AP Human Geography Unit 7

CITIES AND URBAN LAND-USE PATTERNS AND PROCESSES
Welcome to Unit 7!

In this unit, we study Cities and Urban Land Use. Read the video transcript below for a short introduction to the key themes in this unit.

Welcome to unit 7 of AP Human Geography—Cities and Urban Land Use.

In this unit, we will look at land use through two different angles. First, the external forces that shape a city, and secondly, the internal forces that shape a city. For example, from the external angle, we analyze where cities are and wonder why they are there. We look at the historical distribution of cities, the political, economic, and cultural function of cities, and the reasons for different growth patterns over time. We think about how cities influence the landscape, how they interact with each other through transportation and communication, their spatial distribution, both locally and globally, and changes in the urban hierarchy over time.

The second sub-field of urban geography focuses on the form, internal structure, and emphasizes what cities are like as places to live and work. Internally, cities follow certain land use patterns. Some cities are planned, but most cities evolve organically from an original resource supply. For example, construction in rings around the central business district, or sectors stemming from a central node, is common in North American cities. But cities in other parts of the world may center around a port or colonial area.

So how did cities begin?

It’s hard to imagine a world without cities, but assuming humans have been on Earth for 100,000 years, they form no permanent settlements for the first 90,000 of them. According to archaeological evidence, cities began about 10,000 years ago. As agriculture advances, like irrigation, created surplus, jobs specialization was possible. Most people remained rural farmers, but some became skilled craftsmen and priests. As systems became more complex, the need for leadership and organization arose. This is what we now call government. The site and situation characteristic most critical for early city development was the ability to defend the settlement. Rivers aided transportation, but hilltops offered defensive advantages.

The Industrial Revolution changed the center of city life from temple, palace, marketplace, or river, to the factories, railroads, and housing for factory workers. A city simply needs a node and residents that are not primarily agriculture-based in labor, as land near the market, or what we today call the central business district, is usually too expensive to allow for the type of space needed for farming.

Most cities, as opposed to rural settlements, have a high density, a large amount of diversity, and are large enough that the residents don’t know all the other residents, creating a sense of anonymity. Important world cities have ebbed and flowed, and after the fall of the Roman Empire, the majority of large cities were located in the east, like Baghdad, Constantinople, which is today’s Istanbul, and Cairo. It was just in the last 200 years that London became a dominant world city, and it remains so with New York and Tokyo. Urban areas continue to grow as people flock from rural areas for opportunities like jobs and education.

Today there are approximately 20 megacities. These are cities that have over 10 million people, and they continue to grow. Just 100 years ago, there were no cities with 10 million people and only 13 with a population of over 1 million. 50% of our world’s population today lives in cities. There are increasing challenges for these bursting cities, like slums, sprawl, placelessness, conservation of green spaces, infrastructure strain, social services lag, and overall quality of life.

Join us as we examine urban land use in the past, present, and future, and the analysis of the external and internal structures of cities in AP Human Geography.

We will answer these essential questions in Unit 7:

- Why are the form, function, and size of urban settlements are constantly changing?
- How do models help us understand the distribution and size of cities?
- How do models of internal city structure and urban development provide a framework for urban analysis?
- How do built landscapes and social space reflect the attitudes and values of a population?
- How do urban areas face economic, social, political, cultural, and environmental challenges?
Overview of Unit 7

The course divides urban geography into two subfields. The first is the study of systems of cities, focusing on the location of cities and why cities are where they are. This study involves and examination of such topics as the current and historical distribution of cities; the political, economic, and cultural functions of cities; reasons for differential growth among cities; and types of transportation and communication linkages among cities. Theories of settlement geography, such as Christaller’s central place theory, the rank-size rule, and the gravity model, are introduced. Quantitative information on such topics as population growth, migration, zones of influence, and employment is used to analyze changes in the urban hierarchy.

The second subfield of urban geography focuses on the form, internal structure, and landscapes of cities and emphasizes what cities are like as places to live and work. You are introduced to topics such as the analysis of patterns of urban land use, ethnic segregation, types of intracity transportation, architectural traditions (neoclassical, modern, and postmodern) cycles of uneven development, and environmental justice (the disproportionate location of polluting industries and brown field in low-income or minority residential areas). Your understanding of cities as places is enhanced by both quantitative data from censuses and qualitative information from narrative accounts and field studies. You will also learn about and apply models of internal city structure and development in the United States and Canada (Burgess concentric zone model, Hoyt sector model, Harris-Ullman multiple nuclei model, and Galactic city model), examine the strengths and weaknesses of these models, and compare and contrast the models with the internal structure of cities outside North America.

Topics such as economic systems, housing finance, culture, architectural history, government policies, and innovations in transportation can be useful in the analysis of spatial patterns of urban landscapes. Although much of the literature in urban geography focuses on the cities of North America, comparative urbanization is an increasingly important topic. The study of cities worldwide illustrates how differing economic systems and cultural values can lead to variations in the spatial structures of urban landscapes.

You will also examine current trends in urban development, such as the emergence of edge cities, new urbanism, transit-oriented development, smart growth, and the gentrification of neighborhoods. In addition, you will evaluate sustainable urban planning design initiatives and community actions, such as bikeways and walkable mixed-use commercial and residential developments, that reduce energy use and protect the environments of cities in the future.
We have included reading assignments from the following textbook:

In addition, we recommend for all learners the following exam preparation book:

**Reading Assignment:**
Describe what you will learn in this unit.
How old do you think cities are? You have heard of Mesopotamia - the land between two rivers (meso meaning land and potamia meaning rivers). This was one of our planet's earliest permanent settlements, called an urban hearth, and it originated between 5,000 and 4,000 years ago along with the Indus River Valley civilizations, which evidence shows traded with Mesopotamia. Here is an archaeological ruin of a ziggurat in an ancient city called Ur-part of Mesopotamia. Ancient cities were the hearths of some of the most important developments in human history including the invention of the wheel, agricultural developments like cereal crops, the development of cuneiform (early writing), math/astronomy, taxes, and government.

These early cities, like Cairo in Egypt, flourished due to their locations (site) and their ability to trade with others (situation). Site and situation are the two most important features of early city development. The majority of these early cities were located on rivers, while today that is not as big of a necessity as it was then.

Ancient cities not only were the precursors to modern cities but today some cities have just continued to sprawl from their origins. This city is near Mosul, in Northern Iraq, which was part of the cradle of civilization.

Cairo today is a sprawling and crowded metropolitan area, where growth is outpacing economic development. A steady stream of migrants arrives in cities each day as the rural to urban migration globally increases. They are seeking opportunities, but the reality is that many of these opportunities are scarce and many migrants are forced to the fringes of the cities, creating slums and shantytowns. While there is wealth in every city, evidenced in their skylines, many cities struggle to keep up with growth and infrastructure strains. We will explore this later in the unit in the Challenges Lesson.

Notice the walls and elevation (called a citadel) of this ancient city center. Why do you think this was an important feature of early cities?
We have included reading assignments from the following textbook:

In addition, we recommend for all learners the following exam preparation book:

Reading Assignment:
Read pages 452-453 in your textbook, taking notes.
Read pages 301-303 in your exam prep book, taking notes.
Site and situation affect the origin, function, and growth of cities. People want to be near each other as social animals, and they also benefit from collaboration. The origins of towns come from situation characteristics: a permanent community (as opposed to hunter-gatherers), a concentration of people, specialization of people in areas other than agriculture, and government. Note that city and civilization have the same Latin Root, civis.

The site factors were fertile soil, the presence of water, building materials, and a defendable location. Advances in agriculture and transportation, population growth, migration, economic development, and government policies influence urbanization, then and now. As you can see from these two early cities, farms were not included in the walled area of the city. Therefore, food had to be provided for the urban population from the hinterland, or land surrounding the city. As cities grew, sometimes the walls had to be expanded as well. Rome had multiple walls built around it over its course of development.

Culture, in the cities, were often bound with religion, centering around a temple. Later, these became centered around a palace as priests merged into kings as the most important leader of the community. Cities, like today, were the seat of the power and allowed for extraction from the rural areas.

Those who were not involved in agriculture were able to specialize in other areas like metalworking that furthered the impact of agricultural innovation. This increased the economic development of the city. Others had time to become priests or elites that directed the government of the communities' lives. Later, around the 10th century, trade began to be an important economic factor, and the hinterland lost its importance as the sole economic driver. With the Industrial Revolution, urbanization was accelerated as cities which were once focused on the temple, church, or palace, and river found their economic fortune in factories, railroads, and tenements for the factory workers as you will learn more about in the next lesson.
Reading Assignment:
Read pages 454-455 in your textbook, taking notes.
Read page 304 in your exam prep book, taking notes.
Today, urban areas take more than one form. They are not a single, size, structure, or none have the same cultural landscape either. Their commonality is that they are nucleated, nonagricultural settlements. The urban hierarchy goes as follows in terms of size and the availability of services in the settlement: **hamlet, village, town, city, metropolitan area, megalopolis.**
A hamlet has the smallest amount members (<100) with a megalopolis having the most (>10,000,000). A village has around 1,000 residents. A town (<10,000) is smaller than a city (>10,000) and has less functional complexity, but still has a CBD (central business district), or nucleated economic concentration. A metropolitan area (1,000,000) includes a dense urban core with sprawl into the suburbs. Suburbs are a subsidiary area, that is dependent on a larger urban area. A megalopolis (also called conurbation) is a very large agglomerated urban complex (usually involving several cities and towns). We’ll explore the services available in the social hierarchy a little later in the unit.

Megacities have high population growth and migration and are usually located in the developing world. They have a population of over 10 million. This has caused them to explode in population since World War II. All megacities are troubled by chaotic and unplanned growth, pollution, and widespread poverty as they attempt to fulfill their urban function, the services that are necessary for a metropolitan area. Their urban growth rate is very high, as people still flood to these cities daily. Megacities are rapidly growing in countries of the periphery and semi-periphery. Emerging cities are fast-rising world cities like Nairobi, Kuala Lampur, and Addis Ababa.

World cities perform at the top of the world’s urban hierarchy and drive globalization. There are two main characteristics of world cities. One is that they are hubs of global economics. They influence the world’s business with their rank and power. The most well-known are Tokyo, London, and New York City. All are recognized as a center of power with high interaction with other world cities. They have state-of-the-art communication and infrastructure, and an elite reputation for arts and culture. Megacities and world cities both experience economic, social, political, and environmental challenges.

Every urban area has an economic base or the activities that people do to sustain the urban population. There are basic and nonbasic types. For example, the nonbasic sector is crucial to the city’s functioning like doctors, teachers, restaurant owners, and maintenance of roads and water facilities. The basic sector is made up of activities that bring money into the city from outside sources. Most modern cities take on multiple functions. We will examine these in the next lesson.

Examine the maps above. Make a note of the top nine megacities in the world. Write down three other pieces of information from this infographic and one from the emerging megaregions of the United States. What do you think the challenges of an increasingly urban world are?
Transportation and communication have facilitated urbanization (for example, Borchert’s epochs of urban growth) and suburbanization. John Borchert developed a model in 1967 recognizing four epochs in the evolution of the North American metropolis based on the result of transportation and communication. Borchert’s systems make use of the concept of the system of hierarchy. Cities’ growth and decline affect their position in the hierarchy. These innovative waves are as follows:

1) Sail-Wagon Epoch (1790-1830). This era is associated with low technology. Movement is limited and slow because of the difficulty of overland transportation, and primary goods were moved along waterways.

2) Steamboat Iron Horse Epoch (1830-70). This era is associated with steam-powered boats, steam-powered locomotive and spreading railroad systems.

3) Steel-Rail Epoch (1870-1920). This era is associated with the full impact of Industrial Revolution (because of steel), and hinterlands expand, and goods were moved long distances, making it possible to develop intensively industrialized areas.

4) Auto-Air-Amenity Epoch (1920-70). This era is associated with the gas-powered internal combustion engine (aka automobiles), which opened up new locations for development.

5) High Technology Epoch (1970-today). This era is associated with the expansion of service and information industries (this was not part of Borchert’s original model).

Reading Assignment:
Read pages 476-479 in your textbook, taking notes.
Read pages 305-313 in your exam prep book, taking notes.
Week 1, Day 5 – Practice

**Week 2, Day 1 – Lesson 4: Models of Interactions**

Can you identify these cityscapes? Write them down on a sheet of paper and then check your answers below.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Cityscape A" /></td>
<td><img src="image" alt="Cityscape B" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Cityscape C" /></td>
<td><img src="image" alt="Cityscape D" /></td>
</tr>
</tbody>
</table>

A) Paris  B) Dubai  C) London  D) New York City

What types of things helped you recognize each city? Although they all have buildings, each city has its unique design and sense of place. Cities, while they are the center of production and services, economics, administration, and instruction, are also reflections of diverse heritages. In this lesson, we will look deeper into the diversity of cities and cityscapes (the urban equivalent of a landscape). Geographers use models to explain the hierarchy and interaction patterns of urban settlements. Models that are useful for explaining the distribution and size of cities include the rank-size rule, the law of the primate city, and Christaller’s central place theory. The gravity model is useful in explaining interactions among networks of cities.

You’ll need to take notes in your Geographer’s Notebook on all of these models, including the ones on the next pages. We recommend that you sketch them all as well. There have been questions on previous FRQs that ask you to apply these models.
1) Rank-Size Rule Model
In the Rank-Size Rule Model, the pattern of distribution of cities in some countries is explained by the following formula:

<table>
<thead>
<tr>
<th>City Rank</th>
<th>Population Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10,000,000</td>
</tr>
<tr>
<td>2</td>
<td>5,000,000</td>
</tr>
<tr>
<td>3</td>
<td>3,333,333</td>
</tr>
<tr>
<td>4</td>
<td>2,500,000</td>
</tr>
<tr>
<td>5</td>
<td>2,000,000</td>
</tr>
</tbody>
</table>

The \( n^{th} \) largest city is \( 1/n^{th} \) the size of the largest city.

For example:

A country that follows the rank-size rule of population distribution, cannot have a primate city and vice versa.

2) Law of the Primate City
In the Law of the Primate City, there is a city in the country that has a population that is double (or more) of the next largest city’s population. This primate city is also a city of social, economic, and political importance. An example of a primate city is Paris, France. Countries that follow the rank-size rule are in red on the map to the side, and those with primate cities are gray.

3) Gravity Model
As discussed in a previous unit, the Gravity Model explains increased interactions as a factor of distance and population size. Think of population size as a gravitational force. Large populations interact more with other larger populations. An example is illustrated with the interaction between the USA and Mexico versus Guatemala. Guatemala is only a little bit further away from the USA from Mexico, however, the interaction is significantly smaller because the population is significantly smaller.

Mexico is number 10 in population and the USA in number 3. They are both large populations and very close in distance, so the interaction is very high between the two countries. Thus the Gravity Model in geography came from Newton's law of gravity and used to predict the degree of interaction between two places. This can also be applied to the interaction between cities.
4) Christaller’s central place theory
This is a model that was created in 1933 by German geographer Walter Christaller concerning the development of cities as centers for goods and services serving smaller, surrounding areas, and the size, number and distribution of urban areas. It is an attempt to explain the spatial distribution of human settlements.

In this model, there is a range (the distance a consumer is willing to travel in order to acquire a certain good). There is also a threshold, which is the minimum number of customers required to keep an area profitable. Christaller showed trade areas around central places with hexagons to avoid gaps.

Low-order goods are items that are common to places like gas stations that a person is not willing to drive far for, like bread or milk. Even hamlets (the lower on the social hierarchy) have low-order goods. People will not travel far (low range), so there must be a balanced threshold in order to turn a profit. For example, one hamlet will not have ten grocery stores as the threshold and range will not support it. The threshold is the smallest number of people needed to support a good or service, the range is the largest distance people will travel for a good or service.

High-order goods, on the other hand, are items and services that people will travel a great distance for. These goods have a much higher threshold. For example, there is only a Ferrari dealership in some major cities around the world as Ferrari dealership requires a large threshold in order to draw in enough consumers to make a profit. Each settlement has a trade area (also called hinterland) within which it has a corner on the sale of certain goods because of its range. (You wouldn't typically drive to Houston for a pair of shoes, but you would for a concert.)

The utility of the concepts of the hierarchy are the levels of goods, service, and differentiation of areas according to the level in the hierarchy. Settlements come in different sizes with different functions (hamlet, village, town, city, megacity) and their distribution on the landscape is NOT random. There are more lower-order (small) settlements than higher-level (large) settlements. Large settlements are further apart than small settlements and have more functions and higher order functions. Large cities have no need to develop directly next to another large city as they both have similar goods to offer, so they are spaced as a function of the threshold and range. The concepts of threshold and range are important to understanding social behavior and urbanization. These help you understand the development of cities and industrial activity.

Reading Assignment:
Read pages 434-438 in your textbook, taking notes.
Read pages 319-320 in your exam prep book, taking notes.
Week 2, Days 2 – Lesson 5: Models of Urban Cities-North America

Remember Von Thunen’s Model of Urban Land Use? It applied the concepts of the bid-rent curve. Urban Land Use includes many of the same elements. Classic models that are useful for explaining the internal structures of cities and urban development are the Burgess concentric zone model, the Hoyt sector model, and the Harris–Ullman multiple-nuclei model. The galactic city model is useful for explaining internal structures and urban development within metropolitan areas. World-regional models (like Latin America and Africa) are useful (with limitations) for explaining land use and urban development.

An area of geography that you may be interested in is urban planning. Urban planning deals with developing ways to minimize traffic, decrease environmental pollution, and build sustainable cities. There have been three-four main models to illustrate how North American cities have developed over time. Most of these models were developed after World War II and based on U.S. cities; many experts now assert that they don’t truly represent modern cities.

The first model is the concentric zone model, where cities develop in five concentric rings. Ernest Burgess based his city model on 1920’s Chicago. The core of the cities is the CBD, followed by a second ring called the zone of transition between the first and third rings. In this **zone of transition**, land is used by industry or low-quality residential housing. The third ring is the zone of independent workers and is occupied by working-class households. The fourth ring is the zone of better residences and is dominated by middle-class families. Finally, ring five is the commuter’s zone, where most people living there have to commute to work every day.

The second model we’ll study is the sector model. Homer Hoyt’s 1930’s model (also based on Chicago) illustrates a city growing out from a central CBD along movement corridors (at this time mostly railroad, street car, etc.), with pie-shaped sectors. This model is very similar to the concentric ring model but it differentiates in that that are believed to grow in sectors rather than concentric rings. The center of this model is the CBD. The second sector is called the transportation and industry sector. The third sector is the low-class household sector, where lower pay households tend to cluster. The fourth sector is called the middle-class sector and the final sector is the upper-class sector.

The third urban design is the multiple nuclei model. Harris and Ullman’s 1940’s model (also based on Chicago) proposed that neither the concentric zones nor the sector model showed city structure in the mid-1900’s. In this model, which is more similar to the modern city we are familiar with due to automobiles and subsequent sprawl, the city is more complex and has more than one CBD. A node exists for the downtown region, another node could be in a suburb or where a university is situated, and maybe another near an airport. Clustering does exist in this model because some sectors still tend to stay away from other quarters. For example, industry does not tend to grow next to high-income housing.
The galactic-city model, or Peripheral or Edge-city model, represents a post-industrial city. These are cities that global finances and electronic flow of information dominate the economy rather than industry (fewer secondary economic activities and more tertiary, quaternary and quinary economic activities). The 1960 Galactic City Model, based on Detroit and developed by Chauncy Harris, consists of an inner urban area, surrounded by large suburban residential and business areas and tied together by transportation routes (for example a beltway to avoid traffic). This model represents the decentralization of the urban area, an increase in edge cities.

Every 10 years, the US Census Bureau does a calculation of the country’s people and publishes the results. Data reports include household incomes, gender, ethnicity, high school graduation rates and other items like these. This report is not only collected but outlined for spatial analysis. Social scientists like geographers use the data and maps to examine demographic patterns spatially and over time to help understand current and future social, demographic, and economic trends.

Reading Assignment:
Read pages 466-469 in your textbook, taking notes.
Read pages 320-322 in your exam prep book, taking notes.
Residential buildings and designs of land use reflect a city’s culture, technological capabilities, and cycles of development. In the United States, the suburbs are very common, which are an example of a lower-density housing in these residential districts on the outskirts of a city. This means that there is space reserved for a home-owners, single-family structures and also a yard. On the other hand, in urban areas, we see higher-density housing, with the majority of people renting apartments in a smaller space.

Western European cities, while each unique culturally and historically, tend to share some of the same features. The cities are more compact than sprawling American cities, and most of their residents live in apartments. From their long historical Medieval origins, streets are more narrow, and yards are obsolete. Even though damages of World Wars I and II, there are still many remnants going back to Roman times. In Rome, the Renaissance ideas of beautification are evident throughout the cities with elaborate sculptures on the street for all to enjoy. Cities were designed to be walked. High-density does not always mean skyscrapers, as you remember from the picture of Paris earlier in the lesson, the buildings cannot be higher than three stories due to building ordinances and to keep the purity of the Parisian skyline. The Eiffel Tower, like the Statue of Liberty in the US, are symbolic landscapes and are usually preserved as they are the focus of attention and contribute to the country’s culture and heritage.
Eastern European cities were developed under communist control, where each family was assigned a housing space in similar size and build to all other uniform-style apartments. These cities are also compact like Western European cities but are not CBD-planned, but rather government-focused. A large central square ringed by administrative and cultural centers and a commemorative-type park rather than a consumer-driven core.

Because of European compactness, well-developed infrastructure is important such as subway systems. In the United States, sprawl is countered by each family having one or more cars. However, in Europe, while this is becoming more common, many people walk or rely on public transportation. To counter congestion, private cars are sometimes taxed.

**Reading Assignment:**
Read pages 470-471 in your textbook, taking notes.
Read page 324 in your exam prep book, taking notes.
North American cities develop differently than cities in other places around the globe. Here we will look at some typical city patterns of Latin America, Africa, and Asia.

The Latin American city blends the concentric zone and the sector model with a few exceptions. Common features in Latin American cities include a CBD featuring both a high rise area and traditional market area, an elite (upper class) residential sector and a commercial spine – that is an extension of the CBD in Boulevard form with facilities like malls and shopping centers. These areas are surrounded by concentric zones that decrease in residential quality as you move away from the CBD. The “Zone of Maturity” includes middle-class homes. The “Zone of In Situ Accretion” is an area between the middle-class homes and the **periferico** that contain many structures that appear to be under constant construction. Squatter settlements dominate the periphery (**periferico**) that are located on the outskirts of the city and have very little infrastructure.
In deBlij’s model, the Sub-Saharan African city has three CBDs - an old colonial CBD with some advanced development (like high rises), an open-air informal market zone and a transitional market zone with a more formal storefront and curbside economic activity.

The old colonial CBD is the area most connected to surrounding areas by planned transportation routes. Around the CBDs are residential zones reflecting varying ethnic neighborhoods reflecting the many tribes of Africa. Manufacturing and mining zones are sometimes located next to these ethnic neighborhoods. Informal satellite townships are squatter settlements located on the outskirts of the cities.

McGee - Southeast Asian City

Instead of a traditional CBD, the SE Asian city traditionally centers around the colonial port. The elements of a CBD are found near this port zone. “Alien commercial zones” are home to Chinese and other types of merchants who have migrated to Southeast Asia for economic opportunity for decades. Fast-growing sectors extend out from the port zone, and newer industrial sectors are located on the edge of the city.

Reading Assignment:
Read pages 472-475 in your textbook, taking notes.
Read pages 323-331 in your exam prep book, taking notes.
Week 2, Day 5 – Practice

Week 3, Day 1 – Lesson 8: Challenges in Urbanism: Slums

Explore one of the world’s largest slums in Google’s 360 experience and see what life is like in the favelas of Brazil? Google “Beyond the Map”
https://beyondthemap.withgoogle.com/en-us/

Next, visit one of the largest slums in the world in Nairobi, Kenya. Here we will see how GIS is improving lives through mapping.
https://youtu.be/ChWj4yBmE0E

Reading Assignment:
Read pages 337-342 in your exam prep book, taking notes.
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 begun to industrialize. While residents in New York City and Moscow have an elaborate airport, road, water, and communication systems, these rapidly growing cities are struggling to keep up with the demands of population increases. The above photograph is of one of the elaborate and well maintained subway system stations in Moscow.
In developing countries, modern technologies in transportation and public facilities are sparsely available. While all cities in developing countries vary culturally, most share some similarities other than not being able to keep up with these public services and infrastructure. Secondly, some are ancient, but most 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 (more on that in the next unit), 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,” which you learned about in a previous lesson. Examples of this are moving the capital of Dar Es Salaam to Dodoma in Tanzania, Brasilia in Brazil and Abuja in Nigeria. These planned cities are created to draw population away from overgrown metropolises and to house industrial and governmental centers.

**Reading Assignment:**
Read pages 484-489 in your textbook, taking notes.
Read pages 343-346 in your exam prep book, taking notes.
Economic and social problems linked with the growth and decline of urban communities include housing and insurance unfairness, housing affordability, access to food stores and other public services, disamenity zones, zones of abandonment, and gentrification. In the past in the United States, there was racial discrimination. This was further facilitated through segregated city development. *Blockbusting* and *redlining* were racially discriminatory and illegal practices of pressuring a party to sell a home to families of a minority race or ethnic background, then using fear tactics to cause others in the neighborhood to sell at low prices. Real estate agents and insurance agents also *racially steered* customers to purchase homes in certain areas depending on their race or refusing to make mortgage loans or issue insurance policies.
Central cities were dismissed in the 1980s, began to regrow in popularity in the 1990s and now are the destination spot for the people to be, culturally and entertainment-wise. However, housing prices have raised so much, most of the desirable areas are already bought or too expensive to be acquired. So people begin looking elsewhere for affordable housing. *Gentrification* is the process of rehabilitating old structures in deteriorated areas instead of demolishing the old structures to build new ones. Gentrification is usually done in formerly low-income areas by middle- and high-income groups. It gives an economic boost to the area, but it also raises property values which push out the poorer, often minority groups that settled there during the redlining and blockbusting times mentioned above. Gentrification creates tension between long-time residents and newcomers. Sometimes, empty or abandoned areas are razed (demolished to the ground) and a new development built right on top.

On the other hand, as cities decentralize by moving industry outward, people leave the city as well in a movement known as *counter-urbanization*. Some move to suburbs, but some families decide to move to rural areas. Approximately one in six Americans live in a master-planned community. Inside these master-planned communities, one can find gated subsets where a fence or wall manned by a code or security guard denies access except to a few individuals. More than 9 million high-income Americans live in these types of communities. Troubled by inner-city crime, people seek safety within their walled compounds. Gated communities can also be found around the world as well.

**Reading Assignment:**
Read pages 490-495 in your textbook, taking notes.
Land use and environmental problems linked to the growth and decline of urban communities include suburban sprawl, low sanitation, air and water quality, remediation and redevelopment of brown fields (former industrial areas), farmland protection, and energy use.

*Suburban sprawl, or suburbanization,* is the growth of cities outside of an urban area. They grow in the galactic/edge city model because of the interstate highway and the availability of goods outside of the city. Cheaper land costs allow families to have more room for the American dream - a single family, detached home. The effects of suburbanization are declining inner city use, uneven development, declining green spaces and pollution as urban sprawl continues. One effect of suburbanization is *placelessness*; this is the feeling that you are in the same place wherever you go because the landscape is homogenous. For example, a strip mall with Chili’s, Barnes and Noble, and Target looks the same in Minneapolis as it does in Houston. This conflicts with the sense of place that humans have imprinted onto their environment.

Another consequence of suburban sprawl is the encroachment on farmland and green spaces. As developers look for new places to locate subdivision, they clear the forests and brush. They also buy farmland and push the farmers even farther out of the urban zone.

In developing countries, these areas outside of the city-center are called slums, ghettos or shantytowns. They are a district of a city marked by poverty and inferior living conditions. In Brazil, they are called *favelas* (like the interactive you viewed at the beginning of the unit). In Peru, they are called *barriadas.* Either way, these areas are a mixture of permanent and temporary residents, many who take part in the informal economy. Some are squatters, where they just put up a homemade structure on a piece of land and occupy it, while others pay rent to owners who allow them to stay in the precarious housing situations. Some have access to water and electricity, and others do not. The municipalities have a hard time keeping up with the growth (like you saw in the GIS video), and some cities don’t even try. These people are also some of the most vulnerable to environmental catastrophes as floods and earthquakes can easily destroy their fragile homes. Many of these houses are single-mother *female-headed households* who struggle to raise their children and bring in income at the same time. The lack of infrastructure leads to high levels of pollution and low levels of air and water quality.

**Reading Assignment:**
Read pages 480-483 in your textbook, taking notes.
Read pages 346-348 in your exam prep book, taking notes.
Traffic congestion is a big topic of environmental sustainability discussion. Along with the smog and greenhouse gasses emitted by cars, people spend much of their time in their commutes. *Smart growth* works to try to reduce the impact on the environment and increase the quality of life. Smart growth communities design houses with smaller lawns (less water), solar panels, recycling pickup, front porches and walkable neighborhoods, to name a few. The Mueller development in Austin, Texas is a good example of the smart growth/new urbanism action.

*New Urbanism* is the term given to the movement to design living communities that are attached to mass transit and *mixed use* buildings that contain both housing and living spaces, close to people’s work. This has pushed cities to re-examine their zoning laws that keep business and residential areas separate in the United States. To alleviate the fear of the negative consequences of gentrification, many of these new urban developments also are required to provide a percentage of housing and low-to-middle income residents.

Can you find examples of New Urbanism and new Mixed Use communities around you?

**Reading Assignment:**
Read pages 348-351 in your exam prep book, taking notes.
Week 4, Day 1 – Practice

Week 4, Day 2 – Free Response Practice

1. In the last half of the twentieth century some United States cities experienced decline due to deindustrialization and loss of population due to suburbanization. To counteract the inner city decline, urban planners have embraced New Urbanism and mixed-use development to attract residents back to the city.
   
   A. Identify TWO goals of the New Urbanism movement.
   B. Explain the difference between mixed-use development and traditional zoning practices.
   C. Explain TWO benefits of mixed-use development in promoting urban growth.
   D. Explain TWO criticisms of New Urbanism.
Week 4, Day 3 – Self-Assessment Multiple Choice

1. When did cities (like Mesopotamia) originate?
   a. 400 years ago
   b. 4000 years ago
   c. 40000 years ago
   d. 400000 years ago

2. The origins of towns come from situation characteristics: ____________, a concentration of people, specialization of people in areas other than agriculture, and government.
   a. farms
   b. a permanent community
   c. rural land

3. The geographic term related to the study of the growth and diffusion of the urban lifestyle is
   a. agribusiness.
   b. Industrialization.
   c. globalization.
   d. distance decay.
   e. urbanization.

4. The smallest, least complex settlement in the urban hierarchy is the
   a. city.
   b. megacity.
   c. town.
   d. village.
   e. hamlet.

5. Baghdad has a population of 7.2 million. The second largest city in Iraq is Basra, with a population of 2 million. The third largest city, Al Mawsil al Jadidah, also has a population of 2 million. Baghdad is an example of a(n)
   a. edge city.
   b. megalopolis.
   c. primate city.
   d. megacity.
   e. perifericos.

6. The reason for the high interaction of Mexico and the United States, as opposed to Honduras and the United States, is best explained by the geographic theory of
   a. Rank-Size Rule.
   b. Gravity Model.
   c. Environmental Determinism.
   d. Core-Periphery.
   e. Gentrification.

7. Christaller’s central place theory explains that settlements will form in a triangular/hexagonal lattice, with the geometric shapes forming
   a. agricultural areas.
   b. transport routes.
   c. uneven hinterlands.
   d. planned communities.
   e. market centers.
8. The concentric zone model is portrayed as a series of rings, with the outer-most ring being the
   a. zone of transition.
   b. commuter zone.
   c. working-class zone.
   d. factory zone.
   e. central business district.

9. Because of European compactness, well-developed infrastructure, such as subway systems, is important. In the United States, sprawl is countered by each family having one or more cars.
   a. True
   b. False

10. Instead of a traditional CBD, the African city traditionally centers around the colonial port.
    a. True
    b. False

11. Gentrification is
    a. when older people are moved to nursing homes.
    b. a controversial economic boost to a dilapidated urban area.
    c. the best way to bring in tourists.
    d. a movement to bring mass transit to the suburbs.

12. An example of a “forward capital” is moving the capital of Dar Es Salaam to Dodoma in Tanzania, Brasilia in Brazil, and Abuja in Nigeria.
    a. True
    b. False

13. Which of the following is MOST likely to live in the suburbs?
    a. young single woman
    b. older married couple
    c. middle-aged family with children
    d. young family with no children
    e. young single man

14. The planned mixed-use Mueller development in Austin, Texas that has houses with smaller lawns (less water), solar panels, recycling pick-up, front porches and walkable neighborhoods, is a good example of
    a. urbanization
    b. new urbanism
    c. suburbanization
    d. sprawl
    e. slums

15. In developing nations such as Thailand, large numbers of individuals leave rural areas mainly to find work in
    a. sites for religious study.
    b. agricultural communes.
    c. academic centers.
    d. small and medium-size villages.
    e. large cities.
Week 4, Day 4 – Additional Practice

Complete the Progress Check if your teacher has assigned it on AP Classroom.

Read page 357 in your exam prep book, taking notes.
The last part of the essay is all you - it's the application of pathos. Bringing it all back to the SO WHAT? Human Geography is all about the SO WHAT. Who really cares about the demographic transition model if we don't have an underlying compassion for the people that are being graphed? We have to care that fewer babies are dying and more mom are getting educated. We care that quality of life is rising. That is the last part, pathos, the connection to human emotion. So as you connect that pathos, you connect it to its area of economic impact, social impact, environmental impact, or political impact. Like the famous Alec Baldwin scene, ABC "Always Be Closing," you need to ABESPN "Always Be thinking about ESPN".
The map and table above show the geographic location, population growth, and projected growth of Mexico’s most populous cities.

A. Define the following terms and describe how each relates to Mexico’s urban geography.
   
   - Primate city
   - Rank-size rule

B. Explain TWO positive effects of primate cities on a country’s economic development and TWO different negative effects of primate cities on a country’s economic development.

Rubric and Sample Student Responses:
https://secure-media.collegeboard.org/apc/ap11_human_geo_q1.pdf