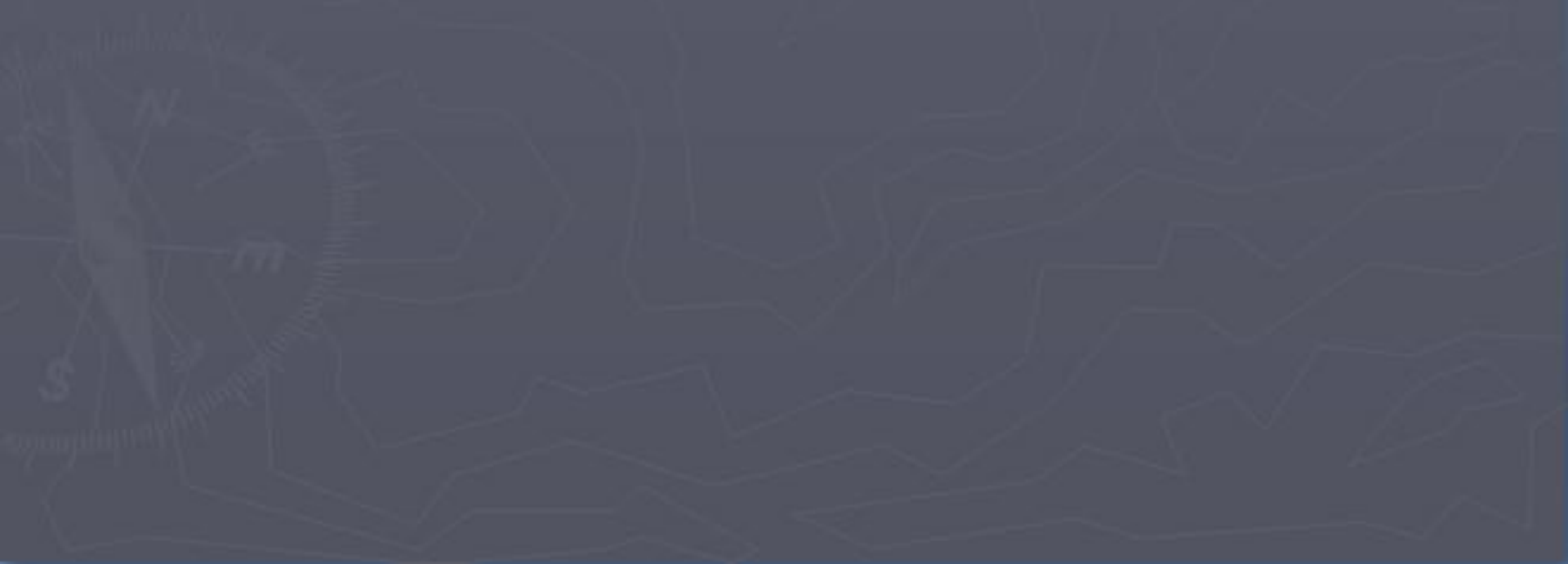


# Basics of Population Geography



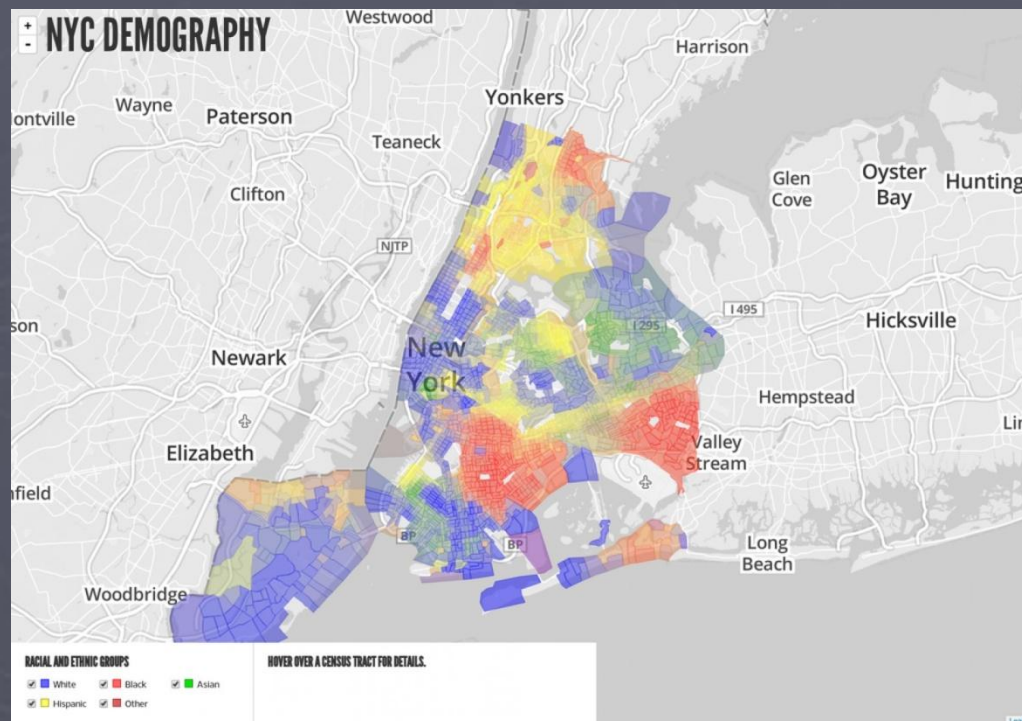
# Population

- The number of people within a given geographic area



# Demography

- The study of population characteristics
  - Looks at spatial distributions of people by age, gender, occupation, fertility, health, etc...



# Physiological Density

- The amount of people divided by the amount of arable land
  - Ex. USA is 445 per square mile, Egypt is 6,682 per square mile
- The higher the physiological density the greater the pressure the people put on the land to produce food



# Agricultural Density

- Is the ratio of the number of farmers to the amount of arable land
  - USA has 2 farmers per square kilometer, China is 145 farmers per square kilometer



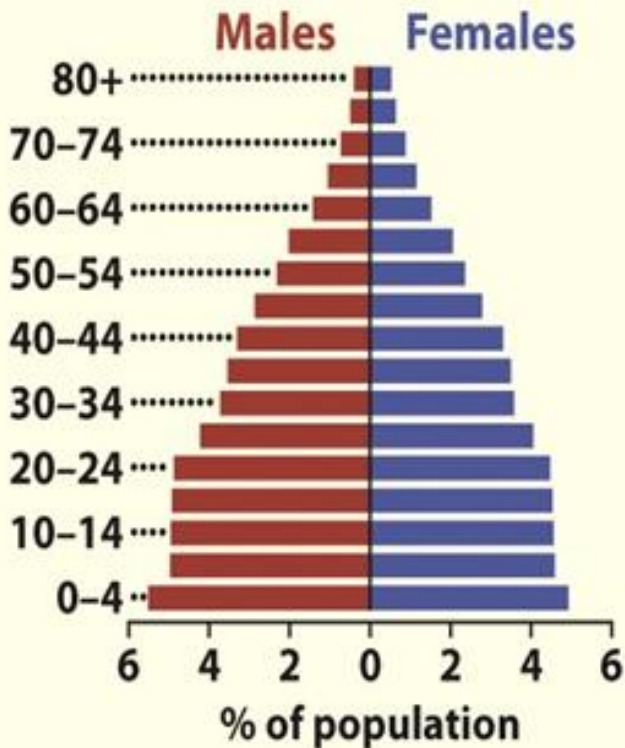
# Overpopulation

- Refers to the over-exertion of resources given a population's need in a specific area.

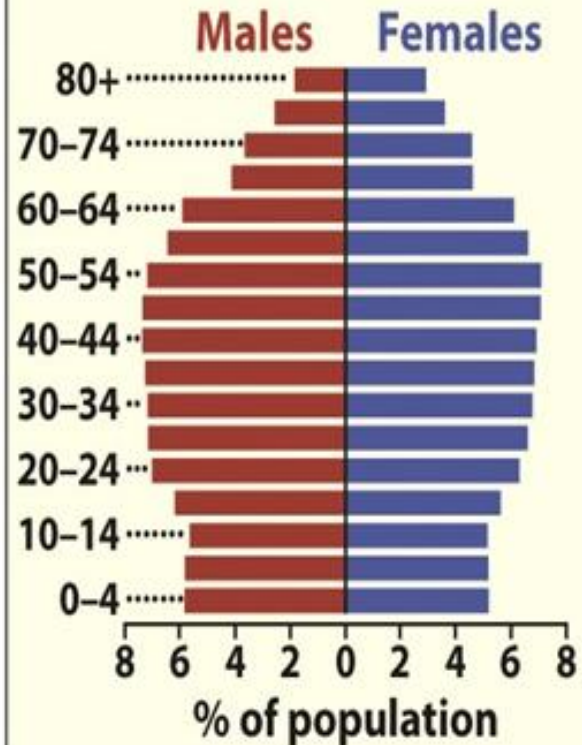


# Mapping Data – Population Pyramids

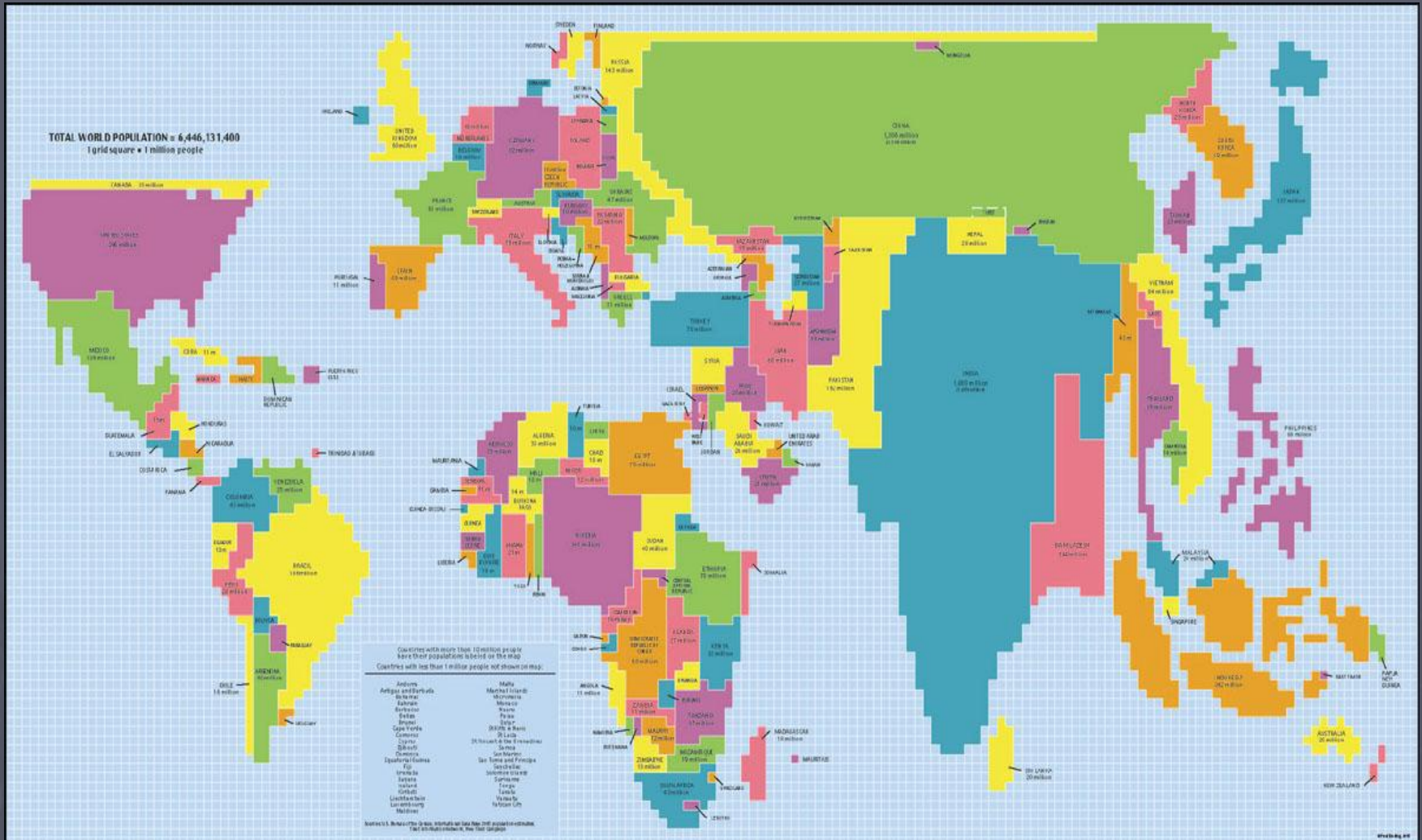
## Poorer Countries, 2010



## Wealthier Countries, 2010

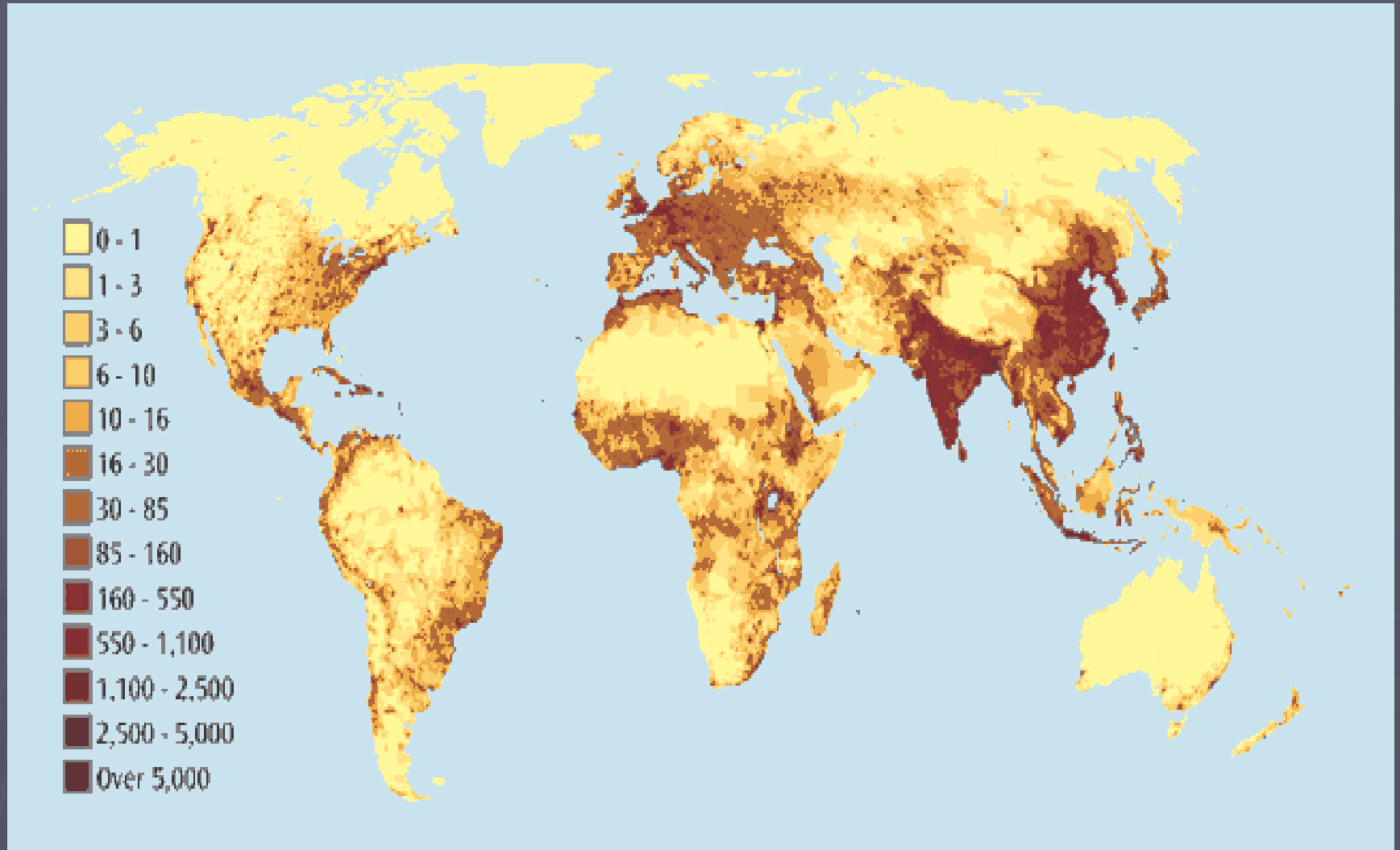


# Mapping Data – Population Cartogram Map



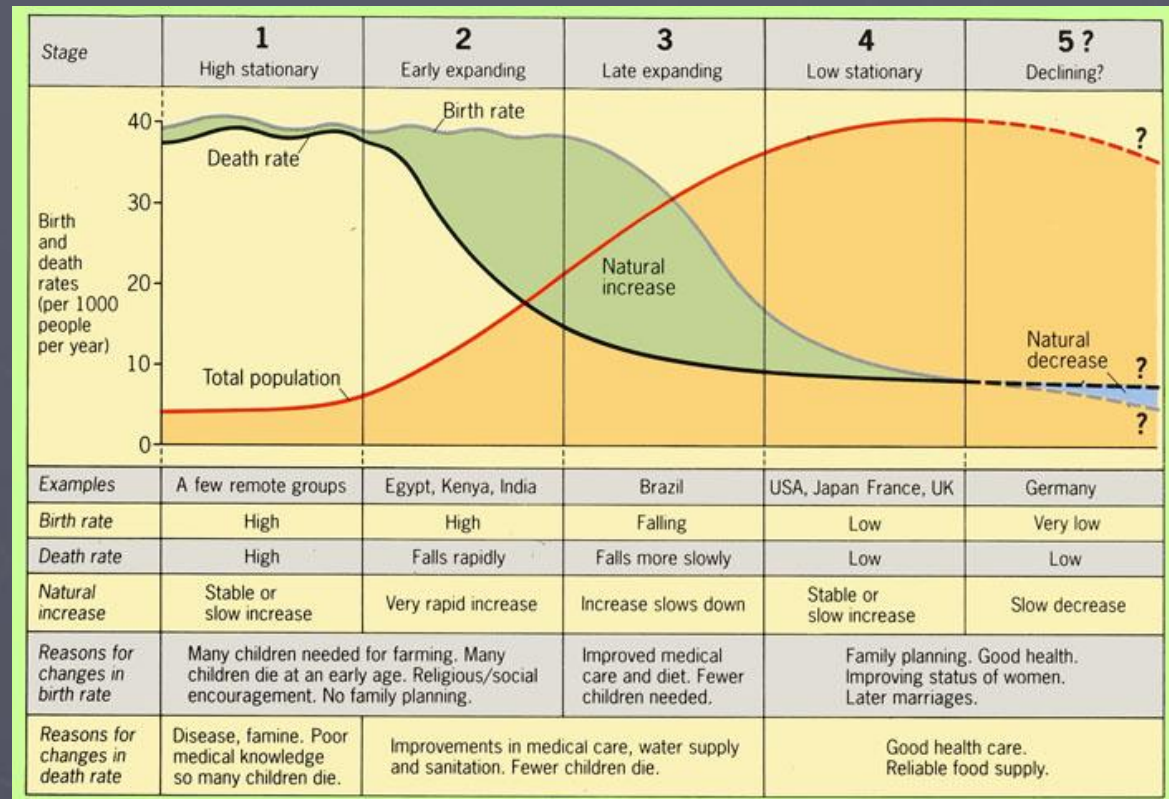


# Mapping Data – Population Density Map



# The Demographic Transition Model

- Uses Crude Birth Rate and Crude Death Rate to calculate population growth at different stages of development

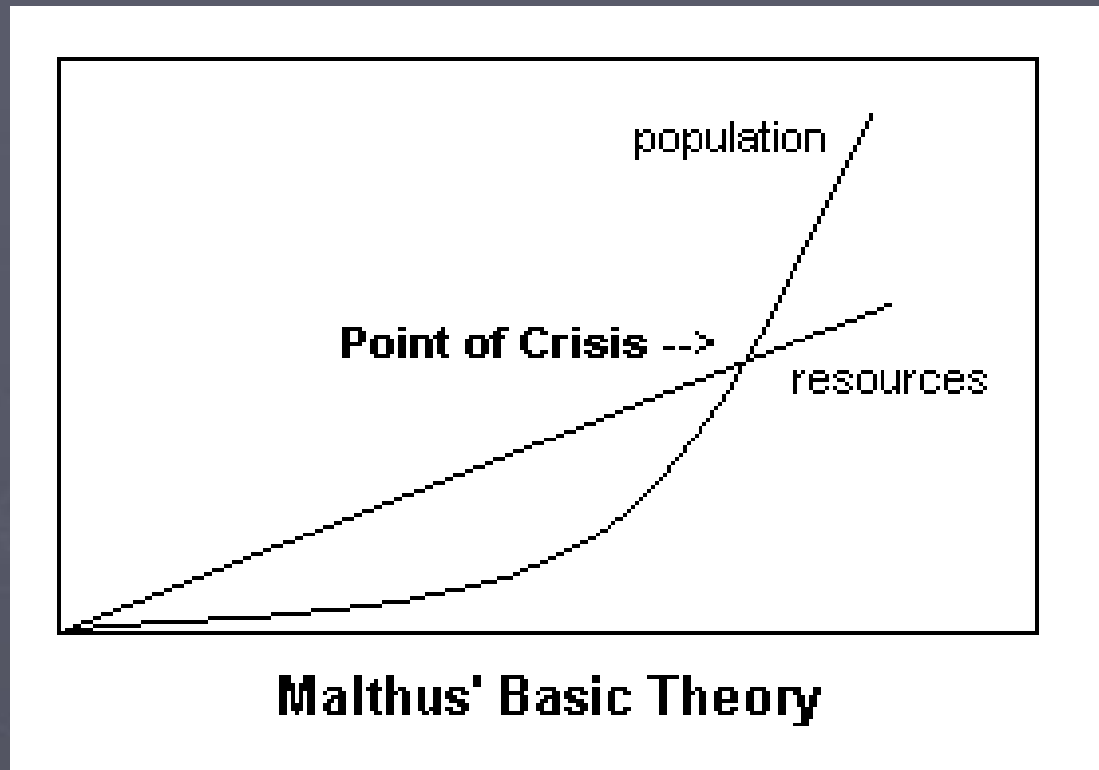


# Thomas Malthus (1766 – 1834)

- English Economist
  - 1766-1834
  - Considered to be father of Demographics
  - Made observations of England's working class during industrial revolution

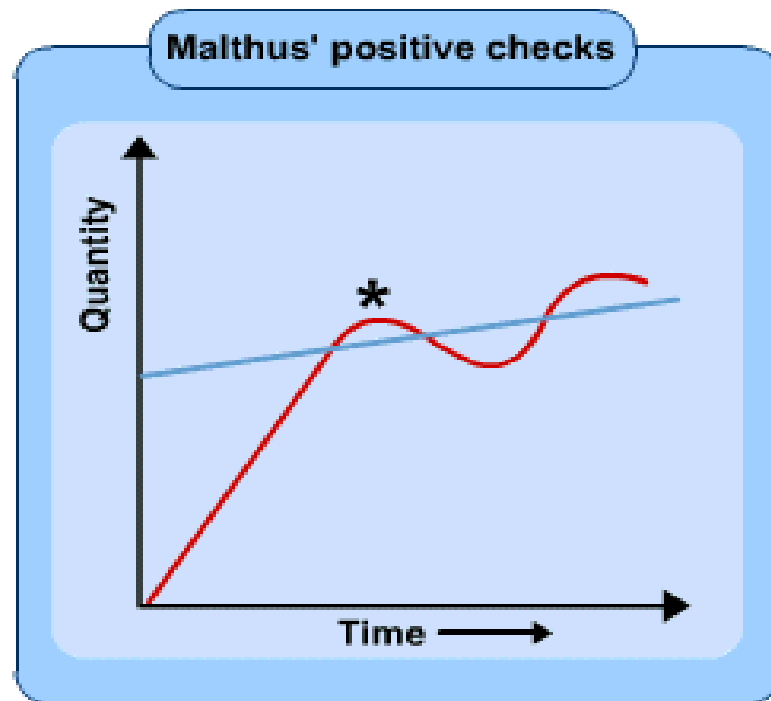


# Population vs. Resources



- For stages 1-3 resources exceed population, then as population exceed resources this leads to “misery”

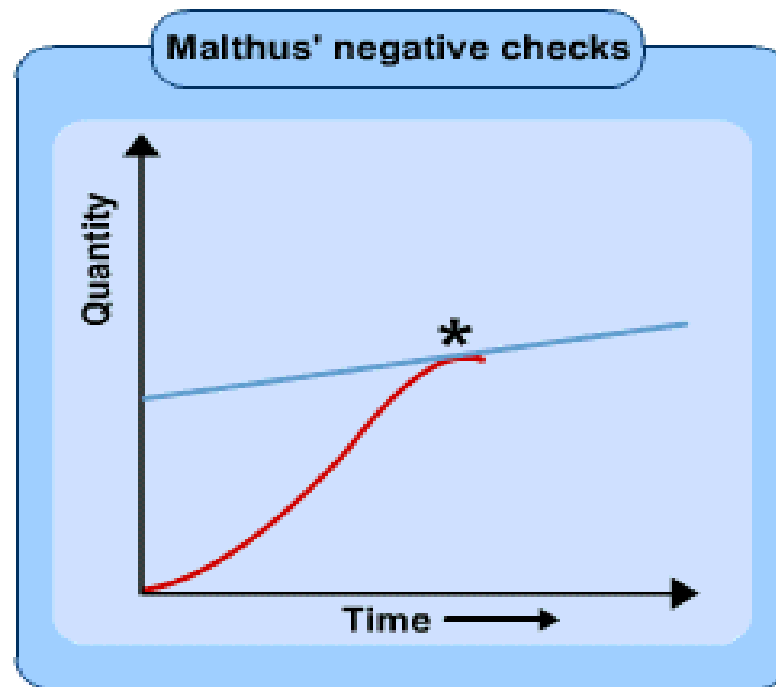
# Positive Checks



**\* Population exceeds food supply and is kept in check by war, famine, or disease. It then drops below the food supply. As the population recovers, so the cycle continues.**

\* Red line is population, blue line is food production

# Negative Checks



\* Here, as population starts to approach the limits of the food supply, so growth slows. Malthus says this slowing is caused by delayed marriage.

\* Red line is population, blue line is food production

# Neo-Malthusians

2. Neo-Malthusians Robert Kaplan and Thomas Fraser expanded Malthus' ideas to more than just food, but to also include energy resources
- Argue wars and civil violence will increase as food, clean air, fuel, and suitable farmland become more scarce

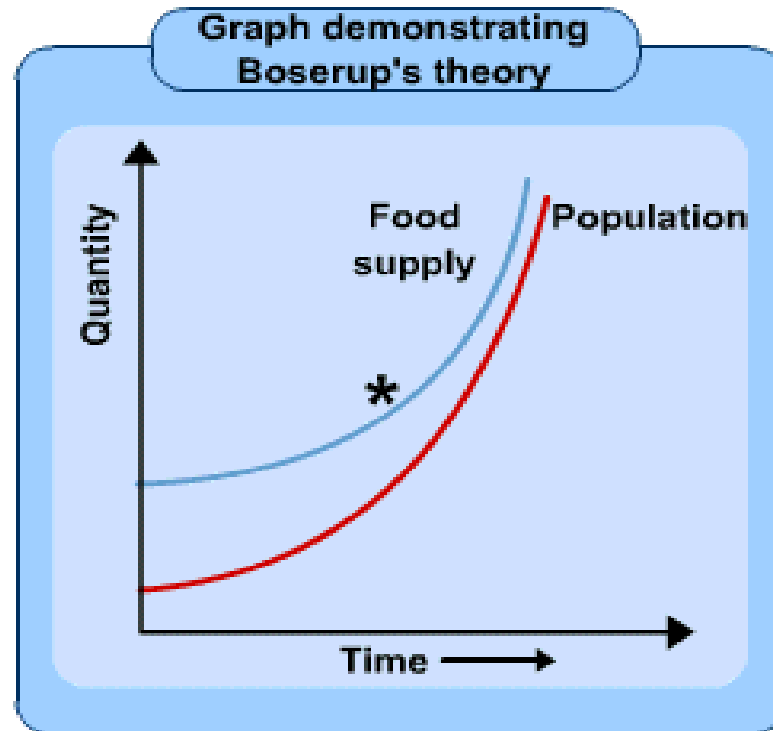


# 20<sup>th</sup> Century Thought

- Esther Boserup
  - Optimistic view of population growth
    - As population approached crisis the world would respond with assistance spawning economic growth and new technologies
- Julian Simon
  - Population growth spurs economic development
    - More people means more ideas



# Boserup's Theory



\* Boserup argues that as the population approaches the limits of the food supply, that food supply increases as new technology improves yields.