Preparing for the
AP Human Geography Exam
THE DEMOGRAPHIC TRANSITION

THE DEMOGRAPHIC TRANSITION MODEL

STAGE ONE (Pre-Modern)
STAGE TWO (Urbanizing/Industrializing)
STAGE THREE (Mature Industrial)
STAGE FOUR (Post Industrial)

YEAR
CBR, CDR RATE PER 1000
TOTAL POPULATION

CBR, CDR, Total Population
THE DEMOGRAPHIC TRANSITION

Stage One:

- \( CBR \)- very high
- \( CDR \)- very high
- \( NIR \)- low

Population Growth: Low

Movement from Stage One to Stage Two:

- MDC- Industrial Revolution
- LDC- Medical Revolution

Stage Two:

- \( CBR \)- very high
- \( CDR \)- plummets
- \( NIR \)- high

Population Growth: High

Movement from Stage Two to Stage Three:

- Changes in Social customs and improved technology
DEMOGRAPHIC TRANSITION

Stage Three:

- \( CBR \): Drops quickly
- \( CDR \): Falling but slower than before
- \( NIR \): slows

\textit{Population Growth}: Moderate

Movement from Stage Three to Stage Four:

greater gender equality, more women working and improved birth control

Stage Four:

- \( CBR \): low
- \( CDR \): low
- \( NIR \): low

\textit{Population Growth}: Low
DEMOGRAPHIC TRANSITION

Examples of Countries and Regions of each stage of demographic transition:

Stage One: None
Stage Two: Sub-Saharan Africa
          Nigeria, Sierra Leon, Cape Verde
Stage Three: East Asia, Latin America, Middle East
            China, Brazil, Mexico, Saudi Arabia, Chile
Stage Four: Western Europe
           United Kingdom, Denmark
ROSTOW’S STAGES OF ECONOMIC GROWTH

Definition: A model of economic development that describes a country’s progression which occurs in five stages transforming them from least-developed to more-developed regions.

Stages:

1. The traditional society- a country that has not yet begun the process of development. It contains a very high percentage of national wealth allocated to military and region. (Rostow called those services “nonproductive”)

2. Preconditions to takeoff- An elite group of people initiate innovative economic activities including new technology and infrastructure.

3. The Takeoff- Rapid growth generated in a limited number of economic activities like textile and food production.

4. The drive to maturity- Modern technology diffuses to many areas. Workers become more skilled and specialized.

5. The age of mass consumption- Economy shifts from heavy industry to consumer goods.
Rostow’s Stages of Economic Growth

Support of the model: According to the model, each country is in one of the five stages. It was based on two factors: 1. LDC’s rely on the advancements of MDC’s to develop rapidly. 2. many LDC’s contain an abundant supply of raw materials sought by manufacturers and producers in MDC’s

1st- primary activities
2nd- Exploitation of raw materials and commercialization of agriculture
3rd- Foreign Investment
4th- Manufacturing and Commercial Industry
5th- Mass consumption

Critiques of the model: One major problem with the model is that it assumes that all countries will follow the same process of development that the developed countries of Western Europe and North America followed. It also follows countries with a capitalist economy. Not all countries in the world have a strong, capitalistic economy like those in the West.
MALTHUS’ PRINCIPAL OF POPULATION AS IT AFFECTS THE FUTURE

Malthus’ Theory of Population and Food Growth Over Time
% increase on left axis
What Malthus said:

• population grows exponentially while food production grows arithmetically

• according to Malthus, these growth rates would produce the following relationships between food and people in the future:
  
  • Today 1 person, 1 unit of food
  • 25 years from now 2 persons, 2 units of food
  • 50 years from now 4 persons, 3 units of food
  • 75 years from now 8 persons, 4 units of food
  • 100 years from now 16 persons, 5 units of food

• these predictions were made just after England became the first country to enter stage 2 of Demographic Transition
MALTHUS’ PRINCIPAL OF POPULATION AS IT AFFECTS THE FUTURE

Neo-Malthusians:

1. Population growth is increasing greatly in the poorer countries of the world because of medical growth not growth of wealth. They are not increasing their food production as quickly as they are their population.

2. Population growth is stripping the world of many valuable resources like energy sources, not just food.

Malthus’ Critics:


3. Marxists: No cause-effect relationship between the growth of population and economic development.
1826 - *The Isolated State* by Johann von Thunen

According to the model, a commercial farmer initially considers which crops to cultivate and which animals to raise based on market location.

Farmer takes into account two costs: cost of land v. cost of transportation.

The goods that are expensive to ship or are perishable will be closer to the central city while the goods that need lots of land or are inexpensive to ship will be farther from the central city.
CENTRAL PLACE THEORY

Definition:

A theory of Walter Christaller that seeks to explain the relative size and spacing of towns and cities as a function of people’s shopping behavior.

It explains how and where central places in the urban hierarchy should be functionally and spatially distributed.

The smallest settlements in an urban system will provide only those goods and services that meet everyday needs (bakery and diary products, and groceries) and that these small settlements will be situated relatively close to one another because consumers, assumed to be spread throughout the countryside, will not be prepared to travel far for such items. On the other hand, people will be willing to travel farther for more expensive, less frequently purchased items usually found in the larger settlements.

Range and Threshold are taken into account when deciding where to place a business.
**Definition**: A city grows outward from a central city in a series of concentric rings. The rings denote different classes of people.

1st is the CBD

2nd is the zone of transition containing industry and poorer houses

3rd is the working-class zone containing modest homes with working class families

4th is the middle class with newer spacious homes

5th is the commuter zone
**Definition:** The city develops in a series of sectors, not rings. As a city grows, activities expand outward in a wedge from the center. Many areas are more attractive for various activities. Social classes are found in sectors of a city, not in the rings from the inside out.
**Definition:** A city is a complex structure that includes more than one center around which activities revolve. Examples of these nodes are a port, neighborhood business center, university, airport and park. Some activities are attracted to particular nodes, whereas others try to avoid them like things near universities and airports.
Definition: Theory developed by Immanuel Wallerstein that explains the emergence of a core, periphery and semi-periphery in terms of economic and political connections first established at the beginning of exploration in the late 15th century and maintained through increased economic access up until the present.

Core- Countries with strong economies with large economic productivity, high per capita GDP. Seen as the MDCs of the world

Semi-periphery- The newly industrialized countries with median standards of living, such as Chile, Brazil, India, China and Indonesia. They offer their citizens relatively diverse economic opportunities but also have extreme gaps between rich and poor.

Periphery- Countries that have low levels of economic productivity, low per capita incomes and generally low standards of living. They world economic periphery includes Africa (not S. Africa), parts of S. America and Asia
MACKINDER’S HEARTLAND THEORY AND SPYKMAN’S RIMLAND THEORY

Heartland Theory:

Mackinder believed that a land-based power, not a sea-based power, would ultimately rule the world. He believed that Eurasia was the most important area in the world containing a “pivot area” extending from Eastern Europe to eastern Siberia. The “pivot area” became known as the Heartland.

Who rules East Europe rules the Heartland.

Who rules the Heartland rules the World Island.

Who rules the World Island rules the World.

Rimland Theory

Spykman believed the Eurasia rim, not its heart, held the key to global power. He parodied Mackinder:

Who controls the Rimland rules Eurasia

Who rules Eurasia controls the destinies of the world.

Spykman saw a divided rimland as a key to the world’s balance of power. Today the rimland includes Western Europe and China.
WEBER’S LEAST COST THEORY

Alfred Weber- People will put their manufacturing establishment where transportation, labor, sales is located, and rent is cheapest.

Definition:
Model developed according to the location of manufacturing establishments is determined by the minimization of three critical expenses:

1. labor
2. transportation
3. agglomeration (a process involving the clustering or concentrating of people or activities. Often refers to businesses that benefit from proximity because they share skilled-labor pools and technological and financial amenities.)
• Developed in 1970s with cars becoming a common household item to explain suburban regions that were tied to mixed-use downtowns with relative independence from the CBD

• Within the urban “realms” people’s daily lives occurred within a fixed activity space

• Occurred because many people wanted to leave the bustle of the city in movement called counter-urbanization

• Also occurred with new technologies that allowed people to work without physically traveling to the city called telecommuting
THE ZELINSKY MODEL OF MOBILITY TRANSITION

- His model claims that the type of migration that occurs within a country depends on how developed it is or what type of society it is. A connection is drawn from migration to the stages of within the Development Transition Model (DTM).

- **Stage 1 of the DTM: Pre industrialized economies**
  - Economies that have not yet developed are made up of rural countries and subsistence farmers. There will only be Rural – Urban migration between the settlements, if at all, as there are few urban areas.

- **Stages 2-3 of the DTM: Industrializing countries**
  - As countries start to industrialize (UK in the 18th & 19th century) there is increased migration from the countryside to the cities where there were better wages and an increase in the standards of living.

- **Stage 4 of the DTM: Post industrial economies**
  - Advanced countries that rely on tertiary industry more than secondary industry show an increase in Urban – Rural migration. Technological and transport movement improvements mean that people do not have to live close to where they work. Inter-urbanization occurs as people move to the suburbs.
1960s theory developed by Samuel Borchert, an American. His theory defines 4 categories of cities based on transportation technology that dominated the era when the city hit its initial growth spurt.

- **Stage 1:** “sail wagon” cities that grew during 1790-1830 near ports and waterways
  - Example: London
- **Stage 2:** “iron horse” cities that grew around rivers and canals during 1830-1870
  - Example: New York
- **Stage 3:** “steel rail” cities during 1870-1920 built around industrialization
  - Example: Pittsburgh
- **Stage 4:** born around 1920 and were linked to car and air travel creating suburbs
  - Example: southern cities like Phoenix
THE FIVE THEMES OF GEOGRAPHY

1. Location
   - Most geographic study begins with learning the location of places. Location can be absolute or relative.
   - Absolute location provides a definite reference to locate a place. The reference can be latitude and longitude, a street address, or even the Township and Range system.
   - Relative location describes a place with respect to its environment and its connection to other places.

2. Place
   - Place describes the human and physical characteristics of a location.
   - Physical characteristics include a description such things as the mountains, rivers, beaches, topography, and animal and plant life of a place.
   - Human characteristics include the human-designed cultural features of a place, from land use and architecture to forms of livelihood and religion to food and folk ways to transportation and communication networks.

3. Human-Environment Interaction
   - This theme considers how humans adapt to and modify the environment. Humans shape the landscape through their interaction with the land; this has both positive and negative effects on the environment.

4. Movement
   - Humans move, a lot! In addition, ideas, fads, goods, resources, and communication all travel distances. This theme studies movement and migration across the planet.

5. Region
   - Region divides the world into manageable units for geographic study. Regions have some sort of characteristic that unifies the area. Regions can be formal, functional, or vernacular.
   - Formal regions are those that are designated by official boundaries, such as cities, states, counties, and countries. For the most part, they are clearly indicated and publicly known.
   - Functional regions are defined by their connections. For example, the circulation area for a major city area is the functional region of that paper.
   - Vernacular regions are perceived regions, such as "The South," "The Midwest," or the "Middle East;" they have no formal boundaries but are understood in our mental maps of the world.