Topic, Big Idea, and Enduring Understanding	Essential Knowledge	Citations in eBook
	UNIT 1: Thinking Geographically	
Topic 1.1: Introduction to Maps  BI-2: Impacts and Interactions	IMP-1.A.1: Types of maps include reference maps and thematic maps.	23-25
IMP-1: Geographers use maps and data to depict relationships of time, space, and scale.	IMP-1.A.2: Types of spatial patterns represented on maps include absolute and relative distance and direction, clustering, dispersal, and elevation.	7, 10, 16-17, 23
	IMP-1.A.3: All maps are selective in information; map projections inevitably distort spatial relationships in shape, area, distance, and direction.	22, 25, 465-473
Topic: 1.2: Geographic Data	IMP-1.B.1: Data may be gathered in the field by organizations or by individuals.	8, 25-28, 122
BI-2: Impacts and Interactions  IMP-1: Geographers use maps and data to depict relationships of time, space, and scale.	IMP-1.B.2: Geospatial technologies include geographic information systems (GIS), satellite navigation systems, remote sensing, and online mapping and visualization.	25-28
	IMP-1.B.3: 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.	2-5
Topic: 1.3: The Power of Geographic Data	IMP-1.C.1: Geospatial and geographical data, including census data and satellite imagery, are	25-28
BI-2: Impacts and Interactions	used at all scales for personal, business and organizational, and governmental decision-making	
IMP-1: Geographers use maps and data to depict relationships of time, space, and scale.	purposes.	
Topic: 1.4: Spatial Concepts	PSO-1.A.1: Spatial concepts include absolute and relative location, space, place, flows, distance	2-4, 6-7, 9, 14-17, 20, 27, 57, 60, 66-67
BI-1: Patterns and Spatial Organization	decay, time-space compression, and pattern.	
PSO-1: Geographers analyze relationships among and between places to reveal important spatial patterns.		

Topic: 1.5: Human Environmental Interaction	PSO-1.B.1: Concepts of nature and society include sustainability, natural resources, and land use.	2, 19, 26, 38-39, 116, 248, 253, 263-265, 274, 298, 323-324, 442
BI-1: Patterns and Spatial Organization		200 200, 27 1, 200, 020 02 1, 112
PSO-1: Geographers analyze relationships among and between places to reveal important spatial patterns.	PSO-1.B.2: Theories regarding the interaction of the natural environment with human societies have evolved from environmental determinism to possibilism.	39
Topic: 1.6: Scales of Analysis  BI-1: Patterns and Spatial Organization	PSO-1.C.1: Scales of analysis include global, regional, national, and local.	2, 11, 21-22
PSO-1: Geographers analyze relationships among and between places to reveal important spatial patterns.	PSO-1.D.1: Patterns and processes at different scales reveal variations in, and different interpretations of, data.	21-22
Topic: 1.7: Regional Analysis  BI-3: Spatial Processes and Societal Change	SPS-1.A.1: Regions are defined on the basis of one or more unifying characteristics or on patterns of activity.	17-20
SPS-1: Geographers analyze complex issues and	SPS-1.A.2: Types of regions include formal, functional, and perceptual/vernacular.	17-20
relationships with a distinctively spatial perspective.	SPS-1.A.3: Regional boundaries are transitional and often contested and overlapping.	17-20
	SPS-1.A.4: Geographers apply regional analysis at local, national, and global scales.	11, 17-20
UNIT 2: P	opulation Migration Patterns and Processes	
Topic: 2.1: Population Distribution	PSO-2.A.1: Physical factors (e.g., climate, land forms, water bodies) and human factors (e.g., culture,	12, 118-120
BI-1: Patterns and Spatial Organization	economics, history, politics) influence the distribution of population.	
PSO-2: Understanding where and how people live is essential to understanding global cultural, political, and economic patterns.	PSO-2.A.2: Factors that illustrate patterns of population distribution vary according to the scale of analysis.	118-120
	PSO-2.B.1: The three methods for calculating population density are arithmetic, physiological, and agricultural.	120-122

	PSO-2.C.1: The method used to calculate population density reveals different information about the pressure the population exerts on the land.	120-122
Topic: 2.2: Consequences of Population Distribution  BI-1: Patterns and Spatial Organization	PSO-2.D.1: Population distribution and density affect political, economic, and social processes, including the provision of services such as medical care.	82, 118-122, 368, 375, 424, 446
Bi-i. I atterns and Spana Organization		
PSO-2: Understanding where and how people live is essential to understanding global cultural, political, and economic patterns.	PSO-2.D.2: Population distribution and density affect the environment and natural resources; this is known as carrying capacity.	44, 122-125
Topic: 2.3: Population Composition  BI-1: Patterns and Spatial Organization	PSO-2.E.1: Patterns of age structure and sex ratio vary across different regions and may be mapped and analyzed at different scales.	108, 116-117, 126, 378
PSO-2: Understanding where and how people live is essential to understanding global cultural, political, and economic patterns.	PSO-2.F.1: Population pyramids are used to assess population growth and decline and to predict markets for goods and services.	106-111, 125-126
Topic: 2.4: Population Dynamics  BI-2: Impacts and Interactions	IMP-2.A.1: Demographic factors that determine a population's growth and decline are fertility, mortality, and migration.	102-106
IMP-2: Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and	IMP-2.A.2: Geographers use the rate of natural increase and population-doubling time to explain population growth and decline.	109-111
political factors.	IMP-2.A.3: Social, cultural, political, and economic factors influence fertility, mortality, and migration rates.	102-106, 111-116
Topic: 2.5: The Demographic Transition Model  BI-2: Impacts and Interactions	IMP-2.B.1: The demographic transition model can be used to explain population change over time.	111-114

IMP-2: Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.	IMP-2.B.2: The epidemiological transition explains causes of changing death rates.	113-114
Topic: 2.6: Malthusian Theory  BI-2: Impacts and Interactions  IMP-2: Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.	IMP-2.B.3: Malthusian theory and its critiques are used to analyze population change and its consequences.	123-125, 251, 255, 259
Topic: 2.7: Population Policies  BI-3: Spatial Processes and Societal Change  SPS-2: Changes in population have long- and short-term effects on a place's economy, culture, and politics.	SPS-2.A.1: Types of population policies include those that promote or discourage population growth, such as pronatalist, antinatalist, and immigration policies.	102, 123, 125-126, 177-180
Topic: 2.8: Women and Demographic Change  BI-3: Spatial Processes and Societal Change  SPS-2: Changes in population have long- and	SPS-2.B.1: Changing social values and access to education, employment, health care, and contraception have reduced fertility rates in most parts of the world.	102-103, 117, 125-126
short-term effects on a place's economy, culture, and politics.	SPS-2.B.2: Changing social, economic, and political roles for females have influenced patterns of fertility, mortality, and migration, as illustrated by Ravenstein's laws of migration.	91-93
Topic: 2.9: Aging Populations  BI-3: Spatial Processes and Societal Change	SPS-2.C.1: Population aging is determined by birth and death rates and life expectancy.	100-101, 104-106
SPS-2: Changes in population have long- and short-term effects on a place's economy, culture, and politics.	SPS-2.C.2: An aging population has political, social, and economic consequences including the dependency ratio.	109, 113, 126-127

Topic: 2.10: Causes of Migration  BI-2: Impacts and Interactions	IMP-2.C.1: Migration is commonly divided into push factors and pull factors.	85-86, 91
bi-2. Impacts and interactions		
IMP-2: Changes in population are due to mortality,		
fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.	IMP-2.C.2: Push/pull factors and intervening opportunities/obstacles can be cultural, demographic, economic, environmental, or political.	64-65, 78, 82, 85-86, 91
Topic: 2.11: Forced and Voluntary Migration	IMP-2.D.1: Forced migrations include slavery and events that produce refugees, internally displaced	57, 70, 82-84
BI-2: Impacts and Interactions	persons, and asylum seekers.	
IMP-2: Changes in population are due to mortality,		
fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.	IMP-2.D.2: Types of voluntary migrations include transnational, transhumance, internal, chain, step, guest worker, and rural-to-urban.	57, 82-83, 86, 92, 125, 187, 192- 194, 198-199, 203-204, 254
Topic: 2.12: Effects of Migration	IMP-2.E.1: Migration has political, economic, and cultural effects.	57-60, 199, 203-207
BI-2: Impacts and Interactions		
IMP-2: Changes in population are due to mortality, fertility, and migration, which are influenced by the		
interplay of environmental, economic, cultural, and political factors.		
•	IT 3: Cultural Patterns and Processes	
Topic: 3.1: Introduction to Culture	PSO-3.A.1: Culture comprises the shared practices,	34-35
BI-1: Patterns and Spatial Organization	technologies, attitudes, and behaviors transmitted by a society.	
Di-1. 1 diterns and Spatial Organization	PSO-3.A.2: Cultural traits include such things as	35-38
PSO-3: Cultural practices vary across geographical locations because of physical geography and	food preferences, architecture, and land use.	
available resources.	PSO-3.A.3: Cultural relativism and ethnocentrism are different attitudes toward cultural difference.	177

Topic: 3.2: Cultural Landscapes	PSO-3.B.1: Cultural landscapes are combinations of	12-14, 39, 41, 48, 150, 155-156,
	physical features, agricultural and industrial	160-162, 165-166, 210, 212-213,
BI-1: Patterns and Spatial Organization	practices, religious and linguistic characteristics,	234
	evidence of sequent occupancy, and other	201
PSO-3: Cultural practices vary across geographical	expressions of culture including traditional and	
locations because of physical geography and	postmodern architecture and land-use patterns.	
available resources.	PSO-3.C.1: Attitudes toward ethnicity and gender, including the role of women in the workforce; ethnic	74, 149-150, 177, 195-198, 261, 340-343, 411
	neighborhoods; and indigenous communities and	340-343, 411
	lands help shape the use of space in a given	
	society.	
Topic: 3.3: Cultural Patterns	PSO-3.D.1: Regional patterns of language, religion,	18, 35, 38, 133-135, 139-143, 147-
	and ethnicity contribute to a sense of place,	148, 151-155, 174, 180, 182-194
BI-1: Patterns and Spatial Organization	enhance placemaking, and shape the global	
	cultural landscape.	
PSO-3: Cultural practices vary across geographical	PSO-3.D.2: Language, ethnicity, and religion are	18, 35, 38, 133-135, 139-143, 147-
locations because of physical geography and available resources.	factors in creating centripetal and centrifugal forces.	148, 151-155, 174, 180, 182-194
available resources.		
Topic: 3.4: Types of Diffusion	IMP-3.A.1: Relocation and expansion–including	54-57
DI 2 Castial Day and a second Castial Classes	contagious, hierarchical, and stimulus expansion—	
BI-3: Spatial Processes and Societal Change	are types of diffusion.	
IMP-3: The interaction of people contributes to the		
spread of cultural practices.		
Topic: 3.5: Historical Causes of Diffusion	SPS-3.A.1: Interactions between and among cultural	58-59, 144
	traits and larger global forces can lead to new forms	
BI-2: Impacts and Interactions	of cultural expression; for example, creolization and	
	lingua franca.	
SPS-3: Cultural ideas, practices, and innovations	SPS-3.A.2: Colonialism, imperialism, and trade	48-51, 176, 333-334, 386
change or disappear over time.	helped to shape patterns and practices of culture.	
Topic: 3.6: Contemporary Causes of Diffusion	SPS-3.A.3: Cultural ideas and practices are socially	38, 93-94, 100, 111-112, 114-115, 117,
	constructed and change through both small-scale	187, 198, 211, 218-222, 318
BI-3: Spatial Processes and Societal Change	and large-scale processes such as urbanization and	
	globalization. These processes come to bear on	
SPS-3: Cultural ideas, practices, and innovations	culture through media, technological change,	
change or disappear over time.	politics, economics, and social relationships.	

	SPS-3.A.4: Communication technologies, such as the internet and the time-space convergence, are reshaping and accelerating interactions among people; changing cultural practices, as in the increasing use of English and the loss of indigenous languages; and creating cultural convergence and divergence.	14, 51, 57, 64, 76, 138-140, 174, 218-222
Topic: 3.7: Diffusion of Religion and Language	IMP-3.B.1: Language families, languages, dialects, world religions, ethnic cultures, and gender roles	133-135, 138-144, 155-166, 182-184, 199-203
BI-2: Impacts and Interactions	diffuse from cultural hearths.	100 110 151 100
IMP-3: The interaction of people contributes to the spread of cultural practices.	IMP-3.B.2: Diffusion of language families, including Indo-European, and religious patterns and distributions, can be visually represented on maps, in charts and toponyms, and in other representations.	132-149, 151-168
	IMP-3.B.3: Religions have distinct places of origin from which they diffused to other locations through different processes. Practices and belief systems impacted how widespread the religion diffused.	54-57, 153-168
	IMP-3.B.4: Universalizing religions, including Christianity, Islam, Buddhism, and Sikhism, are spread through expansion and relocation diffusion.	54-57, 153-168
	IMP-3.B.5: Ethnic religions, including Hinduism and Judaism, are generally found near the hearth or spread through relocation diffusion.	155-157, 163-165
Topic: 3.8: Effects of Diffusion	SPS-3.B.1: Acculturation, assimilation, syncretism, and multiculturalism are effects of the diffusion of	60, 167, 180-182
BI-3: Spatial Processes and Societal Change	culture.	
SPS-3: Cultural ideas, practices, and innovations change or disappear over time.		
	IT 4: Political Patterns and Processes	
Topic: Introduction to Political Geography	PSO-4.A.1: Independent states are the primary building blocks of the world political map.	395-396
BI-1: Patterns and Spatial Organization		
PSO-4: The political organization of space results from historical and current processes, events, and ideas.	PSO-4.A.2: Types of political entities include nations, nation-states, stateless nations, multinational states, multistate nations, and	396-397

	autonomous and semiautonomous regions, such as American Indian reservations.	
Topic: 4.2: Political Processes  BI-1: Patterns and Spatial Organization	PSO-4.B.1: The concepts of sovereignty, nation- states, and self-determination shape the contemporary world.	395-397, 410
PSO-4: The political organization of space results from historical and current processes, events, and ideas.	PSO-4.B.2: Colonialism, imperialism, independence movements, and devolution along national lines have influenced contemporary political boundaries.	183, 333-334, 397-400, 411-412
Topic: 4.3: Political Power and Territoriality  BI-1: Patterns and Spatial Organization	PSO-4.C.1: Political power is expressed geographically as control over people, land, and resources, as illustrated by neocolonialism, shatterbelts, and choke points.	335-336, 409
PSO-4: The political organization of space results from historical and current processes, events, and ideas.	PSO-4.C.2: Territoriality is the connection of people, their culture, and their economic systems to the land.	71-72, 147-148
Topic: 4.4: Defining Political Boundaries  BI-2: Impacts and Interactions  IMP-4: Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been negotiated or imposed.	IMP-4.A.1: Types of political boundaries include relic, superimposed, subsequent, antecedent, geometric, and consequent boundaries.	405-406
Topic: 4.5: The Function of Political Boundaries  BI-2: Impacts and Interactions	IMP-4.B.1: Boundaries are defined, delimited, demarcated, and administered to establish limits of sovereignty, but they are often contested.	405-408
IMP-4: Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been	IMP-4.B.2: Political boundaries often coincide with cultural, national, or economic divisions. However, some boundaries are created by demilitarized zones or policy, such as the Berlin Conference.	397-399
negotiated or imposed.	IMP-4.B.3: Land and maritime boundaries and international agreements can influence national or regional identity and encourage or discourage international or internal interactions and disputes over resources.	406-408, 410-412, 415

	IMP-4.B.4: The United Nations Convention on the Law of the Sea defines the rights and responsibilities of nations in the use of international waters, established territorial seas, and exclusive economic zones.	415-416
Topic: 4.6: Internal Boundaries  BI-2: Impacts and Interactions	IMP-4.B.5: Voting districts, redistricting, and gerrymandering affect election results at various scales.	423-428
IMP-4: Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been negotiated or imposed.		
Topic: 4.7: Forms of Governance  BI-2: Impacts and Interactions	IMP-4.C.1: Forms of governance include unitary states and federal states.	403-404
IMP-4: Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been negotiated or imposed.	IMP-4.D.1: Unitary states tend to have a more top- down, centralized form of governance, while federal states have more local-based, dispersed power centers.	404
Topic: 4.8: Defining Devolutionary Factors  BI-3: Spatial Processes and Societal Change  SPS-4: Political, economic, cultural, or technological changes can challenge state sovereignty.	SPS-4.A.1: Factors that can lead to the devolution of states include the division of groups by physical geography, ethnic separatism, ethnic cleansing, terrorism, economic and social problems, and irredentism.	410-414
Topic: 4.9: Challenges to Sovereignty  BI-3: Spatial Processes and Societal Change  SPS-4: Political, economic, cultural, or technological changes can challenge state sovereignty.	SPS-4.B.1: Devolution occurs when states fragment into autonomous regions; subnational politicalterritorial units, such as those within Spain, Belgium, Canada, and Nigeria; or when states disintegrate, as happened in Eritrea, South Sudan, East Timor, and states that were part of the former Soviet Union.	410-414
	SPS-4.B.2: Advances in communication technology have facilitated devolution, supranationalism, and democratization.	414

	SPS-4.B.3: Global efforts to address transnational and environmental challenges and to create economies of scale, trade agreements, and military alliances help to further supranationalism.	414-417
	SPS-4.B.4: Multinational organizations—including the United Nations (UN), North Atlantic Treaty Organization (NATO), European Union (EU), Association of Southeast Asian Nations (ASEAN), Arctic Council, and African Union—can challenge state sovereignty by limiting the economic or political actions of member states.	414-421
Topic: 4.10: Consequences of Centrifugal and Centripetal Forces  BI-3: Spatial Processes and Societal Change	SPS-4.C.1: Centrifugal forces may lead to failed states, uneven development, stateless nations, and ethnic nationalist movements.	410-414
SPS-4: Political, economic, cultural, or technological changes can challenge state sovereignty.	SPS-4.C.2: Centripetal forces can lead to ethnonationalism, more equitable infrastructure development, and increased cultural cohesion	408-410
UNIT 5: Agricu	Iture and Rural Land-Use Patterns and Proce	sses
Topic: 5.1: Introduction to Agriculture  BI-1: Patterns and Spatial Organization	PSO-5.A.1: Agricultural practices are influenced by the physical environment and climatic conditions, such as the Mediterranean climate and tropical climates.	269-270
PSO-5: Availability of resources and cultural practices influence agricultural practices and landuse patterns.	PSO-5.A.2: Intensive farming practices include market gardening, plantation agriculture, and mixed crop/livestock systems.	254-256, 263-267
	PSO-5.A.3: Extensive farming practices include shifting cultivation, nomadic herding, and ranching.	254-255, 263, 267, 269
Topic: 5.2: Settlement Patterns and Survey Methods	PSO-5.B.1: Specific agricultural practices shape different rural land-use patterns.	253-255
BI-1: Patterns and Spatial Organization	PSO-5.B.2: Rural settlement patterns are classified as clustered, dispersed, or linear.	231-232, 354-355

PSO-5: Availability of resources and cultural practices influence agricultural practices and landuse patterns.	PSO-5.B.3: Rural survey methods include metes and bounds, township and range, and long lot.	230-231
Topic: 5.3: Agricultural Origins and Diffusions  BI-3: Spatial Processes and Societal Change	SPS-5.A.1: Early hearths of domestication of plants and animals arose in the Fertile Crescent and several other regions of the world, including the Indus River Valley, Southeast Asia, and Central	44-46, 48-50
SPS-5: Agriculture has changed over time because of cultural diffusion and advances in technology.	America.  SPS-5.B.1: Patterns of diffusion, such as the Columbian Exchange and the agricultural revolutions, resulted in the global spread of various plants and animals.	44-46, 258-260
Topic: 5.4: The Second Agricultural Revolution  BI-3: Spatial Processes and Societal Change  SPS-5: Agriculture has changed over time because	SPS-5.C.1: New technology and increased food production in the second agricultural revolution led to better diets, longer life expectancies, and more people available for work in factories.	57, 111-114, 356
of cultural diffusion and advances in technology.		
Topic: 5.5: The Green Revolution  BI-3: Spatial Processes and Societal Change	SPS-5.D.1: The Green Revolution was characterized in agriculture by the use of high-yield seeds, increased use of chemicals, and mechanized farming.	258-260
SPS-5: Agriculture has changed over time because of cultural diffusion and advances in technology.	SPS-5.D.2: The Green Revolution had positive and negative consequences for both human populations and the environment.	258-260
Topic: 5.6: Agricultural Production Regions  BI-1: Patterns and Spatial Organization	PSO-5.C.1: Agricultural production regions are defined by the extent to which they reflect subsistence or commercial practices	252-257, 260-269
BI-1. Patterns and Spatial Organization	(monocropping or monoculture).	
PSO-5: Availability of resources and cultural practices influence agricultural practices and landuse patterns.	PSO-5.C.2: Intensive and extensive farming practices are determined in part by land costs (bidrent theory).	263-265
Topic: 5.7: Spatial Organization of Agriculture	PSO-5.C.3: Large-scale commercial agricultural operations are replacing small family farms.	265-266

BI-1: Patterns and Spatial Organization PSO-5: Availability of resources and cultural	PSO-5.C.4: Complex commodity chains link production and consumption of agricultural products.	260-262, 283
practices influence agricultural practices and land- use patterns.	PSO-5.C.5: Technology has increased economies of scale in the agricultural sector and the carrying capacity of the land.	258-260
Topic: 5.8: Von Thünen Model  Bl-1: Patterns and Spatial Organization	PSO-5.D.1: Von Thünen's model helps to explain rural land use by emphasizing the importance of transportation costs associated with distance from the market; however, regions of specialty farming	263-265
PSO-5: Availability of resources and cultural practices influence agricultural practices and landuse patterns.	do not always conform to von Thünen's concentric rings.	
Topic: 5.9: The Global System of Agriculture  BI-1: Patterns and Spatial Organization	PSO-5.E.1: Food and other agricultural products are part of a global supply chain.	283
PSO-5: Availability of resources and cultural practices influence agricultural practices and land-	PSO-5.E.2: Some countries have become highly dependent on one or more export commodities.	269-270, 283, 332-333
use patterns.	PSO-5.E.3: The main elements of global food distribution networks are affected by political relationships, infrastructure, and patterns of world trade.	260-270
Topic: 5.10: Consequences of Agricultural Practices  BI-2: Impacts and Interactions	IMP-5.A.1: Environmental effects of agriculture land use include pollution, land cover change, desertification, soil salinization, and conservation efforts.	257, 446-452
IMP-5: Agricultural production and consumption patterns vary in different locations, presenting different environmental, social, economic, and	IMP-5.A.2: Agricultural practices—including slash and burn, terraces, irrigation, deforestation, draining wetlands, shifting cultivation, and pastoral nomadism—alter the landscape	254-256
cultural opportunities and challenges.	IMP-5.A.3: Societal effects of agricultural practices include changing diets, role of women in agricultural production, and economic purpose.	260-261, 340
Topic: 5.11: Challenges of Contemporary Agriculture BI-2: Impacts and Interactions	IMP-5.B.1: Agricultural innovations such as biotechnology, genetically modified organisms, and aquaculture have been accompanied by debates over sustainability, soil and water usage, reductions	258-260, 270
Di-2. impacts and interactions	Tover sustainability, son and water usage, reductions	

IMP-5: Agricultural production and consumption patterns vary in different locations, presenting	in biodiversity, and extensive fertilizer and pesticide use.	
different environmental, social, economic, and cultural opportunities and challenges.	IMP-5.B.2: Patterns of food production and consumption are influenced by movements relating to individual food choice, such as urban farming, community-supported agriculture (CSA), organic farming, value-added specialty crops, fair trade, local-food movements, and dietary shifts.	252, 256-257, 270-271
	IMP-5.B.3: Challenges of feeding a global population include lack of food access, as in cases of food insecurity and food deserts; problems with distribution systems; adverse weather; and land use lost to suburbanization.	257, 325-327, 339-340
	IMP-5.B.4: The location of food-processing facilities and markets, economies of scale, distribution systems, and government policies all have economic effects on food-production practices.	249-252, 260-262, 283
Topic: 5.12: Women in Agriculture	IMP-5.C.1: The role of females in food production, distribution, and consumption varies in many places	261, 340-341
BI-2: Impacts and Interactions  IMP-5: Agricultural production and consumption patterns vary in different locations, presenting different environmental, social, economic, and cultural opportunities and challenges.	depending on the type of production involved.	
UNIT 6: Cities and Urban Land-Use Patterns and Processes		
Topic: 6.1: The Origin and Influences of Urbanization	PSO-6.A.1: Site and situation influence the origin, function, and growth of cities.	355-357
BI-1: Patterns and Spatial Organization		
PSO-6: The presence and growth of cities vary across geographical locations because of physical geography and resources.	PSO-6.A.2: Changes in transportation and communication, population growth, migration, economic development, and government policies influence urbanization.	350, 355-359, 368, 375-382

Topic: 6.2: Cities Across the World  BI-1: Patterns and Spatial Organization	PSO-6.A.3: Megacities and metacities are distinct spatial outcomes of urbanization increasingly located in countries of the periphery and semiperiphery.	350-351
PSO-6: The presence and growth of cities vary across geographical locations because of physical geography and resources.	PSO-6.A.4: Processes of suburbanization, sprawl, and decentralization have created new land-use forms—including edge cities, exurbs, and boomburbs—and new challenges.	375-376
Topic: 6.3: Cities and Globalization  Bl-1: Patterns and Spatial Organization	PSO-6.B.1: World cities function at the top of the world's urban hierarchy and drive globalization.	361, 363
PSO-6: The presence and growth of cities vary across geographical locations because of physical geography and resources.	PSO-6.B.2: Cities are connected globally by networks and linkages and mediate global processes.	360-364, 386-387
Topic: 6.4: The Size and Distribution of Cities  Bl-1: Patterns and Spatial Organization  PSO-6: The presence and growth of cities vary across geographical locations because of physical geography and resources.	PSO-6.C.1: Principles that are useful for explaining urban concepts include rank-size rule, the primate city, the gravity model, and Christaller's central place theory.	68-69, 360-364
Topic: 6.5: The Internal Structure of Cities  BI-1: Patterns and Spatial Organization  PSO-6: The presence and growth of cities vary across geographical locations because of physical geography and resources.	PSO-6.D.1: Models and theories that are useful for explaining internal structures of cities include the Burgess concentric-zone model, the Hoyt sector model, the Harris and Ullman multiple-nuclei model, the galactic city model, bid-rent theory, and urban models drawn from Latin America, Southeast Asia, and Africa.	365-371, 390-391
Topic: 6.6: Density and Land Use  BI-2: Impacts and Interactions  IMP-6: The attitudes and values of a population, as well as the balance of power within that population, are reflected in the built landscape.	IMP-6.A.1: Residential buildings and patterns of land use reflect and shape the city's culture, technological capabilities, cycles of development, and infilling.	365-368, 374

Topic: 6.7: Infrastructure	IMP-6.B.1: The location and quality of a city's infrastructure directly affects its spatial patterns of	357, 364, 382-385
BI-2: Impacts and Interactions	economic and social development.	
IMP-6: The attitudes and values of a population, as well as the balance of power within that population, are reflected in the built landscape.		
Topic: 6.8: Urban Sustainability	IMP-6.C.1: Sustainable design initiatives and zoning	241-242, 383
	practices include mixed land use, walkability,	·
BI-2: Impacts and Interactions	transportation-oriented development, and smart-	
IMP-6: The attitudes and values of a population, as	growth policies, including New Urbanism, greenbelts, and slow-growth cities.	
well as the balance of power within that	IMP-6.D.1: Praise for urban design initiatives	241-242, 381, 383-385, 388
population, are reflected in the built landscape.	includes the reduction of sprawl, improved	2 11 2 12, 00 1, 000 000, 000
	walkability and transportation, improved and	
	diverse housing options, improved livability and promotion of sustainable options. Criticisms include	
	increased housing costs, possible de facto	
	segregation, and the potential loss of historical or	
	place character.	
Topic: 6.9: Urban Data	IMP-6.E.1: Quantitative data from censuses and	350-353
BI-2: Impacts and Interactions	surveys provide information about changes in population composition and size in urban areas.	
bi-2. Impacts and interactions	population composition and size in diban areas.	
IMP-6: The attitudes and values of a population, as	IMP-6.E.2: Qualitative data from field studies and	362, 373, 378, 380
well as the balance of power within that	narratives provide information about individual	302, 373, 376, 360
population, are reflected in the built landscape.	attitudes toward urban change.	
Topic: 6.10: Challenges of Urban Changes	SPS-6.A.1: As urban populations move within a city,	371-372, 374, 376-377
Topic. 0.10. Challenges of Orban Changes	economic and social challenges result, including	371-372, 374, 370-377
BI-3: Spatial Processes and Societal Change	issues related to housing and housing	
	discrimination such as redlining, blockbusting, and	
SPS-6: Urban areas face unique economic,	affordability; access to services; rising crime;	
political, cultural, and environmental challenges.	environmental injustice; and the growth of disamenity zones or zones of abandonment.	
	SPS-6.A.2: Squatter settlements and conflicts over	388-390
	land tenure within large cities have increased.	

	SPS-6.A.3: Responses to economic and social challenges in urban areas can include inclusionary zoning and local food movements	252, 374	
	SPS-6.A.4: Urban renewal and gentrification have both positive and negative consequences.	381-382	
	SPS-6.A.5: Functional and geographic fragmentation of governments—the way government agencies and institutions are dispersed between state, county, city, and neighborhood levels—presents challenges in addressing urban issues.	424	
Topic: 6.11: Challenges of Urban Sustainability  BI-3: Spatial Processes and Societal Change  SPS-6: Urban areas face unique economic,	SPS-6.B.1: Challenges to urban sustainability include suburban sprawl, sanitation, climate change, air and water quality, the large ecological footprint of cities, and energy use.	327-328, 368-369, 437-439, 446	
political, cultural, and environmental challenges.	SPS-6.B.2: Responses to urban sustainability challenges can include regional planning efforts, remediation and redevelopment of brownfields, establishment of urban growth boundaries, and farmland protection policies.	343, 377-378, 383	
UNIT 7: Industrial and Economic Development Patterns and Processes			
Topic: 7.1: The Industrial Revolution  BI-3: Spatial Processes and Societal Change	SPS-7.A.1: Industrialization began as a result of new technologies and was facilitated by the availability of natural resources.	13, 290, 307	
SPS-7: Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven	SPS-7.A.2: As industrialization spread, it caused food supplies to increase and populations to grow; it allowed workers to seek new industrial jobs in the cities and changed class structures.	111-113, 248	
development.	SPS-7.A.3: Investors in industry sought out more raw materials and new markets, a factor that contributed to the rise of colonialism and imperialism.	333-334	
Topic: 7.2: Economic Sectors and Patterns	SPS-7.B.1: The different economic sectors—including primary, secondary, tertiary, quaternary,	248-249	
BI-3: Spatial Processes and Societal Change	and quinary—are characterized by distinct development patterns.		

SPS-7: Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.	SPS-7.B.2: Labor, transportation (including shipping containers), the break-of-bulk point, least cost theory, markets, and resources influence the location of manufacturing, such as core, semiperiphery, and periphery locations.	290-297, 335-336
Topic: 7.3: Measures of Development  BI-3: Spatial Processes and Societal Change  SPS-7: Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.	SPS-7.C.1: Measures of social and economic development include Gross Domestic Product (GDP); Gross National Product (GNP); 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 material energy; and literacy rates.	320-332
, and the second	SPS-7.C.2: Measures of gender inequality, such as the Gender Inequality Index (GII), include reproductive health, indices of empowerment, and labor-market participation.	343-344
	SPS-7.C.3: The Human Development Index (HDI) is a composite measure used to show spatial variation among states in levels of development.	343-345
Topic: 7.4: Women and Economic Development  BI-3: Spatial Processes and Societal Change	SPS-7.D.1: The roles of women change as countries develop economically.	340-343
SPS-7: Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven	SPS-7.D.2: Although there are more women in the workforce, they do not have equity in wages or employment opportunities.	340-343
development.	SPS-7.D.3: Microloans have provided opportunities for women to create small local businesses, which have improved standards of living.	341-342
Topic: 7.5: Theories of Development  BI-3: Spatial Processes and Societal Change  SPS-7: Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.	SPS-7.E.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.	334-336

BI-1: Patterns and Spatial Organization PSO-7: Economic and social development happen at different times and rates in different places.  PSO-7: Economic and social development happen at different times and rates in different places.  PSO-7: Economic and social development happen at different times and rates in different places.  PSO-7: A: Global financial crises (e.g., debt crises), international lending agencies (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.  PSO-7.A.5: Outsourcing and economic restructuring have led to a decline in jobs in core regions and an increase in jobs in newly industrialized countries.  PSO-7.A.6: 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.  PSO-7.A.7: The contemporary economic landscape has been transformed by post-Fordist methods of production, multiplier effects, economies of scale,	Topic: 7.6: Trade and the World Economy	PSO-7.A.1: Complementarity and comparative advantage establish the basis for trade.	64-66, 289, 299-301
PSO-7: Economic and social development happen at different times and rates in different places.    Spatial connections, and trade relationships, such as the EU, World Trade Organization (WTO) Mercosur, and OPEC, that foster greater globalization.   PSO-7.A.3: Government initiatives at all scales may affect economic development, including tariffs.   PSO-7.A.4: Global financial crises (e.g., debt crises), international lending agencies (e.g., the 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.   PSO-7.A.5: Outsourcing and economic restructuring have led to a decline in jobs in core regions and an increase in jobs in newly industrialized countries.   PSO-7.A.6: In countries outside the core, the growth of industry has resulted in the creation of new manufacturing zones—and the emergence of an international division of labor in which developing countries have lower-paying jobs.   PSO-7.A.7: The contemporary economic landscape has been transformed by post-Fordist methods of production, multiplier effects, economies of scale,	BI-1: Patterns and Spatial Organization	PSO-7.A.2: Neoliberal policies, including free trade	93-94, 336, 417-419
at different times and rates in different places.  the EU, World Trade Organization (WTO) Mercosur, and OPEC, that foster greater globalization.  PSO-7.A.3: Government initiatives at all scales may affect economic development, including tariffs.  PSO-7.A.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.  PSO-7.A.5: Outsourcing and economic restructuring have led to a decline in jobs in core regions and an increase in jobs in newly industrialized countries.  BI-1: Patterns and Spatial Organization  BI-1: Patterns and social development happen at different times and rates in different places.  PSO-7.A.6: 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.  PSO-7.A.7: The contemporary economic landscape has been transformed by post-Fordist methods of production, multiplier effects, economies of scale,	PSO-7: Economic and social development happen		
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has been transformed by post-Fordist methods of production, multiplier effects, economies of scale,			240 200 200 202 204 207 200
production, multiplier effects, economies of scale,			248, 298-299, 303-304, 307-308
just-in-time delivery, the emergence of service sectors, high technology industries, and growth			
poles.			
Topic: 7.8: Sustainable Development IMP-7.A.1: Sustainable development policies attempt   321, 432-433	Tonic: 7.8: Sustainable Development	<u> </u>	221 422 422
to remedy problems stemming from natural-	Topic. 7.0. Sustainable Development		321, 432-433
BI-2: Impacts and Interactions resource depletion, mass consumption, the effects	RI-2: Impacts and Interactions		
of pollution, and the impact of climate change.	Di Z. impacts and interactions		
IMP-7: Environmental problems stemming from IMP-7.A.2: Ecotourism is tourism based in natural 310	IMP-7: Environmental problems stemming from		310
industrialization may be remedied through environments—often environments that are			
sustainable development strategies. threatened by looming industrialization or			
development—that frequently helps to protect the	,		

environment in question while also providing jobs for the local population.	
IMP-7.A.3: The UN's Sustainable Development Goals help measure progress in development, such as small-scale finance and public transportation projects.	320-321