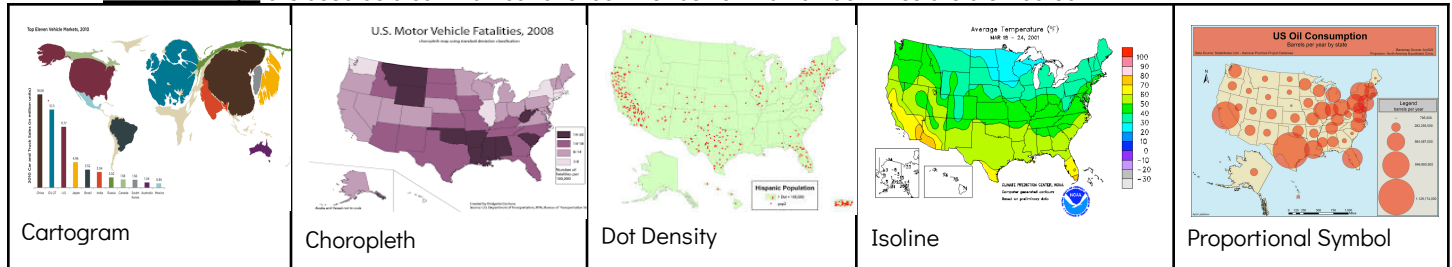


UNIT ONE: THINKING GEOGRAPHICALLY

1. Introduction to Maps

Learning Target: Identify types of maps, the types of information presented in maps, and different kinds of spatial patterns and relationships portrayed in maps.





- **Reference maps** are designed for people to refer to for general information about places. The two main reference maps are political and physical
- **Thematic Maps** are used as a communications tool – tell us how human activities are distributed



Spatial Patterns Represented on a Map

absolute and relative distance and direction	Clustering: Grouped/bunched together	Dispersal: appears to be distributed over a wide area	Elevation: using levels of how high/low something is located on the land
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Map Projections (distortion in shape, size, distance, and direction)

 <p>Mercator Map Shape and directions of countries are fairly accurate Greatly distorted toward poles</p>	 <p>Robinson Map Everything is distorted in small amounts</p>	 <p>Goode Continent sizes are accurately portrayed Directions and distance aren't accurate</p>	 <p>Gall Peters Shape of countries especially near the equator are distorted</p>
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2. Geographic Data

Learning Target: Identify different methods of geographic data collection.

Geospatial Data: all information including physical features and human activities

Geographic information system (GIS) is a computer system for capturing, storing, checking, and displaying data related to positions on Earth's surface

GPS stands for Geographic Positioning System: This system uses data from satellites to pin-point a location on earth and help people find their way to a destination.

Remote sensing: refers to the process of taking pictures of the Earth's surface from satellites (or, earlier, airplanes) to provide a greater understanding of the Earth's geography over large distances.

- Spatial information can come from written accounts in the form of field observations, media reports, travel narratives, policy documents, personal interviews, landscape analysis, and photographic interpretation.

3. The Power of Geographic Data

Learning Target: Explain the geographical effects of decisions made using geographical information.

Geospatial Data: all information including physical features and human activities

Census data: an official count of individuals in a population (in the USA, it happens every 10 years)

4. Spatial Concepts

Learning Target: Define major geographic concepts that illustrate spatial relationships.

Absolute location: The precise spot where something is located

Relative Location: where something is in relation to other things

Space: extent of an area and can be in a relative and absolute sense

Place: refers to the specific human and physical characteristics of a location.

Distance Decay: a geographical term which describes the effect of distance on cultural or spatial interactions

Time-Space Compression: is the increasing sense of connectivity that seems to be bringing people closer together even though their distances are the same

Pattern: The geometric or regular arrangement of something in an area

5. Human-Environmental Interaction

Learning Target: Explain how major geographic concepts illustrate spatial relationships.

Sustainability: the goal of the human race reaching equilibrium with the environment; meeting the needs of the present without while also leaving resources for future generations

Natural Resources: a physical material constituting part of Earth that people need and value

Environmental Determinism: How the physical environment caused (determined) social development

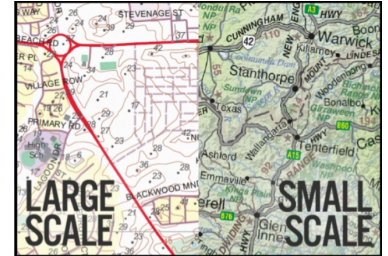
Possibilism: the physical environment may limit some human actions, but people have the ability to adjust to their environment

6. Scales of Analysis

Learning Target: Define scales of analysis used by geographers explain what scales of analysis reveal

Scale: the relationship between the distance on the ground and the corresponding distance on a specific map - also a concept describing how "zoomed in" you are while studying a geographic trait (Global (Globalization), Regional, National, State, and Local)

Scale of Analysis: how zoomed in or out you are when looking at geographic data



7. Regional Analysis

Learning Target: Describe different ways that geographers define regions.

Region: a place larger than a point and smaller than a planet that is grouped together because of a measurable or perceived common feature

Formal Region: a region that is based quantitative data data (that can be documented or measured) - all government areas are this because they share a government (Example: Wisconsin)

Functional Region: a region based around a node or focal point - terrestrial radio broadcasts are an example of this (example: Radio station broadcast area, DC metro)

Vernacular (Perceptual) Region: an area that shares a common qualitative characteristic, it's only a region because people believe it's a region (example: midwest)

UNIT TWO: POPULATION + MIGRATION

1. Population Distribution

Learning Target: Identify the factors that influence the distribution of human populations at different scales.

Ecumene is a term used by geographers to mean where people are settled on the earth. (along rivers, fertile land, coast, etc)

- Physical Factors: People avoid areas too dry, too wet, too cold, too high
- Cultural Factors: Populations will be concentrated in areas that have access to Education, health care, and entertainment opportunities
- Historical FACTORS: certain areas where life could be sustain and lived (Areas where human flourished and survived)

Learning Target: Define methods geographers use to calculate population density.

Arithmetic Density - total number of objects in an area

Physiological Density: Number of people supported by a unit area of **arable land** (Land suited for agriculture)

Agricultural Density: Ratio of the number of farmers to amount of arable land

Learning Target: Explain the differences between and the impact of methods used to calculate population density.

1. Agricultural density reflects how developed a country is,
2. Physiological density (as a measure of how many people must be fed by a particular amount of land) reveals whether the country is considered overpopulated
3. Arithmetic density is a calculation and not terribly meaningful on its own.

2. Consequences of Population Distribution

Learning Target: Explain how population distribution and density affect society and the environment.

Areas with larger populations and greater population density have greater political, economic, and social power

- Political – greater control over laws and larger influence
- Economic – concentration of jobs, areas make more revenue
- Social – greater access to health care, better educational opportunities, greater cultural diversity

As population grows and communities expand we start to alter the environment and landscape (remember landscape is what you see when you look around)

Carrying Capacity: the maximum population size of the species that the environment can sustain

Overpopulation: when there are not enough resources in an area to support a population

3. Population Composition

Learning Target: Describe elements of population composition used by geographers.

Age/sex ratio: comparison of the numbers of males and females of different ages

Population structure is unique to each area due to their own unique history and current condition

Learning Target: Explain ways that geographers depict and analyze population composition.

Population Pyramid: a graph of the population of an area by age and sex

- when a population is growing it takes a pyramid shape

4. Population Dynamics

Learning Target Explain factors that account for contemporary and historical trends in population growth and decline.

Demography - the study of population

Crude Birth Rate (CBR) - the number of live births per one thousand people in the population

Crude Death Rate (CDR) - the number of deaths per one thousand people in the population

Doubling time - the time period it takes for a population to double in size

Fertility - the number of live births occurring in a population

Infant mortality rate (IMR) - the number of children who don't survive their first year of life per 1000 live births in a country

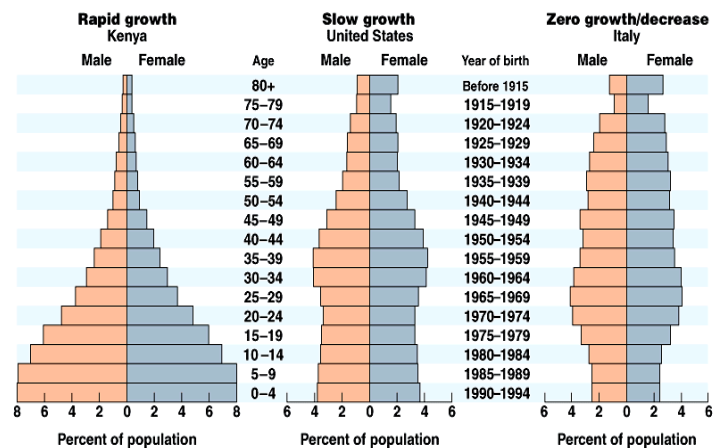
Mortality - the number of deaths occurring in a population

Infant Mortality Rate – number of babies that die during the first year per 1,000 live births

Rate of Natural Increase (RNI) (also known as NIR) - $(\text{birth rate} - \text{death rate})/10$ - a positive NIR means a population is growing and a negative NIR means a population is shrinking

Total fertility rate (TFR) - the average number of children a woman is predicted to have in her child bearing (fecund) years

- Social factors can affect fertility, mortality, and migration (Role of genders in society, is family planning acceptable, age of marriage and traditional family size values, and if marrying young is culturally expected fertility rate is going to be higher)
- Cultural factors can affect fertility, mortality, and migration (Religion - Catholic church forbidding birth control, Ethnicity – certain ethnic groups have larger families (ties into religion as well), Seeking health care or using home remedies to cure diseases)
- Governments can play a role (Policy on limiting or encouraging children, Government supports/funds healthcare for society)
- Economic factors that affect fertility, mortality, and migration (Women in jobs and education = less babies)

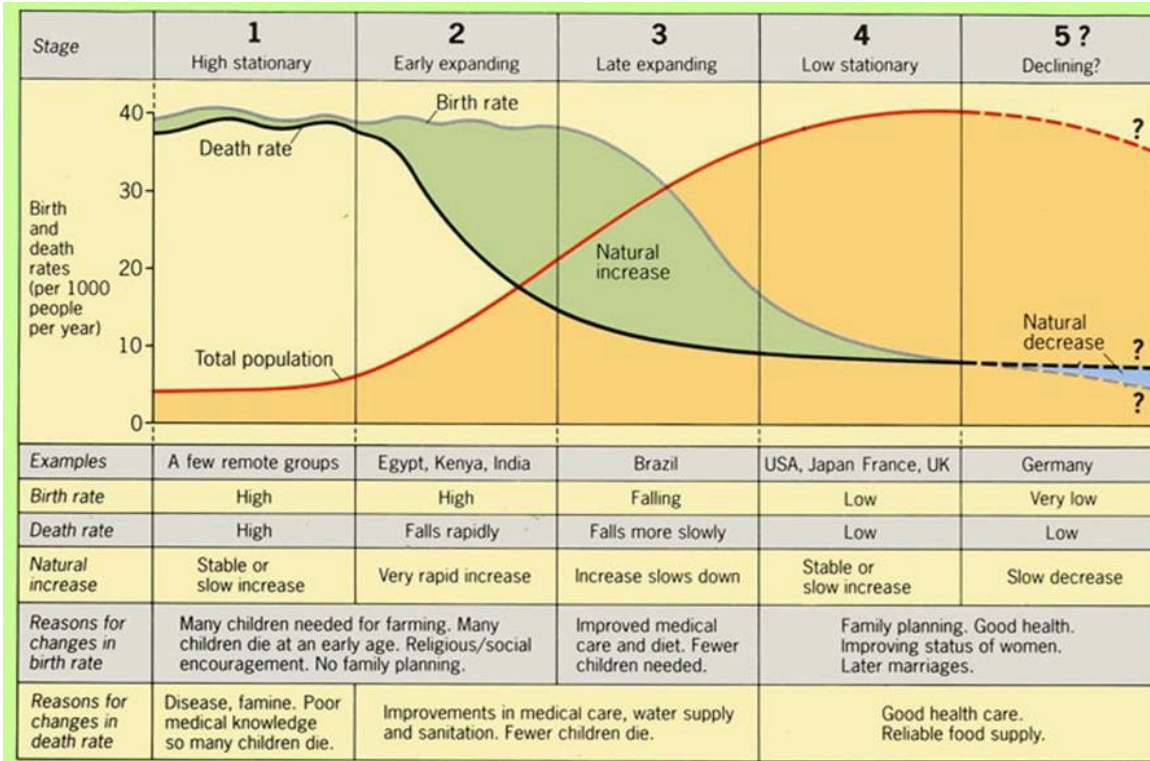


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5. The Demographic Transition Model

Learning Target: Explain theories of population growth and decline.

Demographic Transition Model



Epidemiological Model

Explains how society has developed and the change in how/why people are dying as we have progressed

Stage 1: Pestilence and Famine (High CDR)

Infectious diseases are a principal causes of human deaths

Stage 2: Receding Pandemics

A **pandemic** is an epidemic that occurs over a wide geographic area and affects a very high proportion of the population – whole country or world wide --improved sanitation, medicine and better nutrition

Stage 3: Degenerative and Human-created diseases: Characterized by a decrease in infectious diseases (polio, measles) but increase in Chronic disorders associated with aging. Two especially important chronic disorders are heart disease and cancer

Stage 4: Delayed Degenerative: The major degenerative causes of death - cardiovascular diseases and cancers, but with extended life expectancy. Medicine helps make cancer spread more slowly or stop

- Better life choices, diet, exercise, reduce use of tobacco and alcohol

However, there has been recent consumption of non-nutritious foods and less exercise which has resulted in obesity in many areas

6. Malthusian Theory

Learning Target: Explain theories of population growth and decline.

Malthus Theory: While population increases geometrically, food supply increases arithmetically (population will increase more quickly than food supply)

Neo-Malthusian theory : earth's resources can only support a finite population --Pressure on scarce natural resources leads to famine and war --- Advocate for contraceptive and family planning in order to keep population low and protect resources and prevent famine and war.

7. Population Policies

Learning Target Explain the intent and effects of various population and immigration policies on population size and composition.

Antinatalist policies - when a country provides incentives for people to have fewer children (sometimes including punishments)

Pronatalist policies - when a country provides incentives for people to have more children

Immigration policies - States can set up policies that make it easier or harder for people to immigrate to their territory (quotas and accepting or refusing refugees into the country)

8. Women and Demographic Change

Learning Target: Explain how the changing role of females has demographic consequences in different parts of the world.

Contraception: methods of preventing pregnancy

Ravenstein's Laws of Migration

1. The majority of migrants go only a short distance
2. Migration proceeds step by step (Step Migration)
3. Migrants going long distances generally go to large economic centers
4. Each migration stream produces a compensating counter-stream
5. Natives of towns are less migratory than those of rural areas - people who live in urban areas are less likely to migrate
6. Females are more migratory within their area of birth, but males migrate more frequently internationally
7. Most migrants are young adults, families rarely migrate out of their country
8. Large towns (Urban areas) grow more as a result of migration than natural increases (Births)
9. As infrastructure improves (business, roads, industries) migration increases with it
10. The major directions of migration is from the rural (agricultural) to urban (centers of industry and commerce)
11. The major causes of migration are economic (seeking jobs and opportunity)

9. Aging Populations

Learning Target Explain the causes and consequences of an aging population.

Dependency ratio - the ratio of the number of people not in the workforce (dependents) and those who are in the workforce (producers)
- useful for understanding the pressure on the producers

Life expectancy - the average number of years a person born in a country might expect to live

10. Causes of Migration

Learning Target: Explain how different causal factors encourage migration

Push Factors force that drives people away from a place (no jobs, slavery, political instability, no water)

Pull Factors force that draws people to immigrate to a place. (jobs, to be near family)

Intervening opportunity - the presence of a nearer opportunity that greatly diminishes the attractiveness of sites farther away
(Example: Finding a good paying job when migrating looking for economic options)

Intervening obstacle - and force of factor that may limit human migration (example: Coming into contact with a border, laws, language, natural feature that does not allow the migrant to continue their migration)

11. Forced and Voluntary Migration

Learning Target: Describe types of forced and voluntary migration

Asylum seeker: a person seeking residence in a country outside of their own because they fleeing persecution

Chain migration: a series of migrations within a group that begins with one person who through contact with the group, pulls people to migrate to the same area.

Step-migration: migration to a far away place that takes place in stages

Forced migration: when people migrate not because they want to but because they have no other choice

Guest worker: a legal immigrant who is allowed into the country to work, usually for a relatively short time period

Internally displaced persons: a person forced to flee their home who remains in their home country

Refugee: a person who flees their home country and is not able to return

Transhumance: moving herds of animals to the highlands in the summer and into the lowlands in the winter

Transnational migration: moving across a border into another country

Voluntary migration: people choosing to migrate (not being forced)

12. Effects of Migration

Learning Target: Explain historical and contemporary geographic effects of migration

Political Impact - **Brain drain:** when the majority of educated or skilled workers leave an area to pursue better opportunities elsewhere

Cultural Impact - loss of culture or migrants bring in new language

Economic Impact - loss or gain of income dependent on the migrant flow

UNIT THREE: CULTURAL PATTERNS + PROCESSES

1. Introduction to Culture

Learning Target: Define the characteristics, attitudes, and traits that influence geographers when they study culture.

Culture: Body of materials, customary beliefs, and social forms that together constitute the distinct tradition of a group or people.

Material Culture - The material manifestation of culture, including tools, housing, systems of land use, clothing, etc.

Nonmaterial Culture - beliefs, traditions, celebration, thoughts, values and ideas of a group (religion, morals, attitudes, etc)

Cultural Relativism – the culture should be judged based on its own standards, not based on another culture.

Ethnocentrism – Judging other cultures based on the rules of your culture

Taboo - something that is forbidden by a culture or a religion, sometimes so forbidden that it is often not even discussed

2. Cultural Landscapes

Learning Target: Describe the characteristics of cultural landscapes.

Cultural landscapes: the forms superimposed on the physical environment by the activities of humans. Example: Street lights, rice fields, churches, cemeteries, etc

Learning Target: Explain how landscape features and land and resource use reflect cultural beliefs and identities.

Ethnic Neighborhoods - Neighborhood, district or suburb which retains some cultural distinction from a larger surrounding area.

Indigenous people - a culture group that constitutes the original inhabitants of a territory, distinct from the dominant national culture, which is often derived from colonial occupation

Indigenous community – is the community of indigenous people living together working to keep their culture alive

3. Cultural Patterns

Learning Target: Explain patterns and landscapes of language, religion, ethnicity, and gender.

Sense of place: a strong feeling of identity that is deeply felt by inhabitants and visitors of a location

Language: is a set of mutually intelligible sounds and symbols that are used for communication (Soda vs Pop)

Religion: the belief in and worship of a superhuman controlling power, especially a personal God or gods (Church and Mosque)

Ethnicity: the fact or state of belonging to a social group that has a common national or cultural tradition. (China Town)

Gender: For our purposes in class, it refers to the cultural differences in how men are treated differently than women

4. Types of Diffusion

Learning Target: Define the types of diffusion.

Relocation Diffusion: A form of diffusion where the ideas being diffused are transmitted by their carriers as they migrate to new areas

Expansion Diffusion: The spread of an idea through a population in a way that the number of those influenced becomes continuously larger. Includes contagious, hierarchical, and stimulus diffusion.

- **Contagious:** Transmission of a phenomenon through close contact with nearby places, like diseases.
- **Hierarchical:** An idea spreads by passing first among the most connected individuals, then spreading to other individuals (large connected cities to other large connected cities, then to smaller connected cities)
- **Reverse Hierarchical:** Diffusion up a hierarchy, such as from a little city to a big one.
- **Stimulus:** A form of diffusion in which a cultural adaptation is created as a result of the introduction of a cultural trait from another place. In other words, it is the spreading of an underlying principle of an idea when the idea as a whole cannot spread to a particular culture.

5. Historical Causes of Diffusion

Learning Target: Explain how historical processes impact current cultural patterns.

Creole or creolized language: a language that began as a combination of two other languages and is spoken as the primary language of a group of people

Lingua Franca: mutually understood & commonly used by people who have different native languages

Colonialism an effort by one country to establish settlement in a territory and to impose its political, economic, and cultural principles on that territory

Imperialism The policy of extending a country's influence through political or military force to areas already developed by an indigenous people.

6. Contemporary Causes of Diffusion

Learning Target: Explain how historical processes impact current cultural patterns.

Globalization: World interaction and integration among the people, companies, and governments, a process driven by international trade and investment and aided by information technology

- Media – exposure to western television and movies to the world
 - Technological changes – exposure to cell phones, YouTube, twitter, and the internet
 - Politics – Democracies and democratic ideals being spread and exposed to places around the world has encouraged and driven places to pursue more political equality (Arab Spring)
 - Economics – through trade and globalization economics
- has played a key role in changing culture. As places are exposed to international trade and the ability to specialize in certain industries it has brought outside companies in willing to invest (these western countries bring different culture with them)
- Social Relationships – through globalization there has been tremendous push for equal rights for women and the role women play in traditional societies has been altered

Time-Space Convergence: The decline in travel time between geographical locations as a result of transportation, communication, and related technological and social innovations

Cultural Convergence: Different cultures acquire common ideas, products, and traits, becoming more similar.

Cultural Divergence: Different parts of a cultural region are exposed to different influences and become dissimilar.

7. Diffusion of Religion and Language

Learning Target: Explain what factors lead to the diffusion of universalizing and ethnic religions.

Indigenous language: a language that is native to a region and spoken by indigenous people

Language extinction: a language that is no longer spoken by anyone as their native language

Dialect: different forms of the same language used by groups that have some different vocabulary and pronunciations

Language family: a collection of languages that are all descended from an original, proto-language

Indo-European Family

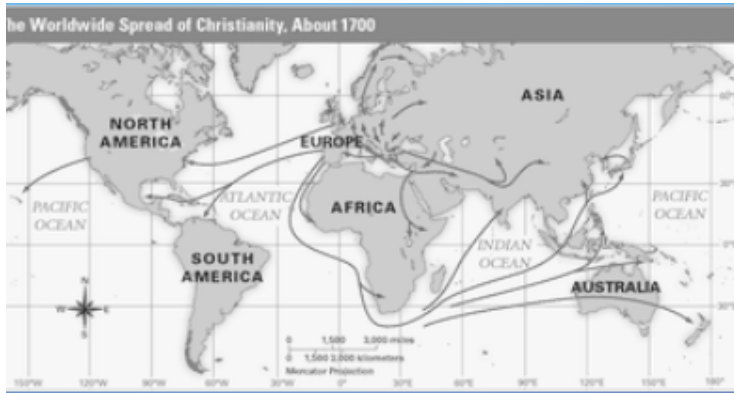
Nomadic Warrior Theory: language diffused through nomadic movement/conquest (hierarchical diffusion)

Sedentary Farmer Theory: language diffused through farmers relocating (relocation diffusion)

Ethnic religion: a religion that is focused on a single ethnic group (often in a centralized area) that doesn't attempt to appeal to all people. Example: Hinduism and Judaism -- (diffused through relocation diffusion)

Universalizing religion: a religion that attempts to appeal to all people and has a worldwide focus as opposed to a regional focus
Example: Christianity, Islam, Buddhism, and Sikhism --- (diffused through hierarchical and relocation diffusion)

Pilgrimage: A journey for religious purposes to a place considered sacred



8. Effects of Diffusion

Learning Target: Explain how the process of diffusion results in changes to the cultural landscape.

Acculturation: adoption of cultural traits, such as language, by one group under the influence of another

Assimilation: the process of a person or group losing the cultural traits that made them distinct from the people around them

Multiculturalism: when various ethnic groups coexist with one another without having to sacrifice their particular identities

Syncretism: the blending traits from two different cultures to form a new trait

UNIT FOUR: POLITICAL PATTERNS + PROCESSES

1. Introduction to Political Geography

Learning Target: For world political maps: a. Define the different types of political entities. b. Identify a contemporary example of political entities.

State: political unit with a permanent population and boundaries that are recognized by other states that allows for the administration of laws, collection of taxes, and provision of defense. (example: United States, Ghana, Australia, etc)

Nation: people who think of themselves as one based on a shared sense of culture and history and who desire political autonomy. (French, German, Indian)

Nation-states: a state with a single nation (very few of these exist) (Example: Japan, Iceland, Armenia)

Stateless nations: a nation who do not have their own independent state (example: Palestinians, Kurds, Hmong)

Multinational states: a state with two or more nations (most states) (example: France, USA, Mexico, China, Russia)

Multistate nations: a nation living across states. Can either have a state (Russia), a state divided in two (Korea), or be stateless (Kurds)

Autonomous region: an area which governs itself but is not an independent country -- Examples: Greenland (not for sale), Hong Kong

Semi-autonomous region: an area which can govern itself in certain areas, but does not have complete power to govern
Examples: Nunavut in Canada, Indian Reservations in US

2. Political Processes

Learning Target: Explain the processes that have shaped contemporary political geography.

Sovereignty: final authority over a territory and the right to defend territorial integrity against incursion.

Self-Determination: the process by which a country determines its own statehood and forms its own allegiances and government.

Independence movements: an area that believes it should be its own country

Devolution: the transfer of decision-making power from a central government to a lower level.

3. Political Power and Territoriality

Learning Target: Describe the concepts of political power and territoriality as used by geographers.

Choke point: a strategic narrow route providing passage through or to another region (Panama Canal, Strait of Gibraltar)

Neocolonialism: gaining indirect control of another country through economic or cultural pressures (as opposed to colonialism which generally used military power (Example: After colonization- Africa continued to export raw materials- resulted in underdevelopment of economies)

Shatterbelt: a region caught between stronger colliding external forces, under persistent stress, often fragmented by aggressive rivals (Israel/Palestine)

Territoriality: the perceived connection of people, their culture, and their economic systems to the land

4. Defining Political Boundaries

Learning Target: Define types of political boundaries used by geographers.

Boundary: line that determines the limit of state jurisdiction (the official power to make legal decisions and judgement) that is a vertical plane that cuts through the subsoil and extends into the airspace above and often coincides with cultural, national, or economic divisions.

Relic: boundary that no longer exists as an international border but remnants of its existence remain. (Examples: Berlin Wall)

Superimposed: boundary that is drawn by powerful outsiders (colonizers) and ignores existing cultural groups (Example: Africa)

Subsequent: boundary that evolves as the cultural landscape of an area takes shape and changes as cultural landscape changes. (Examples: Ireland and Northern Ireland, Sudan and South Sudan)

Antecedent: boundary in the natural landscape that existed before the cultural landscape emerged and stayed in place as people moved in. (example: Mountains between Spain and France and Lakes between US and Canada)

Geometric: boundary that follows a straight line or arc (example: US and Canada - 49th parallel, North and South Korea 38th parallel)

Consequent: boundaries that coincide with cultural groups (example: India (Hinduism) and Pakistan (Islam))

5. The Function of Political Boundaries

Learning Target: Explain the nature and function of international and internal boundaries.

There are 4 phases that must occur before a border is official:

1. Definition: the boundary is negotiated and legally described.
2. Delimitation: the boundary is drawn on a map
3. Demarcation: markers are placed on the ground (signs, walls, fences, etc.)
4. Administration: the boundary is maintained

Demilitarized zone: an area previously in conflict from which weapons and military forces have been removed (N&S Korea border)

The Berlin conference was a meeting held in Berlin in 1884 and 1885 with the purpose of the European nations dividing Africa among them for colonization purposes with the intent of preventing conflict over the process.

- The superimposed boundaries of Africa remained in place after independence, which has led to much of the current conflict and lack of ability to establish effective leadership

Maritime boundary: the extensions of a country's territory that extend into the oceans around them

UNCLOS: established rights and responsibilities of states concerning ownership/usage of the seas and their resources.

Territorial Sea: zone of water adjacent to a state's coast (12 miles) in



which a state has sovereignty.

Median-Line Principle: an approach to dividing and creating boundaries at the midpoint between two place

Exclusive Economic Zone (EEZ): zone of water adjacent to the Contiguous Zone (200 miles) in which the state has a right to explore, exploit, conserve, and manage resources.

South China Seas - China has built military installations on some disputed islands in the SCS. The SCS accounts for 10 percent of the world's fisheries, making it a key source of food for hundreds of millions of people. The region is also home to major oil and natural gas reserves. There are so many countries in close proximity to one another, resulting in high competition for maritime resources and tension over sovereignty.

6. Internal Boundaries.

Learning Target: Explain the nature and function of international and internal boundaries.

Voting District: subdivision for electing members to a legislative body.

Redistricting: when voting districts are redrawn due to changes in population.

Gerrymandering: redrawing voting district boundaries to give

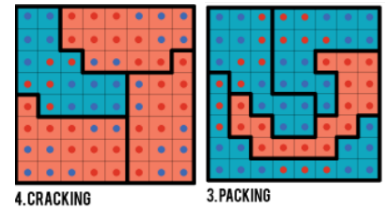
7. Forms of Governance

Learning Target: Define federal and unitary states and explain how federal and unitary states affect spatial organization.

Democracy: a form of government in which the ultimate power rests with the people through, usually through their elected representatives

Unitary state: a country where the national government is strong and the regional governments are weak (U.K., North Korea, France)

Federal state: a country where the national government is strong and the regional governments are also strong so the share power (United States, Canada, Russia)



Defining Devolutionary Factors

Learning Target: Define factors that lead to the devolution of states.

Devolution: the transfer of decision-making power from a central government to a lower level.

- **Physical Geography:** physical boundaries can cause devolution as it was historically hard for resources for states to maintain autonomy over difficult physical regions (Belgium and Basque)
- **Ethnic Separatism:** mainly religion, language, or ethnicity related differences. (Quebec)
- **Ethnic Cleansing:** the mass expulsion or killing of members of an unwanted ethnic or religious group in a society
- **Terrorism:** violence against (typically) civilians for political reasons
- **Economic and Social Problems:** economic or social strife can lead to the devolution and altering of states.
- **Irredentism:** when a state wants to annex a territory whose population is ethnically similar (Russia with Crimea)

9. Challenges to Sovereignty

Learning Target: Explain how political, economic, cultural, and technological changes challenge state sovereignty.

Devolution occurs when states fragment into autonomous regions; sub-national territorial units such as those within Spain, Belgium, Canada and Nigeria

Eritrea: broke from Ethiopia in 1991

South Sudan: broke from Sudan in 2011

East Timor: broke from Indonesia in 2002

Soviet Union: dissolved in 1991

Democratization: introducing democratic systems or principles.

Supranationalism: political and/or economic alliance of three or more states that is formed for mutual benefit to promote shared goals or resolve disputes, but can limit the economic or political actions of member states creating a challenge to state sovereignty. (Example: United Nations)

Economies of scale: cost advantages gained by an increased level of production. As countries agree to produce more of a good, the revenue received from selling that good is bound to increase.

Trade agreements: treaty between two or more states who agree on trade, tariffs, taxes, and often include investment guarantees. (Example: NAFTA formed to eliminate tariffs between US, Canada, and Mexico)

Military alliance: alliance between two or more states who agree on mutual protection and support in case of a crisis. (Example: NATO formed to defend against threats by communist countries after WWII.)

10. Consequences of Centrifugal and Centripetal Forces

Learning Target: Explain how the concepts of centrifugal and centripetal forces apply at the state scale.

Centripetal Force: Force or attitude that tends to unify people and enhance support for the state

- Political - majority/minority relationships, armed conflicts
- Economic - uneven development
- Cultural - stateless nations, ethnic movements

Centrifugal Force: Force or attitude that divides the state

- Political - national identity, 4th of July
- Economic - equitable infrastructure development
- Cultural - linguistic, religious, and ethnic similarities

UNIT FIVE: AGRICULTURE & RURAL LAND-USE PATTERNS & PROCESSES

1. Introduction to Agriculture

Learning Target: Explain the connection between physical geography and agricultural practices.

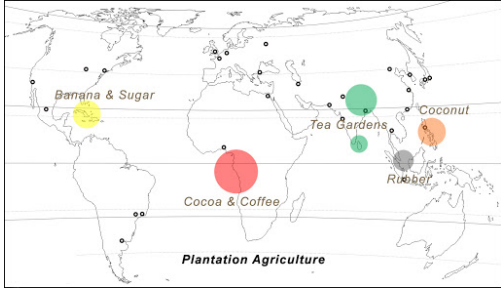

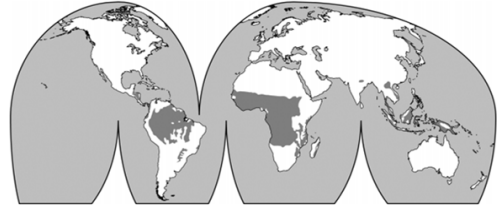

Agriculture: modifying the environment to raise plants or animals for food or other uses'

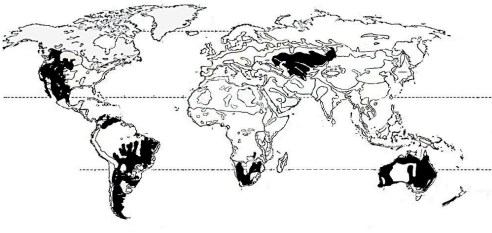
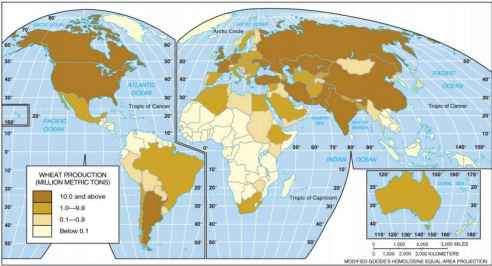
Mediterranean climate: hot/dry-summer climate, mild winter and a defined rainy season that produces certain fruits, vegetables, and grains such as grapes, olives, figs, dates, tomatoes, zucchini, wheat and barley. It prevails along the shores of the Mediterranean, in parts of California and Oregon, in central Chile, South Africa's Cape, and in parts of Australia

Tropical climate: hot, humid climate that produces certain plants, such as cassava, banana, sugar cane, sweet potato, papaya, rice, maize

Extensive agriculture: agriculture that uses small amounts of labor on a large area of land

Intensive agriculture: agriculture that uses a lot of labor on a small area of land

TYPE OF AGRICULTURE	WHERE IT IS FOUND?	WHAT IS PRODUCED?
Market Gardening (Intensive) Some of the fruits and vegetables are sold fresh to consumers, but most are sold to large processors for canning or freezing	Southeastern US, California, Southeastern Australia	Climate: Warm Mid-Latitude Types of Crops: Fresh fruits and vegetables, lettuce, broccoli, apples, oranges, tomatoes
Plantation Agriculture (Intensive) A plantation specializes in one crop that is transported for sale on the global market.		Climate: Tropical Types of Crops: Commodity & speciality crops such as cacao, coffee, rubber, sugarcane, bananas, tobacco, tea, coconuts & cotton.
Mixed Crop/Livestock (Intensive) Commercial farming characterized by integration of crops and livestock; most of the crops are fed to animals rather than consumed by humans		Climate: Cold & Warm Mid-Latitude Types of Crops: Corn, grains, & soybeans grown to feed to cattle & pigs.
Shifting Cultivation (Extensive) Farmers move from one field to another; aka slash-and-burn agriculture because farmers clear and fertilize the land by burning vegetation. When the soil loses fertility, the farmers move to a different plot of land and repeat.		rice, maize (corn), millet and sorghum
Nomadic Herding (Extensive) Nomads move herds to different pastures and trade meat, milk, and hides. Rely upon animals for survival, not profit.		Climate: Drylands/Desert Types of Livestock: Cattle, Camels, Reindeer, Goats, Yaks, Sheep, Horses

<p>Ranching Commercial grazing of livestock. Eventually they will be sent to feedlots and then be sent to slaughter.</p>		<p>Climate: Drylands/Desert Types of Livestock: Cattle, Goats, Sheep</p>
<p>Commercial Grain Farming (Extensive) Crops are grown primarily for human consumption. Farms sell their output to manufacturers of food products, such as breakfast cereals and bread.</p>	 <p>Copyright © 2005 Pearson Prentice Hall, Inc.</p>	<p>Climate: Mid-Latitudes, too dry for mixed crop & livestock Types of Crops: Wheat</p>

2. Settlement Patterns and Survey Methods

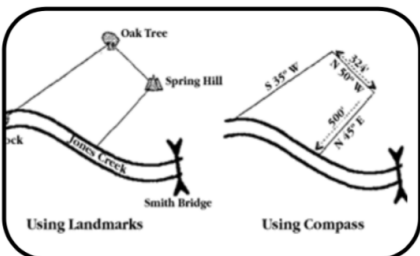


Learning Target: Identify different rural settlement patterns and methods of surveying rural settlements.

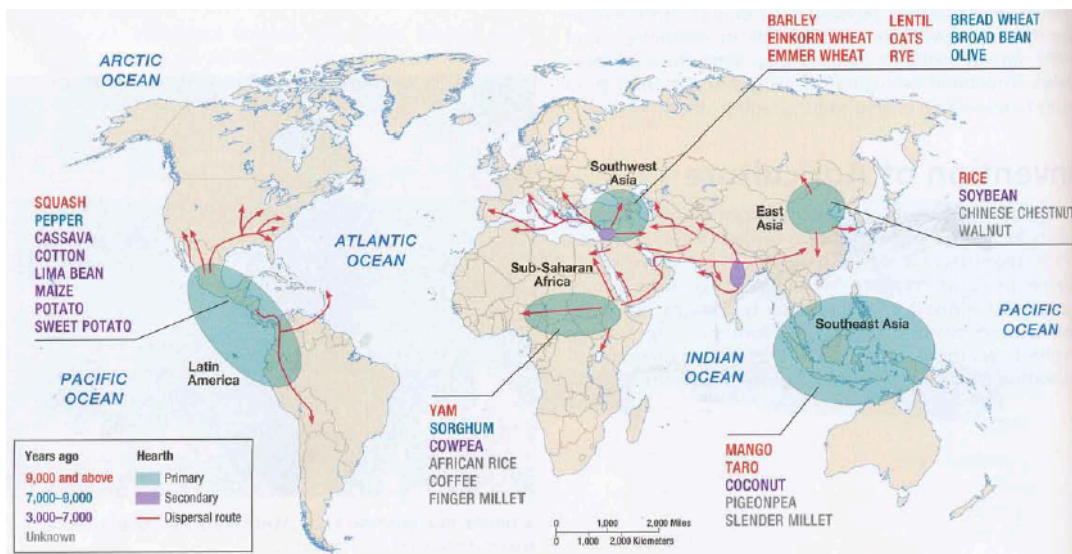
Clustered: a pattern of rural settlement in which the houses and farm buildings of each family are situated close to each others' fields and surround the settlement.

Dispersed: settlement pattern with people living relatively far from each other on their farms

Linear settlement: a rural land use pattern that creates a long, narrow settlement around a river, coast, or road that looks like a line

Surveying: examining and measuring the surface of the Earth for planning, preparing to build, or mapping

<p>Metes and bounds: a system of describing parcels of land where the metes are the lines (including angle and distance that surround the property) and bound describes features such as a river or public road</p>	<p>Long Lot: a rural land use pattern that divides land into long, narrow lined up along a waterway or road</p>	<p>Township and range: a system of dividing large parcels of where the townships describe how far north or south from the center point</p>
		



3. Agricultural Origins and Diffusions

Learning Target: Identify major centers of domestication of plants and animals and explain how plants and animals diffused globally.

Fertile Crescent: a crescent-shaped area in Southwest Asia where settled farming first began to emerge leading to the rise of cities

Columbian Exchange: a widespread exchange of animals, plants, culture, human populations, communicable diseases, and ideas between the

American and Afro-Eurasian hemispheres that was launched by Columbus's voyages

First Agricultural Revolution: time when people first domesticate plants and animals which allows people to live in one place

Domestication: the process of taming plants or animals for human use

Agricultural Hearths: The separate locations in which groups of people began to domesticate plants and animals.

Commonalities Among Agricultural Hearths: Fertile soil in river valleys, availability of water, moderate climates, and collective societal structures

4. The Second Agricultural Revolution

Learning Target: Explain the advances and impacts of the second agricultural revolution.

Second Agricultural Revolution: coincides with the Industrial Revolution; increasing yield and access through machines and transportation

- Caused by the industrial revolution and the enclosure movement
- Effects of the Second Agricultural Revolution: New technology, Led to increased food production, Better diet, longer life, and more people available for work in factories, Shifting demographics (moving to cities, less farmers)

Enclosure Movement: Series of laws enacted by the British government that enabled landowners to purchase and enclose land for their own use which had previously been communal land used by peasant farmers.

- Emergence of commercial agriculture
- Fewer and larger farms -> decrease in farm owners -> improvements in farming techniques -> decrease in agricultural laborers
- **Urbanization:** Mass migration of people into the cities to work in newly emerging factories.

5. The Green Revolution

Learning Target: Explain the consequences of the Green Revolution on food supply and the environment in the developing world.

Green Revolution: the spread of new technologies like high yield seeds and chemical fertilizers to the developing world in the 1960s and 1970s

Positive

- ▷ Able to grow more crops on same amount of land which decreases food prices
- ▷ More crops grown on same size land
- ▷ Improvement in variety

Negative

- ▷ Destroying local land and traditional modes of agricultural production
- ▷ Decreasing biodiversity (hybrid seeds diminish local plant diversity)
- ▷ Impact of chemical

Biotechnology: is the application of scientific techniques to modify and improve plants, animals, and microorganisms to enhance their value.

6. Agricultural Production Regions

Learning Target: Explain how economic forces influence agricultural practices.

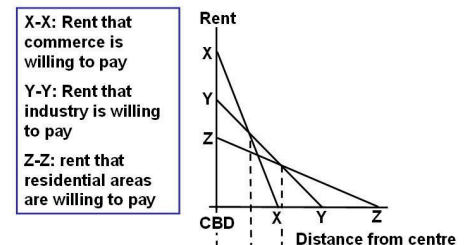
Subsistence Agriculture: only enough food is cultivated to survive (no surplus)

Commercial Agriculture: the production of crop for sale and profit

Monoculture: Growing one crop in a farm system at a given time

Mono-Cropping: Growing one crop in a farm system year after year.

Bid-rent theory: a geographic theory that states the price and demand for real estate change as the distance from the central business district (CBD) increases



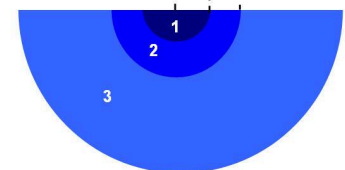
7. Spatial Organization of Agriculture

Learning Target: Explain how economic forces influence agricultural practices.

Commodity Chain: activities involved in the creation of a product: design, production of raw materials, manufacturing and assembly, distribution

Agribusiness: system of commercial agriculture that links various industries to the farm

Economies of scale: cost advantages that come producing a large amount of an item



8. Von Thünen Model

Learning Target: Describe how the von Thünen model is used to explain patterns of agricultural production at various scales.

Von Thünen's model: helps to explain rural land use by emphasizing the importance of transportation costs associated with distance from the market. Von Thünen's rings distribute various farming activities into concentric rings around a central market city.

- ▷ Dairy and gardening is close to the center because it is a perishable good, where the farmer can maximize the profit, intensive agriculture
- ▷ Forests are close to the market, because people need it for fuel and This needed to be close and is expensive to transport
- ▷ Extensive agriculture (grains, field crops) do not perish as quickly as vegetables and milk and need plenty space to grow
- ▷ Livestock and ranching further from the market for cheap land (need more of it and

Concentric Zones:
1: CBD with commerce and offices
2: Industry
3: Residential with highest density nearest centre



transportation is cheap)

9. The Global System of Agriculture

Learning Target: Explain the interdependence among regions of agricultural production and consumption.

Global Supply Chain: a worldwide network to maximize profits in production

Export commodity: goods sent from one country to another for sale (Some countries have become highly dependent on one or more export commodities including Haitian coffee, Sri Lankan Tea, and Cuban Sugar)

10. Consequences of Agricultural Practices

Learning Target: Explain how agricultural practices have environmental and societal consequences.

Pollution: process by which soil is contaminated by chemicals

Land cover change: process by which agricultural areas are lost to development

Conservation: the protection of wildlife and natural resources

Deforestation: human-driven and natural loss of trees for not forest use

Desertification: the process of a dry area becoming drier and losing vegetation

Irrigation: moving water to where you need it

Draining Wetlands: drainage for agricultural practices

Pastoral nomadism: herding animals and migrating with them to find pasture areas without a permanent pasture area

Soil salinization: the slow build up of salt in soil, particularly in irrigated areas, that makes soil unable to grow plants

Terrace farming: method of growing crops on the sides of hills or mountains by planting on man-made steps (terraces)

Changing Diets: MDCs continue their demand for meat, LDCs see an increase in their demand for meat, as well as convenient, processed food.

11. Challenges of Contemporary Agriculture

Learning Target: Explain challenges and debates related to the changing nature of contemporary agriculture and food-production practices.

Agricultural Biotechnology: the use of scientific tools and techniques to modify plants and animals (Pesticide resistant crops, Antibiotics, Biofuels)

GMO: plants or animals whose DNA has been genetically modified, often through a combination of DNA from similar plant or animal species for desired traits.

Aquaculture: raising of fish and shellfish in ponds and controlled saltwater hatcheries raising of fish and shellfish in ponds and controlled saltwater hatcheries

Value Added Foods: foods that have increased in value due to alterations in production, size, shape, appearance, location, and/or convenience

Organic Farming: crops produced without the use synthetic or industrially produced pesticides and fertilizers or genetically engineered seeds

Fair Trade: trade between MDC and LDC in which fair prices are paid to the producers

community-supported agriculture (CSA): individuals who pledge support to a farm operation so that growers and consumers provide mutual support

Urban farming: integrating growing crops or raising animals into an urban ecosystem

Dietary Shifts: movement from processed foods, meat, and sugars towards one more based in fruits and vegetables

Food Insecurity: the state of being without reliable access to a sufficient quantity of affordable, nutritious food

Food Desert: geographic area where large grocery stores are scarce or missing and residents have limited access to fresh nutritious foods. Typically found in urban, low-income neighborhoods

Weather: agricultural production is affected by high temperatures, drought, flooding, storms, freezes

12. Women in Agriculture

Learning Target: Explain geographic variations in female roles in food production and consumption.

- Women are frequently denied loans or financial support, cannot afford tuition or fees; or rural communities lack funding to provide schools.
- Women may be unable to obtain or access inputs to improve productivity (e.g., land, animals, equipment, seeds, fertilizer, or infrastructure).
- Women practicing subsistence agriculture may not be able to generate a surplus.
- Impacts of exposure to environmental hazards (agricultural pollution, chemicals, groundwater pollution) that cause health problems for women and children which have an economic impact (household, local, or national scale).
- In many societies women hold agricultural knowledge and skills passed down to daughters.
- In many societies women represent a spiritual ideal of fertility that is tied to beliefs regarding agricultural productivity.
- Laws and government policies preventing women from acquiring land tenure, owning, or inheriting land.
- Women may lack access to political processes (voting), and institutions (representative government); or females lack political power to improve law and policy affecting women's issues.

Empowering and investing in rural women has been shown to significantly:

- Increase productivity
- Reduce hunger and malnutrition
- Improve rural livelihoods

UNIT SIX: CITIES AND URBAN LAND-USE

1. The Origin and Influences of Urbanization

Learning Target: Explain the processes that initiate and drive urbanization and suburbanization.

Site: the place where the settlement is located. Absolute location of a city Ex. on a hill or in a sheltered valley

Situation: describes where the settlement is in relation to other settlements and features of the surrounding area. Relative location of a city Ex. the settlement surrounded by forest or next to a large city

Urbanization: the movement of people from rural areas to cities.

Origins of Urbanization: 1. Early humans were nomadic, meaning no permanent home 2. Some decided to stop and stay put in certain areas (settlements originated in Mesopotamia: part of the Fertile Crescent in SW Asia). 3. These areas began to grow in size and

became cities as we know them today 4. Early settlements were agricultural villages that formed after humans began growing food and crops 5. Typically located in fertile river valleys (nutrient rich topsoil/silt and water source for crops) 6. Farmers were able to produce surplus crops which could feed larger populations 7. Led to people being able to pursue other occupations and trades

Socioeconomic Stratification: differentiation of society into classes based on wealth, power, production or prestige.

First Urban Revolution: agricultural and socioeconomic innovations that led to the rise of early cities.

Factors that influence Urbanization:

Transportation: innovations in transportation have shaped and reshaped the layout and size of cities and their surrounding areas over time.

Communication: innovations in communication systems



Figure 44.2 The world's first cities arose in six urban hearth areas. How do these urban hearth areas correspond with ancient centers of domestication in Figure 35.4?

allowed businesses, and therefore cities, to grow.

Rural to Urban Migration: movement of people (typically farmers) from rural settlements to urban centers in search of jobs.

Redevelopment: set of activities intended to revitalize an area that has fallen on hard times.

2. Cities Across the World

Learning Target: Explain the processes that initiate and drive urbanization and suburbanization.

Megacities: 10 million inhabitants or more (Cairo, Mumbai, Beijing, Dhaka, Osaka-Kobe-Kyoto)

Metacities: 20 million inhabitants or more (Tokyo, Delhi, Shanghai, São Paulo, Mexico City)

Micropolitan Area: Population between 10,000 - 50,000 people. Smaller City and Surrounding Towns/Counties

Megalopolis: a region in which several large cities and surrounding areas grow together

Metropolitan statistical area: a central city of at least 50,000 people and urban areas linked to it

Suburbanization is a population shift from central urban areas into suburbs, resulting in the formation of (sub)urban sprawl. As a consequence of the movement of households and businesses out of the city centers, low-density, peripheral urban areas grow.

Sprawl (or urban sprawl): tendency of cities to grow outward in an unchecked manner

Edge Cities: nodes of economic activity that have developed in the periphery of large cities.

Exurbs: a district outside a city, especially a prosperous area beyond the suburbs. Often found near farmland, beaches or mountains

Boomburbs: large, rapidly growing, incorporated communities of more than 100,000 residents that are not the biggest city in their region.

3. Cities and Globalization

Learning Target: Explain how cities embody processes of globalization.

World City: (or global city) a city that is a control center of the global economy, in which major decisions are made about the world's commercial networks and financial markets. (Tokyo, Paris, New York City)

Urban Hierarchy: Ranking urban settlements by: Population size and economic function (i.e. # of services provided)

Type of City	Characteristics	Examples
World City	Dominant City in Terms of Economic Standing	New York, London, Tokyo
Megalopolis	An extended Conurban Area, Consisting of Several Cities	BosNYwash (the Area from BOSTON to NEW YORK to WASHINGTON DC)
Alpha City	Primary Regional Nodes in the Global Economy (Similar to World Cities)	New York, London, Hong Kong, Sydney
Beta City	Secondary Regional Nodes in the Global Economy (One Step Down from Alpha)	Washington DC, Dallas, Berlin, Wuhan

Gamma City	Tertiary Regional Nodes in the Global Economy (One Step Down from Beta)	Cleveland, St. Petersburg, Austin, St. Louis
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Source: fivable

Cities are connected globally by networks and linkages:

Transportation Services: those activities designed to assist a person to travel from one place to another to obtain services or carry out life's activities.

Communication Systems: advanced communication systems that provide immediate access to information.

Business Services: services which serve as links to the corporate headquarters of international companies.

4. The Size and Distribution of Cities

Learning Target: Identify the different urban concepts such as hierarchy, interdependence, relative size, and spacing that are useful for explaining the distribution, size, and interaction of cities.

Rank-Size Rule: the country's nth-largest settlement is 1/n the population of the largest settlement. Describes a certain statistical regularity in the city-size distributions of countries and regions. Example: US cities

Primate City: an urban area that dominates its country's economy, culture, and political affairs and is more than twice the population of the next largest city. Example: London, Paris, Bangkok

- Pro: can attract international trade and business, Con: all services in one area

Christaller's central place theory: explains how services are distributed and why a regular pattern of settlements exists

Central place: a settlement that makes certain types of products and services available to consumers

Threshold: the # of people required to support businesses

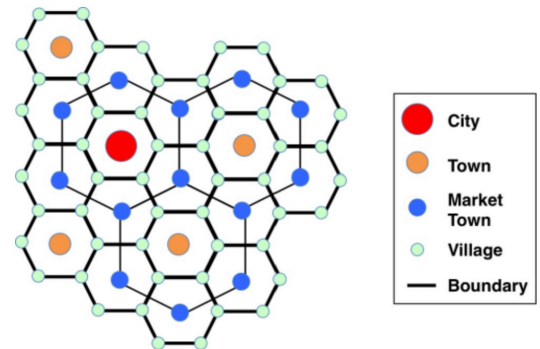
Range: the distance people will travel to acquire a good

Low-Order central place functions: are used by consumers on a regular/daily basis and, as a result, people are not willing to travel far to use them (Walgreens, gas station, grocery store)

High-Order central place functions: are used less frequently by consumers and, as a result, people are willing to travel further for it. (baseball games, football games, hospitals)

Gravity Model: interaction of places based on their population, sizes, and distances between them

- The greater the number of people in an area, the greater the number of potential customers for a service.
- The farther people are from a particular service, the less likely they are to use it.
- Spatial interaction between places increases as the size and importance of places becomes greater and decreases as the distance between them grows.

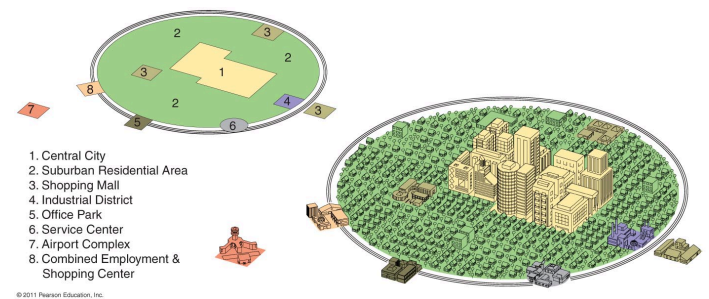


5. The Internal Structure of Cities

Learning Target: Explain the internal structure of cities using various models and theories.

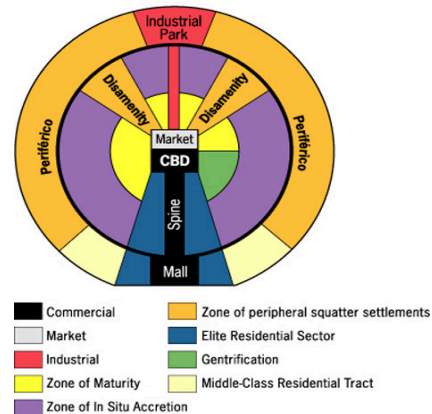
Urban Model	
<p>Concentric-Zone Model - Urban model by Burgess; divides the city into five concentric zones, defined by their function, centered around the CBD. Based on Chicago.</p> <ul style="list-style-type: none"> 1 CBD (central business district) 2 Transition zone 3 Blue-collar residential 4 Middle-income residential 5 Commuter residential 	<p>Sector Model - Created by Homer Hoyt. Zones expanded outward from the city center along transportation corridors creating a wedge shape. As growth occurs, similar activities stay in the same area and extend outward.</p> <ul style="list-style-type: none"> 5 High Income Residence 4 Middle Income Residence 3 Low Income Residence 2 Industry 1 CBD
<p>Multiple Nuclei Model - was created by Chauncey Harris & Edward Ullman in 1945 for developed countries and large expanding cities. The CBD is scattered into several nodes, with transportation hubs near industries and</p>	<p>Galactic (peripheral) City Model - it consists of an inner city, surrounded by large suburban residential and business areas and tied together by transportation nodes (edge cities)</p>

airports. Low income housing is found near workers while high income housing is found in elite districts.

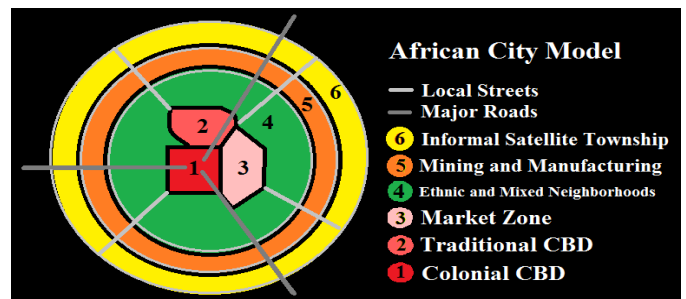


Latin American City Model: Model developed by Griffin and Ford attempting to generalize Latin American cities. Mall, spine, disamenity zone, etc.

A NEW AND IMPROVED MODEL OF LATIN AMERICAN CITY STRUCTURE



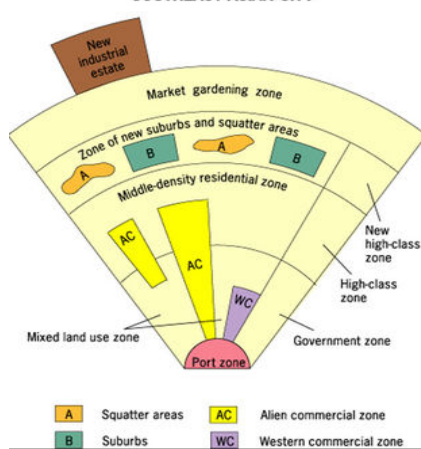
African City Model - Created by Harm DeBlij - fast growing cities with three CBDs: Colonial CBD, Traditional CBD, and Market CBD. The quality of residence gets poorer the farther from the CBDs. Lacks elite, middle class, or gentrification zones which shows a lack of development. Ethnic neighborhoods reflect tribalism that exists throughout Africa.



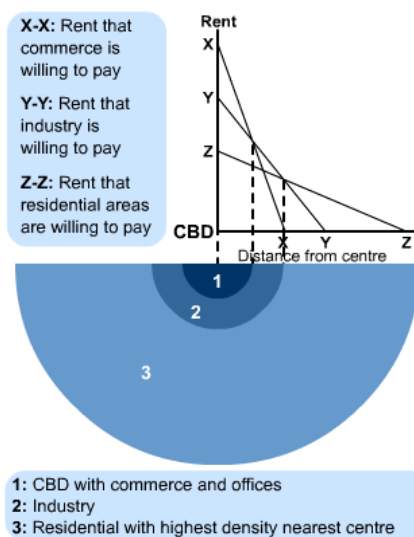
Southeast Asian Model -This model was developed in 1967 by T.G. McGee. McGee studied several cities in Southeast Asia and discovered that they shared certain aspects of land-use. Some similarities include:

Old colonial port zone surrounded by a commercial business district, Western commercial zone, Alien Commercial Zone (dominated by Chinese merchants), No formal central business district (CBD,) Hybrid sectors, & zones growing rapidly New Industrial parks on the outskirts of the city

A GENERALIZED MODEL OF LAND USE AREAS IN THE LARGE SOUTHEAST ASIAN CITY



The bid rent theory- is a geographical economic theory that refers to how the price and demand for real estate change as the distance from the central business district increases.



6. Density and Land Use

Learning Target: Explain how low-, medium-, and high-density housing characteristics represent different patterns of residential land use.

Low Density Housing: residential homes, lots of open space fewest people per geographic unit (Suburbs)

Medium Density Housing: townhomes, single unit housing

High Density Housing: high rises, most people per unit (cities). Land is more expensive in these areas and causes people to be more crammed into smaller apartments

Infilling: The process by which population density in an urban center is increased by building on waste land or underused land.

7. Infrastructure

Learning Target: Explain how a city's infrastructure relates to local politics, society, and the environment.

The location and quality of a city's infrastructure directly affects its spatial patterns of economic and social development.

- Economic development and interconnection within urban areas are dependent upon the location and quality of infrastructure (for example, public transportation, airports, roads, communication systems, water and sewer systems).
- The fastest growing cities are found in developing countries which have just recently industrialized. While residents in both New York City & Moscow have an elaborate airport, road, water, and communication systems, these rapidly growing cities are having issues keeping up with the demands of population increases.
- In developing countries, modern technologies in transportation and public facilities are not very available. While all cities in developing countries are different culturally, most share a few similarities other than not being able to keep up with these public services and infrastructure. Secondly, some are ancient, but almost all have a colonial legacy, established to serve the needs of the colonizing country
- Third, many of these cities have a large number of migrants illegally living on the outskirts of the city, called squatter-settlements, and finally, some governments have responded by moving the national capital away from the overcrowded primate city to a new location. This action is called forward capitals.

Source: fivable

8. Urban Sustainability

Learning Target: Identify the different urban design initiatives and practices.

Smart-Growth: urban planning that avoids urban sprawl and focuses on long term implications with sustainable design initiatives and guides development into more convenient patterns and into areas where infrastructure allows growth to be sustained over the long term.

New Urbanism: walkable blocks and streets, housing and shopping in close proximity, and accessible public spaces.

Greenbelts: areas of undeveloped land around an urban area. A green belt usually includes running and biking paths and tends to incorporate many tunnels and small gardens. Green belts also limit the sprawl of urban areas.

Slow-Growth Cities: slowing a city's growth to limit the problems associated with growth and improve sustainability.

Learning Target: Explain the effects of different urban design initiatives and practices.

De Facto Segregation: Racial segregation that happens by fact rather than by legal requirement

Positive of Urban Sustainability: Reduction of sprawl, improve walkability and transportation, improved and diverse housing options, and improved livability and promotion of sustainable options.

Negatives of Urban Sustainability: Increased housing costs, possible de facto segregation, and potential loss of historical or place character.

9. Urban Data

Learning Target: Explain how qualitative and quantitative data are used to show the causes and effects of geographic change within urban areas.

- Quantitative information about a city's population is provided by census and survey data and provides information about changes in population composition and size in urban areas.
- With this data from the census, lawmakers can create maps to look at residential and racial segregation
- Qualitative data from field studies and narratives provide information about individual attitudes toward urban change.
- Maps commonly show ethnicity of neighborhoods and other characteristics like predominant gender.

10. Challenges of Urban Changes

Learning Target: Explain causes and effects of geographic change within urban areas.

Redlining: a discriminatory real estate practice in North America in which members of minority groups are prevented from obtaining money to purchase homes or property in predominantly white neighborhoods

Blockbusting: a real estate technique to encourage people to sell their property at a very low price by giving the impression that the neighborhood was changing for the worse, especially in reference to minorities moving in and led to a significant turnover in housing which benefitted real estate agents and led to the "white flight" to the suburbs

Affordable Housing: residential units that are economical for the section of society whose income is below the median household income

- **Access to services; rising crime;** environmental injustice; and the growth of disamenity zones or zones of abandonment
- **Access to services:** measure of people's ability to pay for services without financial hardship
- **Rising crime rates:** contributing factors include lack of job availability, less access to quality schools, and real or perceived lack of opportunity

Environmental injustice: disproportionate exposure to communities of color and the poor to pollution and its effects on health and the environment; includes lack of access to healthy food (deserts), inadequate transportation, unsafe neighborhoods with poor air and water quality.

Disamenity Zones: area located within the city characterized by slums and the homeless and in extreme cases are controlled by gangs

Zones of abandonment: areas with lack of jobs, declining land values and falling demand that cause people to leave and businesses to close

Squatter settlements: residential areas characterized by extreme poverty with shelters constructed of found materials that usually exist on land outside of cities that are neither owned or rented by its occupants with little or no access to necessary services.

Zone of Abandonment (Disamenity Zone): The very poorest sectors of cities that in extreme cases are not connected to regular city services

Land Tenure: system regulating the rights to ownership and control and usage of land

Inclusionary Zoning: planning ordinances that provide affordable housing to people with low to moderate incomes

Local Food Movements: food that is produced within a short distance of where it is consumed, often accompanied by a social structure and supply chain different from the large-scale supermarket system

Urban Renewal: the redevelopment of areas within an urban area, typically neighborhoods in economic decline

Gentrification: the restoration of deteriorated urban areas by wealthier people who move into, renovate, and restore housing and sometimes businesses.

- **Negative:** impact to existing groups, displaces poorer residents, disregards the needs and interests of vulnerable groups, disregards the lawful rights of vulnerable groups and disproportionately improves quality of life
- **Positive:** New employment opportunities, improved housing, improved infrastructure, and increase in visitors/tourism

11. Challenges of Urban Sustainability

Learning Target: Describe the effectiveness of different attempts to address urban sustainability challenges.

Urban sustainability: The goal of improving the social and economic conditions of an increasingly urbanized population while maintaining environmental quality.

Suburban Sprawl: the spreading of developments (such as housing developments and shopping centers) into suburban or rural areas.

- Pollution leads to increased greenhouse gasses, acid rain, and ozone depletion.
- As cities expand, particularly on suburban fringes, extensive amounts of land are developed, leaving less land for agriculture and causing loss of natural habitats and fragile landscapes that are difficult or impossible to regenerate.

Brownfield: is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Ecological Footprint: measure of the human pressures on the natural environment from the consumption of renewable resources

Responses to the Challenges of Urban Sustainability: Regional planning efforts, remediation and Redevelopment of Brownfields, establishment of Urban Growth Boundaries, and farmland Protection Policies

1. The Industrial Revolution

Learning Target: Explain how the Industrial Revolution facilitated the growth and diffusion of industrialization.

Industrial Revolution: A period of rapid growth in the use of machines in manufacturing and production that began in the mid-1700s.

- Began in England with the invention of the steam engine and diffused out from the hearth
- Caused an increase in food production (as new technological advances occurred in farming) and caused more people moved to the cities
- Increased the gap wage between the poor and the wealthy
- Increases imperialism and colonialism because of need of raw materials (coal, lumber, cotton, etc)

2. Economic Sectors and Patterns

Learning Target: Explain the spatial patterns of industrial production and development.

Sector	Definition	Job Examples	T-shirt Company Example
Primary	Extraction of raw materials	Mining, fishing, lumber, agriculture, etc	Cotton Farmer
Secondary	Processing natural materials into finished goods	Manufacturing, construction, utilities, etc	T-shirt manufacturer company
Tertiary	Offering services to consumers	Retail, tourism, entertainment, etc	T-shirt Store
Quaternary	Research and administration involved often associated with technological innovation	finance, insurance, marketing, and wholesaling.	Researcher on how to make t-shirts stainless
Quinary	The highest levels of decision-making in a society or economy	CEO, school superintendent, etc	CEO of the T-shirt Company

Site Factors: industrial location factors related to the costs of the factors of production inside the factory

- Land - cheap land (cheaper in suburbs and rural areas right outside of urban ones), want to be close to highway and other transportation routes
- Capital - Funds to establish new factories or expand existing ones. Most important site factor in certain industries (high-tech). More difficult for developing countries to gain access to capital
- Labor - most important site factor globally

Labor-intensive industry: wages and other compensation paid to employees constitute a high percentage of expenses

Break-of-Bulk-Point: A location where transfer is possible from one mode of transportation to another (cargo ship to train)

Weber's Least Cost Theory: Minimize three categories of costs to increase profits: Transportation (weight and distance), Labor (cheap labor), and Agglomeration

- **Bulk Gaining** -makes something that gains volume or weight during production. To minimize transportation costs, they focus on proximity to markets.
- **Bulk Reducing** -Makes something that loses volume or weight during production. To minimize transportation costs, they focus on proximity to inputs
- **Agglomeration:** clustering of productive activities and people for mutual advantage (example: mall)

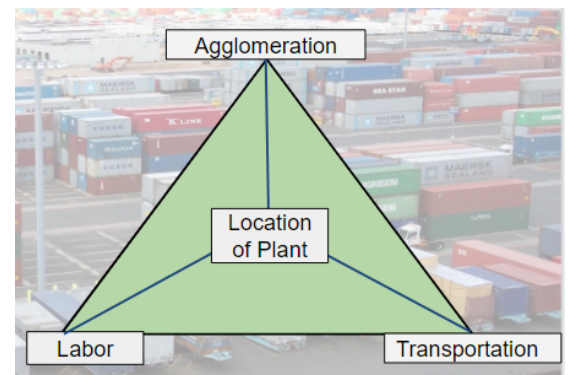
1. labor, transportation (including shipping containers), the break-of-bulk point, least cost theory, markets, and resources influence the location of manufacturing such as core, semi periphery, and periphery locations.

3. Measures of Development

Learning Target: Describe social and economic measures of development.

Essential Knowledge:

1. Measures of social and economic development include Gross Domestic Product (GDP); Gross National Product (GNP); and Gross National Income (GNI) per capita; sectoral structure of an economy, both formal and informal; income distribution; fertility rates; infant mortality rates; access to health care; use of fossil fuels and renewable energy; and literacy rates
2. Measures of gender inequality, such as the Gender Inequality Index (GII), include reproductive health, indices of empowerment, and labor-market participation.
3. The Human Development Index (HDI) is a composite measure used to show spatial variation among states in levels of development.



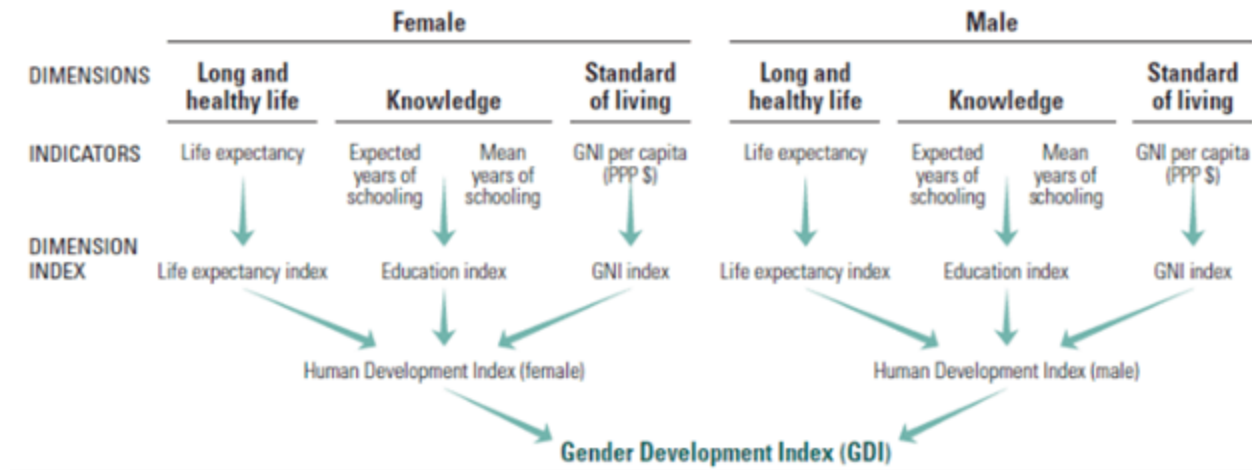
Gross Domestic Product (GDP): The value of the total number of goods and services produced in a country in a given time period (normally one year).

Gross National Product (GNP): The Gross National Product is one of the most widely used and quoted statistics in economic geography, particularly in popular parlance. It refers to the total monetary value, in US dollars, of all the goods, services, and investments produced by a country in a year.

Gross National Income (GNI) per capita: The value of the output of goods and services produced in a country in a year, including money that leaves and enters the country.

Gender Inequality Index (GII): A measure of the extent of each country's gender inequality.

Human Development Index (HDI, literacy rate, fertility rates, infant mortality rates): Indicator of level of development for each country, constructed by the United Nations, combining income, literacy, education, and life expectancy.



4. Women and Economic Development

Learning Target: Explain how and to what extent changes in economic development have contributed to gender parity.

Essential Knowledge:

1. The roles of women change as countries develop economically
2. Although there are more women in the workforce, they do not have equity in wages or employment opportunities.
3. Microloans have provided opportunities for women to create small local businesses, which have improved standards of living.

Microloans: are small credit or loans given to people in developing countries to start small businesses and help improve the economy

5. Theories of Development

Learning Target: Explain different theories of economic and social development.

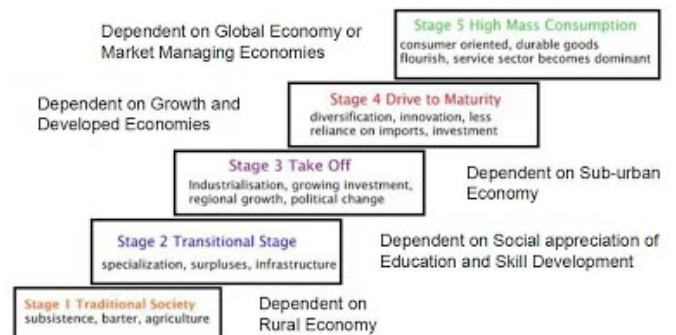
Enduring Understanding: Economic and social development happen at different times and rates in different places.

Essential Knowledge:

1. Different theories, such as Rostow's Stages of Economic Growth, Wallerstein's World System Theory, dependency theory, and commodity dependence, help explain spatial variations in development.

Rostow's Stages of Economic Growth: assumed that all countries wanted to modernize, and that all would, though at different speeds. Rostow also saw economic development as a linear progression in which countries moved from one stage to the next until they reached high mass consumption.

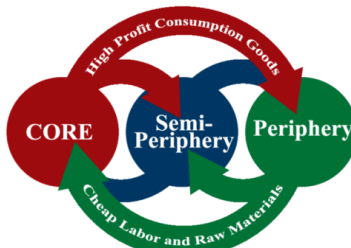
Rostow's 5 Stages of growth



Demographic research requirement using Rostow's model prior to Product Launch
Dr. Krishnan Umachandran

Dependency theory: The Dependency Theory holds that Less Developed Countries (LDCs) are highly dependent on foreign factories and technologies from More Developed Countries (MDCs) to provide employment and infrastructure. The LDCs in this theory get stuck in the continuous cycle of dependency on the MDCs which never allow their economies to fully develop.

Wallerstein's World Systems Theory: attempts to explain the relationship between the core and periphery countries. This image below basically shows how the core benefits from the periphery and semi-periphery. This image also shows how the semi-periphery can benefit from the periphery while still benefiting the core.



Wallerstein's World System Theory Model

6. Trade and the World Economy

Learning Target: Explain causes and geographic consequences of recent economic changes such as the increase in international trade, deindustrialization, and growing interdependence in the world economy

Essential Knowledge:

1. Complementarity and comparative advantage establish the basis for trade.
2. Neoliberal policies, including free trade agreements, have created new organizations, spatial connections, and trade relationships, such as the EU, World Trade Organization (WTO), Mercosur, and OPEC, that foster greater globalization.
3. Government initiatives at all scales may affect economic development, including tariffs.
4. Global financial crises (e.g., debt crises), international lending agencies (e.g., the International Monetary Fund), and strategies of development (e.g., microlending) demonstrate how different economies have become more closely connected, even interdependent.

Complementarity advantage: One place must have what another wants and can secure. example: Flow of seasonal fruits and vegetables from California's Valley to urban markets of the American Midwest and East

Comparative advantage: Comparative advantage is the ability of a firm or individual to produce goods and/or services at a lower opportunity cost than other firms or individuals. A complementary good is a good whose use is related to the use of an associated or paired good.

Neoliberal policies: economic policies that are predicated on a minimalist role for the state, assuming the desirability of free markets as the ideal condition not only for economic organization but also for political and social life

Free trade agreements: to eliminate the barriers to trade in, and facilitate the cross border movement of goods and services between the countries

EU: The European Union is a politico-economic union of 28 member states that are located primarily in Europe. The EU operates through a system of supranational institutions and intergovernmental negotiated decisions by the member states.

World Trade Organization (WTO): works to negotiate rules of trade among the member states

Mercosur: Mercosur or Mercosul (Spanish: Mercado Común del Sur, Portuguese: Mercado Comum do Sul, Guarani: Ñemby Ñemuha, Southern Common Market) is a sub-regional bloc comprising Argentina, Brazil, Paraguay, Uruguay and Venezuela. Its associate countries are Chile, Bolivia, Colombia, Ecuador and Peru.

OPEC: International Organization. Organization of Petroleum Exporting Countries. Purpose: to control worldwide prices of gas.

Tariffs: Taxes on items leaving or entering a country, often used to raise the price of imported goods

International Monetary Fund (IMF): Provides loans to countries experiencing balance-of-payment problems that threaten expansion of international trade.

Microlending: the extension of very small loans (microloans) to impoverished borrowers who typically lack collateral, steady employment and a verifiable credit history; it is designed not only to support entrepreneurship and alleviate poverty, but also in many cases to empower women and uplift entire communities by extension

7. Changes as a Result of the World Economy

Learning Target: Explain causes and geographic consequences of recent economic changes such as the increase in international trade, deindustrialization, and growing interdependence in the world economy.

Enduring Understanding: Environmental problems stemming from industrialization may be remedied through sustainable development strategies.

Essential Knowledge:

1. Outsourcing and economic restructuring have led to a decline in jobs in core regions and an increase in jobs in newly industrialized countries.
2. In countries outside the core, the growth of industry has resulted in the creation of new manufacturing zones—including special economic zones, free-trade zones, and export processing zones—and the emergence of an international division of labor in which developing countries have lower-paying jobs.
3. The contemporary economic landscape has been transformed by post-Fordist methods of production, multiplier effects, economies of scale, agglomeration, just-in-time delivery, the emergence of service sectors, high technology industries, and growth poles

Outsourcing: A decision by a corporation to turn over much of the responsibility for production to independent suppliers.

Newly industrializing countries (NICs): The NICs are Brazil, Russia, India, China, South Africa, and Mexico (BRIC SAM). New Asian Tigers is a term used to describe a new industrial region of Asia that grew because of manufacturing to become highly developed economies and these countries are: Hong Kong, South Korea, Taiwan, and Singapore.

special economic zones: specific areas within a country in which tax and investment incentives are implemented to attract foreign (and domestic) businesses and investment.



free-trade zones: no tariffs between countries --> special zones in which all trade barriers between two countries are eliminated. The FTZs usually consist of labor intensive manufacturing plants, such as the maquiladoras. "

export processing zones: are areas found in many regions of the developing world. They provide incentives for foreign companies to conduct their business in developing regions. They provide benefits to the developing world in the form of foreign investments and improved employment opportunities.

international division of labor: Transfer of some types of jobs, especially those requiring low-paid less skilled workers, from more developed to less developed countries.

Fordism: Form of mass production in which each worker is assigned one specific task to perform repeatedly

Post-Fordism: Adoption by companies of flexible work rules, such as the allocation of workers to teams that perform a variety of tasks

economies of scale: Increase In Efficiency Of Production As The Number Of Goods Being Produced Increases

Ex: Ford Motor Companies

just-in-time delivery: Where the shipment of parts (input) arrives at the factory moments before they are needed to reduce the space that inventory takes up

service sector: The portion of the economy concerned with transportation, communications, and utilities, sometimes extended to the provision of all goods and services to people in exchange for payment.

8. Sustainable Development

Learning Target: Explain how sustainability principles relate to and impact industrialization and spatial development.

Essential Knowledge:

1. Sustainable development policies attempt to remedy problems stemming from natural resource depletion, mass consumption, the effects of pollution, and the impact of climate change.
2. Ecotourism is tourism based in natural environments—often environments that are threatened by looming industrialization or development—that frequently helps to protect the environment in question while also providing jobs for the local population.
3. The UN's Sustainable Development Goals help measure progress in development, such as small-scale finance and public transportation projects.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Ecotourism: Tourism that doesn't harm the environment + benefits local people. Usually a small-scale activity with a small number of visitors in an area at a time.

UN's Sustainable Development Goals: A declaration with the goal of improving the living conditions of people in the least developed countries. The goals were: (1) eradicate extreme poverty and hunger, (2) achieve universal primary education, (3) promote gender equality and empower women, (4) reduce child mortality, (5) improve maternal health, (6) combat HIV/AIDS, malaria, and other diseases, (7) ensure environmental sustainability, (8) develop a global partnership for development. an *international declaration improving the living conditions *by 2015