Unit 1: Geography: Its Nature and Perspectives

1. Eratosthenes – Greek, calculated Earth's circumference\
2. Ptolemy – Greek, *Guide to Geography* included maps, landforms, water, developed a grid system\
3. Idrisi – Arab, first world map
4. George Perkins Marsh – American, *Man and Nature* focused on humans impact on environment, conservation
5. Carl Sauer – American, cultural landscapes should be main focus of geography, his studies are basic to environmental geography (interaction of humans and physical geog.)
6. Environmental Determinism - Alexander von Humboldt and Carl Ritter, German, the physical environment caused human activities (pg. 25)
7. Probablism – the physical environment may set limits on human actions, but people have the ability to adjust and choose alternatives (pg. 26)

Unit 2: Population

1. Thomas Malthus – British, Malthus Theory: population growth vs. food supply, exponential (geometric) growth vs. linear (arithmetic) growth (pg. 69)
2. Demographic Transition Theory – population patterns vary according to different levels of tech development, but all countries are going through the same four stages (pg. 58)
3. Ernst Ravenstein – British, Laws of Immigration: 11 migration laws based on observations in England (pg. 85)

Unit 3: Cultural Patterns and Processes

1. Carl Sauer – American, Agricultural Origins and Dispersals, diffusion occurs through the movement of goods, people, and ideas
2. George Stewart – studies of toponymy in the US

Unit 4: Political Organizations of Space

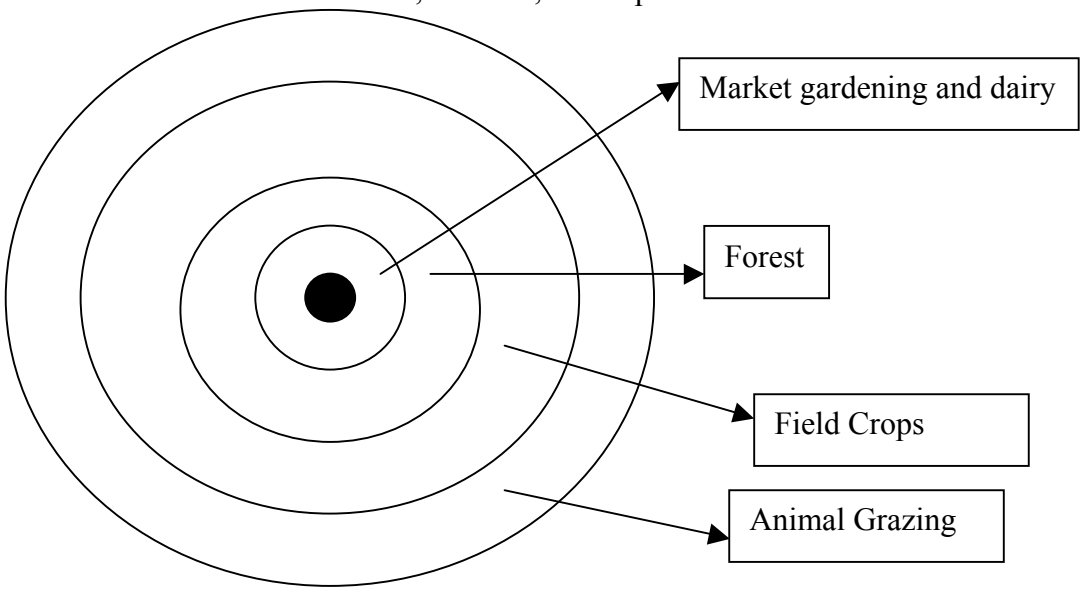
1. Concept of Territoriality – basic to study of political geography, efforts to control pieces of Earth's surface for political and social ends
2. Max Weber – German, defined state as the organization that maintains a monopoly of violence over a territory
3. Friedrich Ratzel – a state compares to a biological organism with a life cycle from birth to death, with a predictable rise and fall
4. Heartland Theory – Halford Mackinder, British, the "pivot area" of the Earth – Eurasia – holds the resources, both natural and human, to dominate the globe (Russia)
5. Rimland Theory – Nicholas Spykman, the Eurasian rim, not its heart, held the key to global power. Rimland – large swath of land that encircles the heartland, roughly touching oceans and seas (China, Korea, Japan, SE Asia, India, Arabian peninsula, Europe)
6. Samuel Huntington – American, political scientist, his take on the global changes of political geography: (democratization, movement toward market economies, revival of ethnic or cultural politics)
    - -the modern world is now in a "third wave" of democratization, characterized by a defeat of dictatorial or totalitarian ruers from S. America to E. Europe to parts of Africa
    - -democratization has occurred:
        - -loss of legitimacy by both right and left wing authoritarian regimes
        - -expansion of an urban middle class in developing countries
        - -new emphasis on "human rights" by the US and the EU
        - -"snowball" effect: when one country does it, others will follow
        - -*Clash of Civilizations*, our most important and dangerous future conflicts will be based on clashes of civilizations, not on socioeconomic or even ideological differences (money or politics)

Unit 5: Agricultural and Rural Land Use

1. Carl Sauer – American, believed vegetative planting originated in SE Asia where a variety of plants existed that were suitable for dividing and transporting, identified three hearths for seed agriculture in the Eastern Hemisphere: western India, northern China, and Ethiopia

2. Columbian Exchange – 15th/16th C, products were carried both ways across the Atlantic and Pacific, exchange between Eastern and Western Hemispheres

3. Von Thunen's Model – Johann Heinrich von Thunen, German, developed a model for rural land use (pg. 356)



4. Location Theory – explains how an economic activity is related to the land space where goods are produced, firms choose locations that maximize their profits, people choose locations that maximize their utility

Unit 6: Industrialization and Economic Developmen

A. Theories of Economic Development: *explain the differences in levels of economic development*

1. Modernization / Westernization Model:

-W.W. Rostow, prosperity is open to all countries, Britain was first to develop industry, modernizations greatest barrier is tradition

-occurs in 4 stages:

1. Traditional stage – family, religion, local community important, live similar to ancestors, mostly subsistent farmers
2. Take-off stage – leader encouragement, producing for trade and profit, individualism, urbanization, tech breakthroughs, all at expense of tradition
3. Drive to technological maturity – economic growth widely accepted, focus on improved living standard, pop growth reduced
4. High mass consumption – economic development raises living standards

2. Dependency Theory

-Immanuel Wallerstein, based on capitalist world economy (a global economic system based in high income nations that have market economies;) economic inequality is traced to European colonization, colonizers took advantage of the wealth of the world

-world economy benefits rich societies and harms other countries by making them dependent on the core. Dependency perpetuated by narrow, export-oriented products (coffee, oil, fruit)

-world is divided into 3 categories

1. Core countries – rich nations fuel world econ by using raw materials found globally and channeling the wealth to N. America, Europe, Australia, and Japan through multinational corporations that operate worldwide.
2. Countries of periphery – low-income countries drawn into the world economy by colonial exploitation, continue to support core with inexpensive labor and large markets for industrial products
3. Countries of the semi-periphery – remaining countries of the world are somewhere in b/t. Exert more power than periphery, but still controlled in some ways by core

B. Theories of Location of Industries: *explains why secondary industries locate where they do*

1. Least-Cost Theory
   - -Alfred Weber, German
   - -location based on variable costs
   - -three factors:
     1. Transportation – cost of moving raw materials to factory
     2. Labor – cheap labor can make up for high transport costs
     3. Agglomeration – if several industries cluster in one city, they can provide support by sharing talents, services, and facilities. Can lead to deglomeration (business leaving a crowded area)
   - -criticism of Weber's theory:
     - -too inflexible, doesn't consider costs over time
     - -substitution principle: business owners can juggle expenses, as long as labor, land rent, transportation costs don't all increase at once. If labor costs go up, there may be a decline in transport costs. It is a balancing of expenses
2. Locational Interdependence Theory
   - -The influence on a firm's locational decisions by locations chosen by its competitors
   - -concerned with variable revenue analysis (firms ability to capture a market that will earn it more customers and money than its competitors, ex: ice cream vendors)

Unit 7: Cities and Urban Land Use

1. Louis Wirth – three characteristics that define a city"
   - A. Large size
   - B. High density
   - C. Social heterogeneity
2. Mark Jefferson – primate cities (larger than other cities in the area and representing a national culture)
3. John Borchert – four stages in the evolution of the American metropolis:
   - A. Sail – Wagon Epoch: 1790-1830, trade took place by ships across sea or by wagons overland. Technologies determined job opportunities of people that came to work in cities
   - B. Iron – Horse Epoch: 1830-1870, railroad tech changed the nature of trade and employment
   - C. Steel – Rail Epoch: 1870-1920, steel industry transformed urban America and job opportunities of workers
   - D. Auto – Air – Amenity Epoch: 1920-1960, internal combustion engine came to dominate lifestyles, employment opportunities, and economic base of cities
2. Models of Urban Systems: *explain the patterns of settlement on the earth's surface (settlement geography)*
   - A. Rank-size rule
   - B. Central Place Theory
3. Models of Urban Land Use: explain *different land uses within a city*
   - A. Concentric Zone Model
   - B. Sector Model
   - C. Multiple Nuclei Model