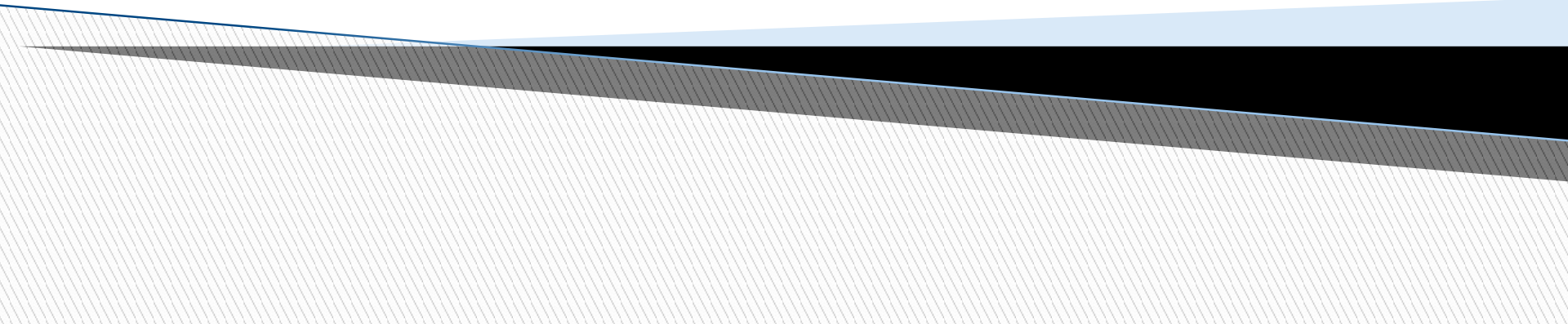
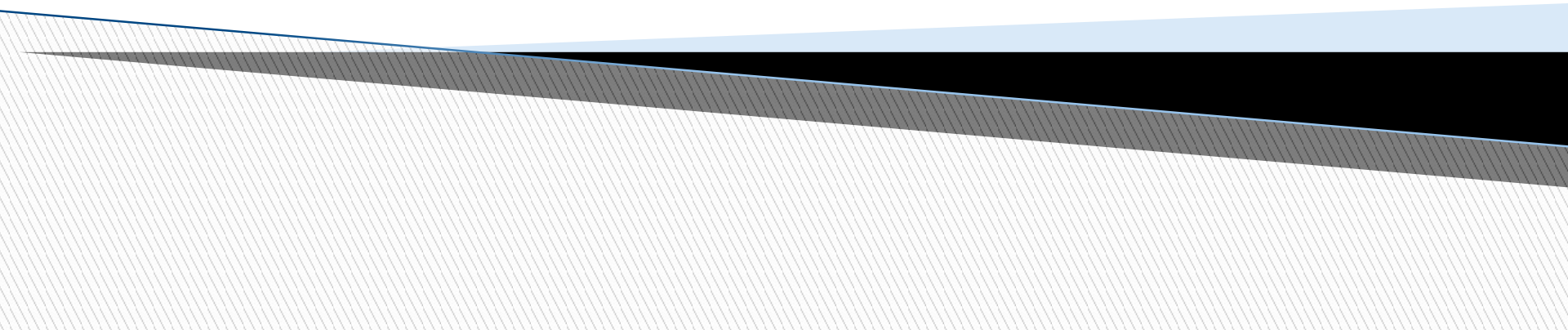


World Geography United States & Canada Notes



Physical



Major Landforms

- ▶ All major landforms are found in U.S. and Canada
- ▶ The two countries share mountain chains and interior plains





United States



Mountains

- ▶ **Appalachian Mountains** – run 1,600 miles from Newfoundland to Alabama
 - include Green and Catskill mountains in the north
 - Blue Ridge and Great Smoky mountains in the south
 - More than 400 million years old
 - Erosion has created gentle slopes & peaks from 1,200–2,400 feet



United States

PHYSICAL GEOGRAPHY







Mountains

- ▶ Rocky Mountains – run 3,000 miles from Alaska to New Mexico
 - Relatively young: 80 million years old
 - Less erosion means rugged, 12,000-foot, snow-covered peaks



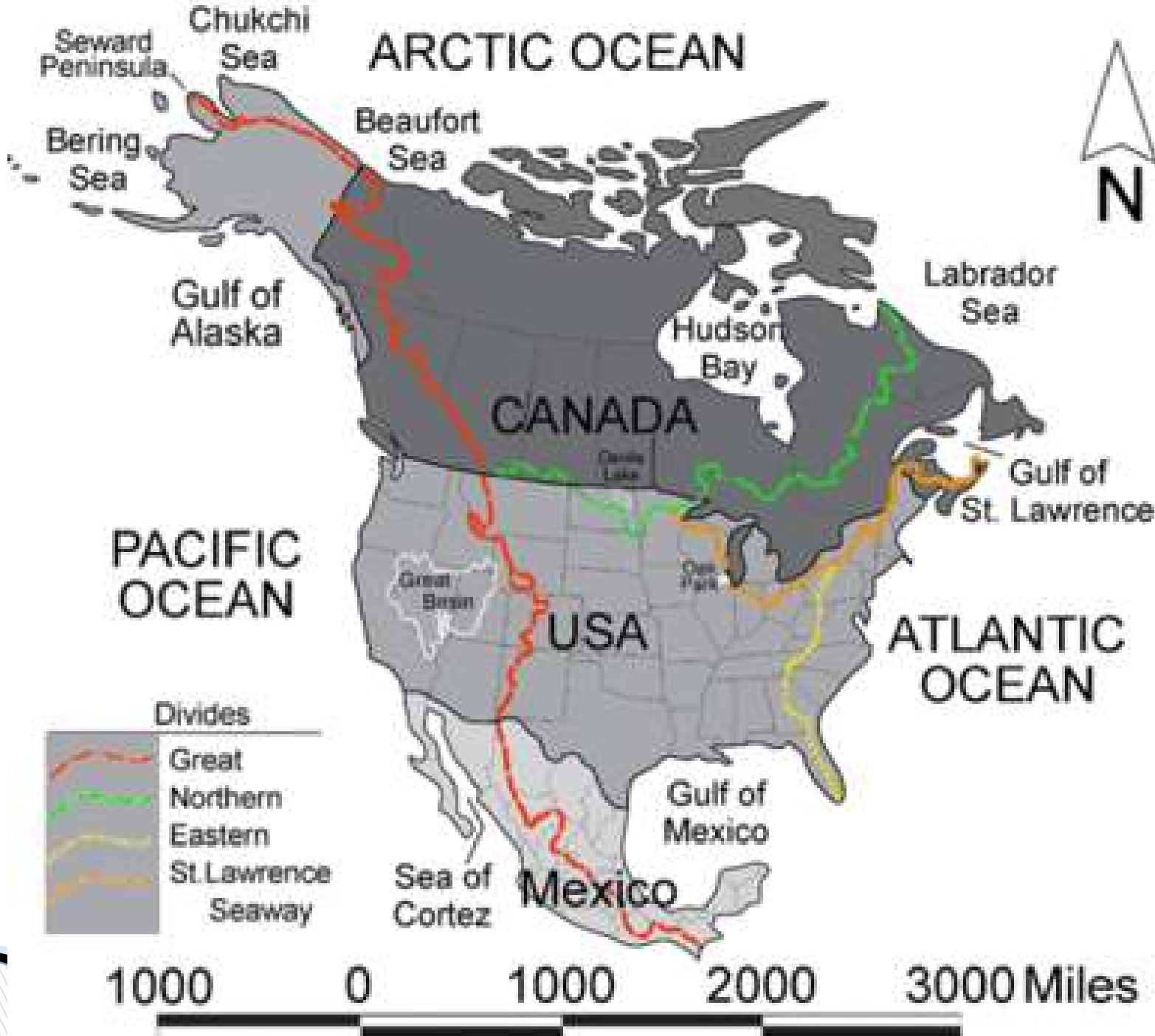




Mountains

- Continental Divide
—the line of highest points along the Rockies & separates rivers that flow eastward from those that flow westward





CONTINENTAL
DIVIDE
ELEV. 7.796



Mountains

- ▶ Mt. McKinley in Alaska is continent's highest peak
- ▶ Other Pacific mountain ranges include Sierra Nevada, Cascade
- ▶ Major earthquake activity in Pacific ranges







United States

PHYSICAL GEOGRAPHY







United States

 National capital



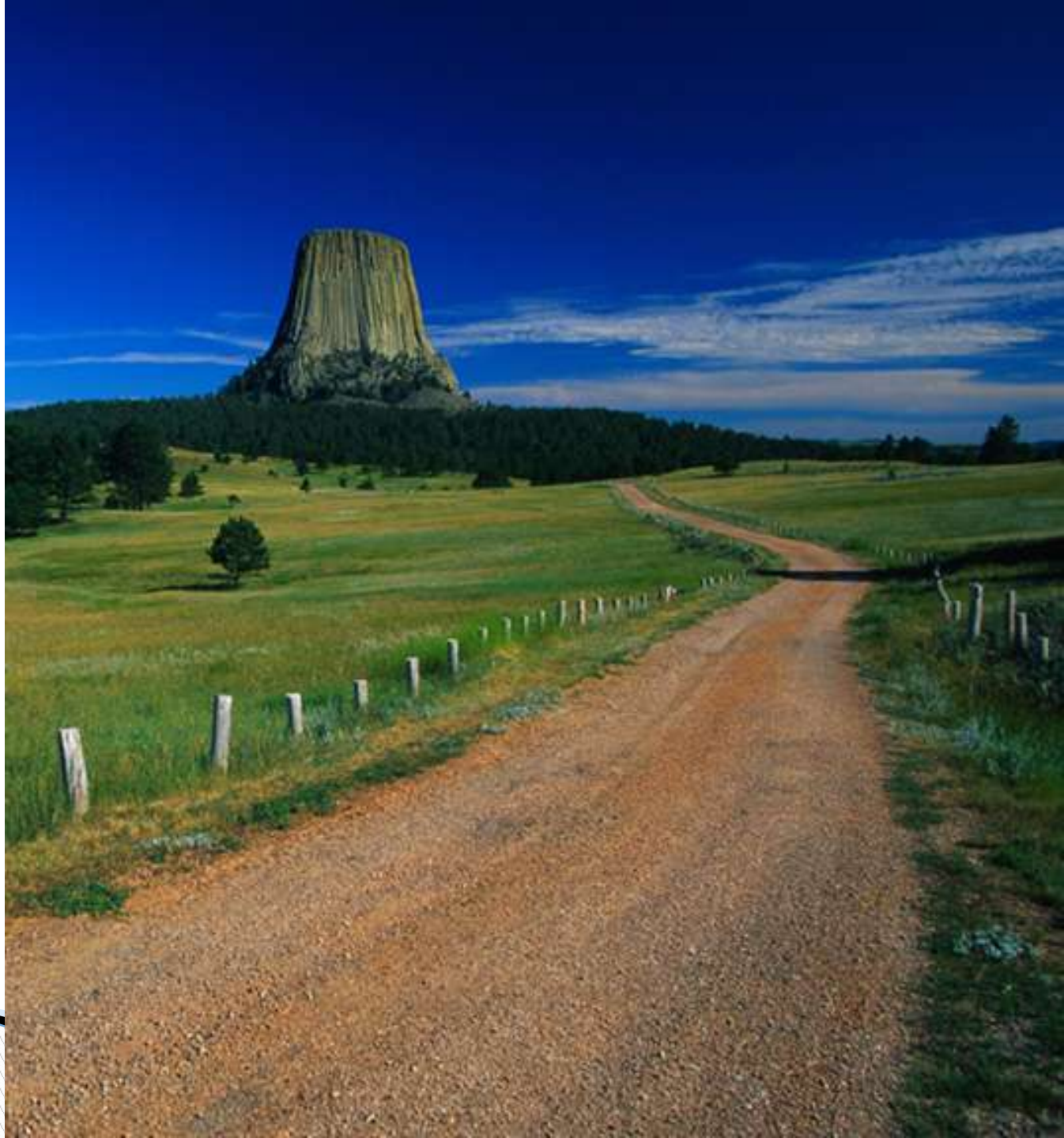
The Interior Lowlands

- ▶ Glaciers leveled the land, left fertile soil
- ▶ Interior Plains – extend from Appalachians to Missouri River
- ▶ Great Plains – extend from Missouri River to Rocky Mountains
- ▶ Canadian Shield – vast, flat area around Hudson Bay















**Photo: Bill Koch, Collection of
Dr. Herbert Kroehl, NGDC**

Oceans and Waterways

- ▶ U.S. and Canada are bounded by: Atlantic, Pacific, Arctic oceans & Gulf of Mexico
- ▶ Countries have many large, inland rivers and lakes that provide transportation, hydroelectric power, irrigation, fresh water, fisheries



Oceans and Waterways

- ▶ Great Lakes – Huron, Ontario, Michigan, Erie, and Superior





Oceans and Waterways

- ▶ Mississippi–
Missouri–Ohio river
system –
continent’s longest
& busiest







Oceans and Waterways

- ▶ Mackenzie River – longest in Canada & crosses Northwest Territories



Eternally Fierce Horizons
CANADA'S NORTHWEST TERRITORIES
Text & Photos by John Holt

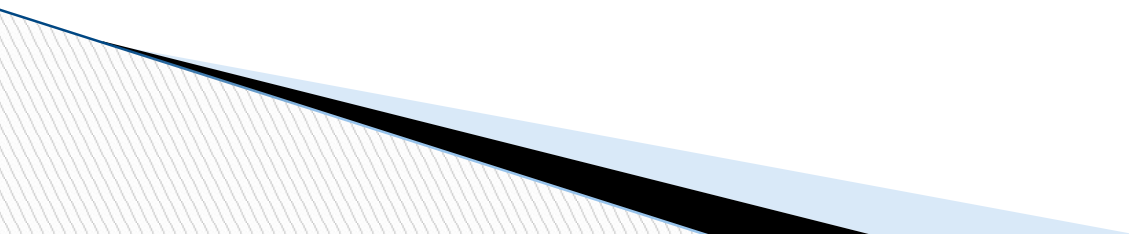




Eternally Fierce Horizons

CANADA'S NORTHWEST TERRITORIES

Text & Photos by John Holt







Natural Resources

- ▶ Fertile soil helps make North America world's leading food exporter
- ▶ Large forests yield lumber and other products
- ▶ Mineral quantity and variety make rapid industrialization possible
 - Canadian Shield – iron ore, nickel, copper, gold, uranium
 - Appalachians & Great Plains – coal
 - Gulf of Mexico – oil & natural gas
- ▶ U.S. – biggest energy consumer & gets most of Canada's energy exports





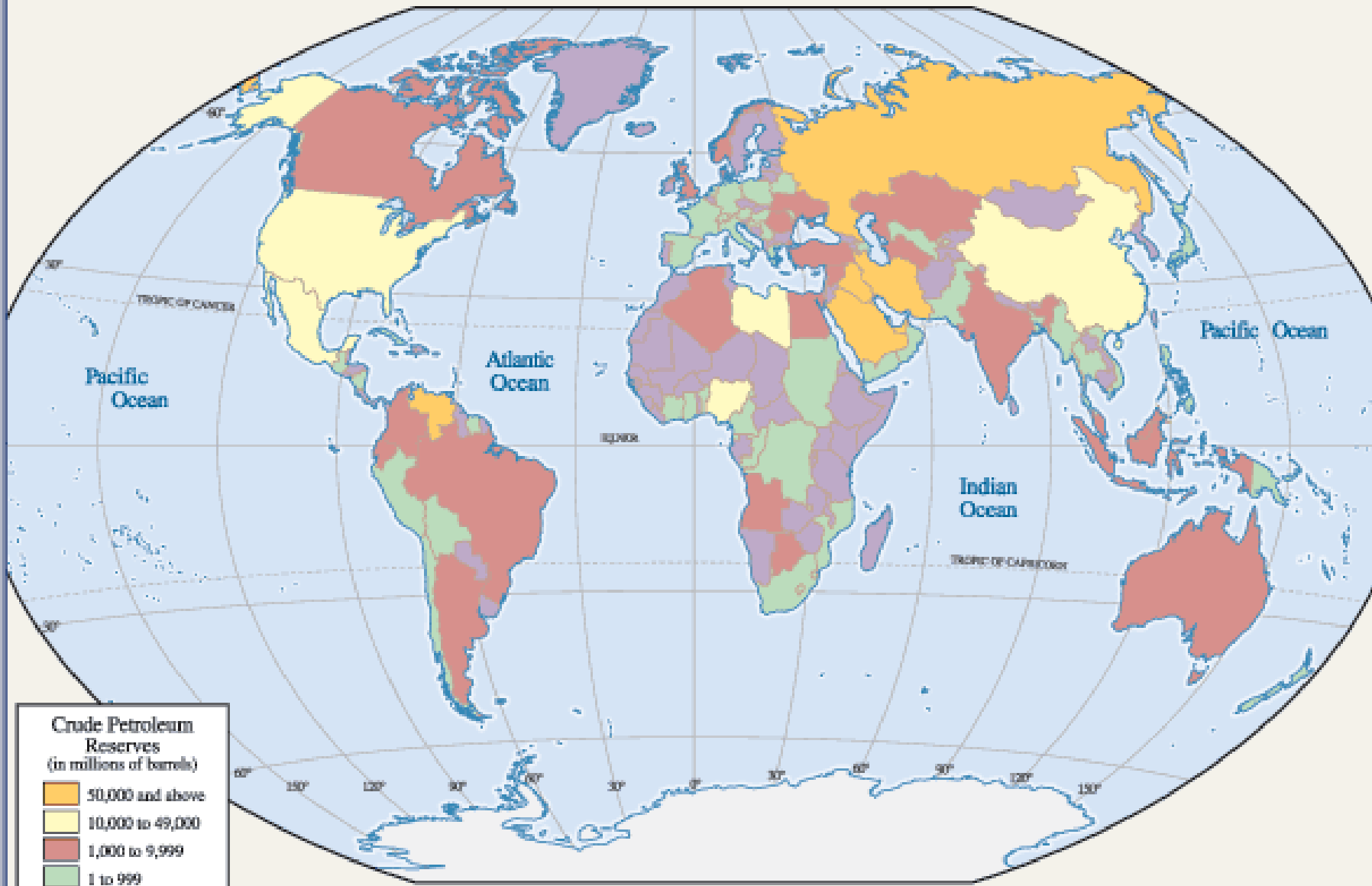








CRUDE PETROLEUM RESERVES



Crude Petroleum Reserves
(in millions of barrels)

Orange	50,000 and above
Yellow	10,000 to 49,000
Red	1,000 to 9,999
Green	1 to 999
Purple	Less than 1 or none
White	No data

Interior Transportation

- ▶ Transcontinental Railroad – from the Atlantic Ocean to the Pacific Ocean
- ▶ First U.S. transcontinental railroad built in 1860; & first Canadian in 1885
- ▶ Moved goods, people & promote economic development & national unity
- ▶ Today – U.S. has world's largest rail system & Canada has third largest



Class I Railroads of North America



Interior Transportation

- ▶ National Highway Systems – Arrival of Autos spurred road building in early 20th Century
- ▶ 1950s – U.S. interstate highway system was begun (46,000-mile network)
- ▶ Today – U.S. has 4 million miles of roads, Canada has 560,000 mile



The National Highway System



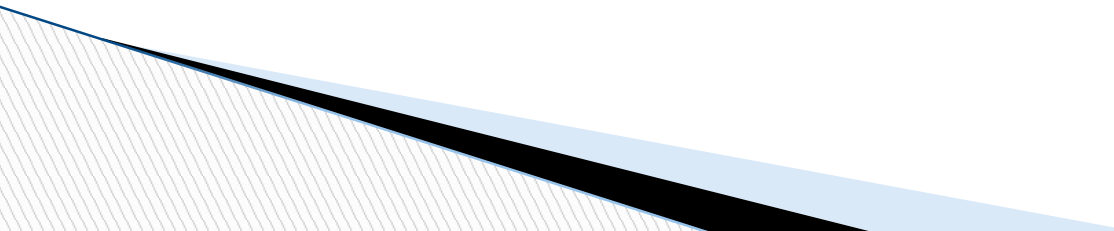
Interior Transportation

- ▶ Large Canadian highways connect major southern cities from east to west
 - Trans-Canada Highway – 4,860 miles, Newfoundland to British Columbia

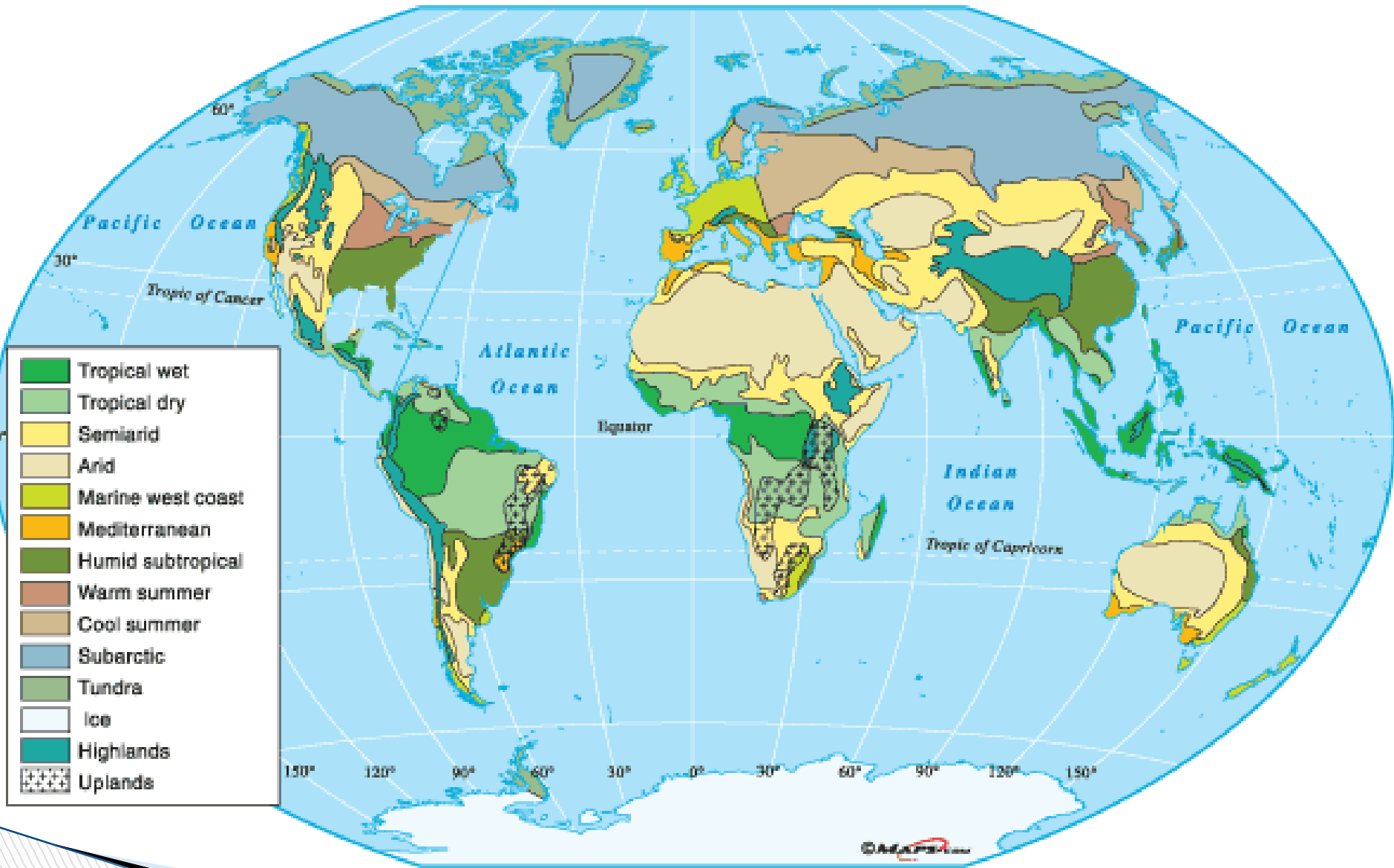




Climate and Vegetation

- ▶ Almost every type of climate is found in the 50 United States because they extend over such a large area north to south.
 - ▶ Canada's cold climate is related to its location in the far northern latitudes.
 - ▶ U.S. has more climate zones than Canada
 - ▶ U.S.: moderate mid-latitudes & Canada: colder high latitudes
 - ▶ Tundra – located along the Arctic coast
 - ▶ some **permafrost**—permanently frozen ground
- 

Climatic Zones



Winkler Tripel Projection

Climate and Vegetation

- ▶ **Deserts** – Mojave and Sonoran located Southwestern United States
- **Everglades**—swampland covering 4,000 square miles located in South Florida i





**Great
Basin**

Mojave

**Las
Vegas**

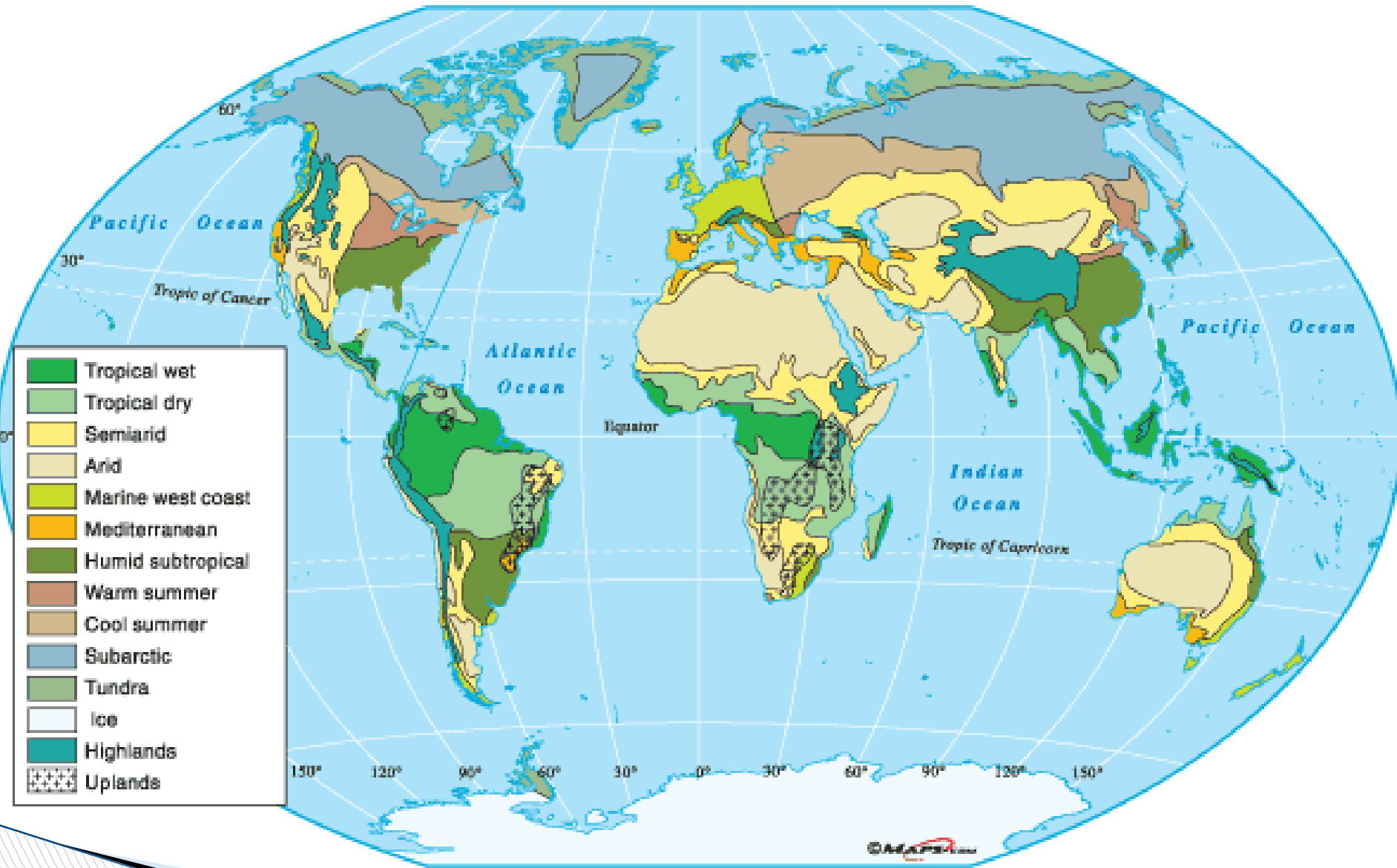
Sonoran

**Chihuahuan
Desert**



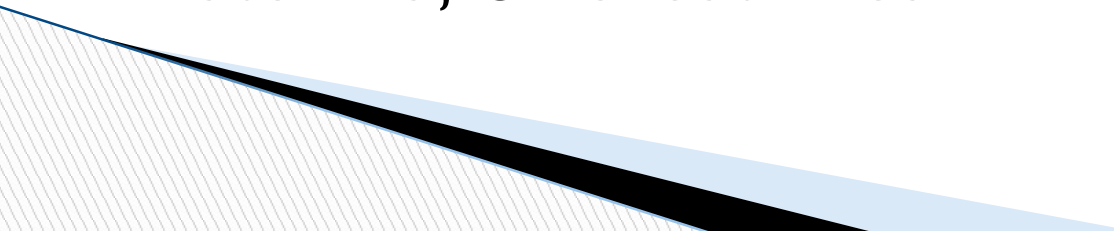


Climatic Zones



Winkler Tripel Projection

Effects of Extreme Weather

- ▶ Warm Gulf air clashes with cold Canadian air over the Great Plains
 - creates thunderstorms, tornadoes, & blizzards
 - ▶ **Hurricanes** sweep the Gulf and Atlantic coasts in summer and fall
 - ▶ Heavy rains cause floods along big rivers like the Mississippi
 - ▶ Heat, lack of rain bring droughts, dust storms, & forest fires
- 





Physical Review Questions

What is permafrost?

What is the highest mountain chain in the United States?

What are the everglades?

How has erosion affected the Appalachian Mountains?

What two bodies of water does the St. Lawrence Seaway connect to each other?

Where is the Mackenzie River located?

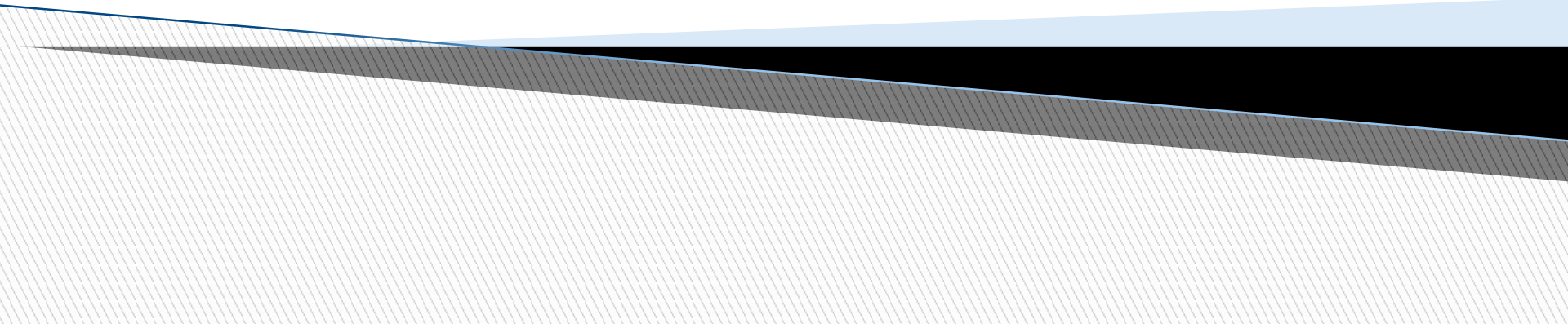
What two rivers are tributaries of the Mississippi River?

What does the series of locks in St. Lawrence Seaway enable large ships to go?

What does the Continental Divide do?

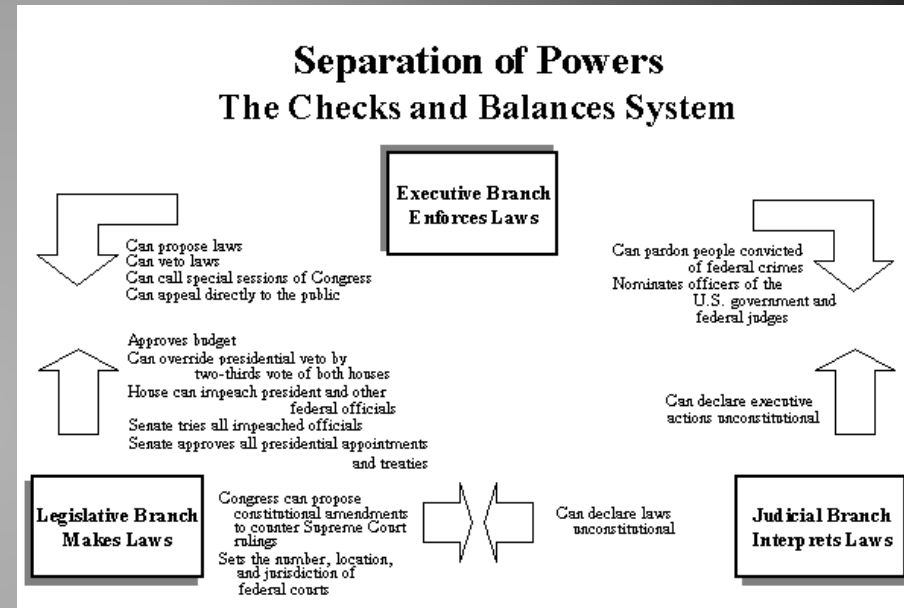


United States Human Geography



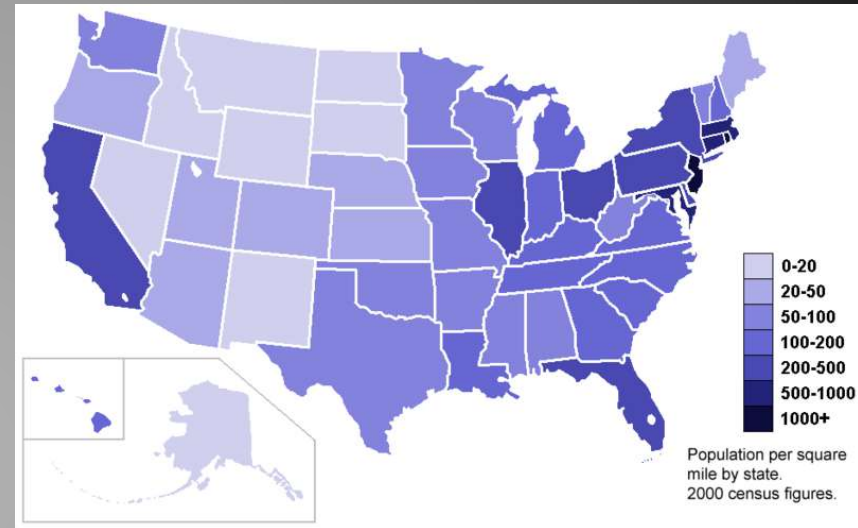
Government

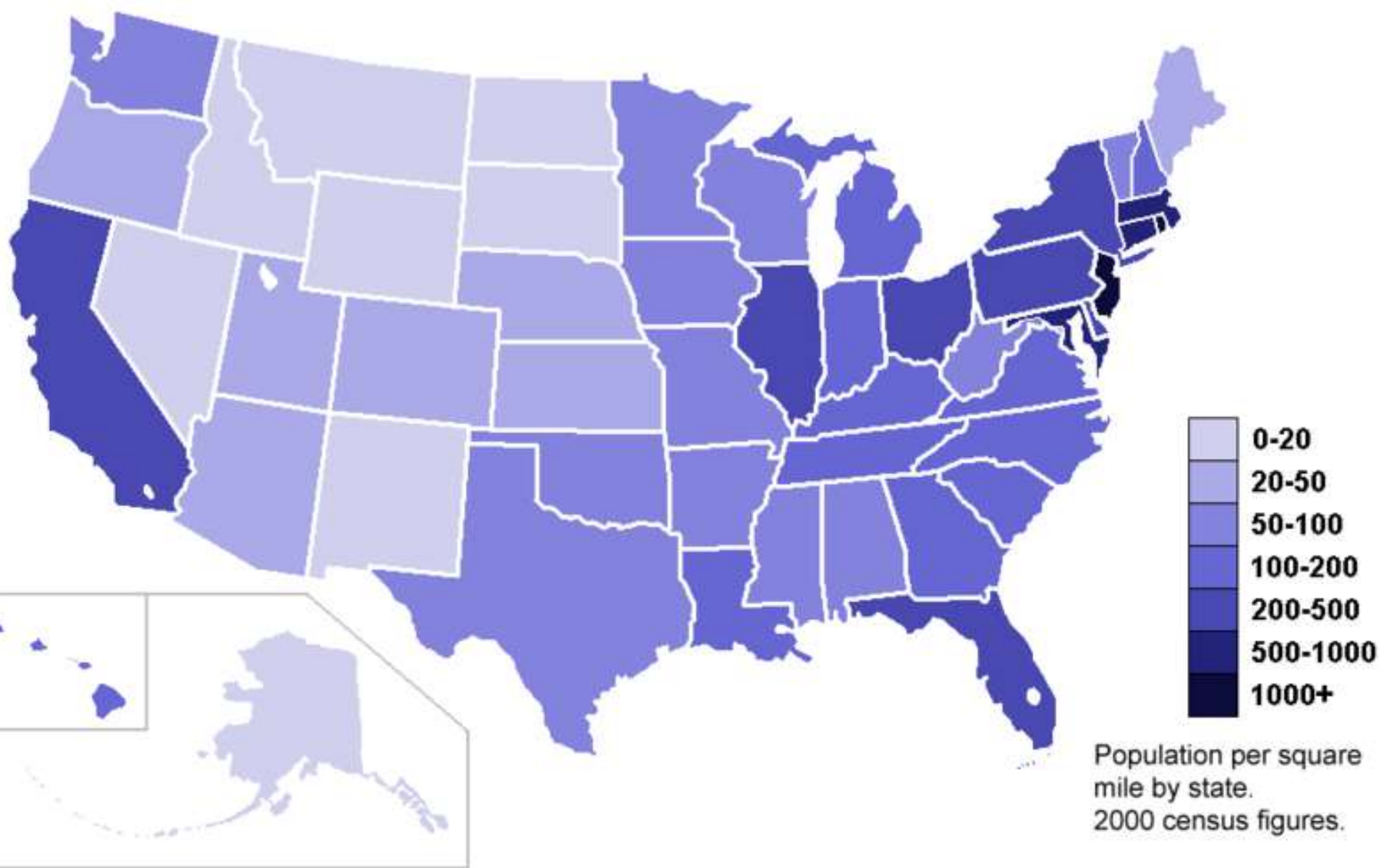
- ▶ Representative democracy – people rule through elected representatives
- ▶ Federal republic – powers divided between national, state governments
- ▶ Three separate & equal branches:
 - Executive branch headed by president, carries out laws
 - Legislative branch makes laws
 - Judicial branch interprets laws, reviews lower court decisions



Population

- ▶ U.S. population: is 280 million
- ▶ 80% live in cities or suburbs
- ▶ Effective transportation (roads, railroads, airlines) aids mobility





The Northeast

- ▶ New England – Maine, Vermont, New Hampshire, Mass., Rhode Island, Connecticut
- ▶ Middle Atlantic states – Pennsylvania, New York, New Jersey
- ▶ Northeast has only 5% of land, but 20% of population



United States

 National capital



The Northeast

- ▶ Megalopolis—several large cities grow together
 - “BoWash:” Boston, New York City, Philadelphia, Washington, D.C.
 - 500 miles; 1 / 6 of U.S. population; connected by road, rail, air links



BosWash

Urban Corridor



Wayne & Pike Co.

Boston

New York

Philadelphia

Washington D.C.

The Midwest

- ▶ north-central U.S., known as the American Heartland
 - 1 / 5 of U.S. land, 1 / 4 of population
- ▶ Central location, soil, climate make it nation's "breadbasket"
 - corn, wheat, soy beans, meat, dairy; meat-packing, food-processing



Contour planting on terraces in Montgomery County, Iowa. USDA Photo by Tim McCabe.

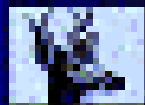
The Midwest

- ▶ Trade, distribution on Great Lakes, Mississippi, with Chicago as hub
- ▶ Farm numbers declining, more people working in service industries
- ▶ Metropolitan areas expand as people leave cities for suburbs
- ▶ People and industries moving to warmer South and West





Contour planting on terraces in Montgomery County, Iowa. USDA Photo by Tim McCabe.

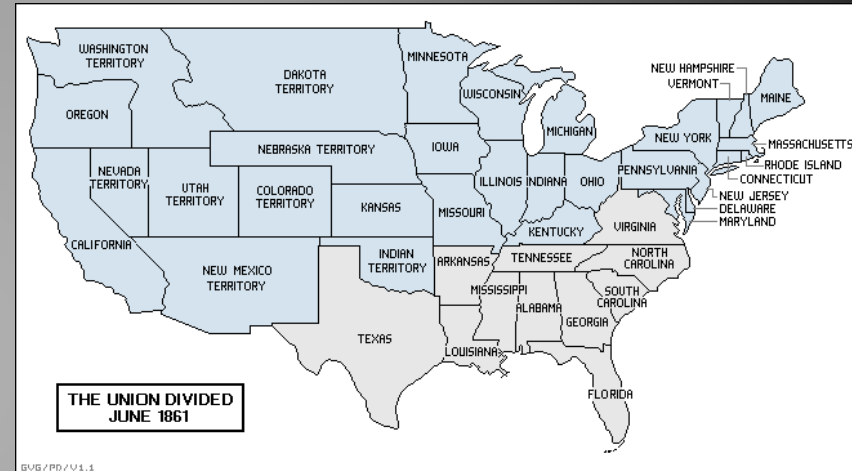


Key



The South

- ▶ 1/4 of U.S. land, more than 1/3 of population
 - 11 states were once part of the Civil War Confederacy
 - Texas was in Confederacy, sometimes considered part of Southwest
- ▶ South's ethnic mix includes Africans, Hispanics, Cajuns, Creoles
- ▶ Once agricultural, rural; now rapidly changing, cities growing–
- ▶ Agriculture: cotton, tobacco, fruits, peanuts, rice, livestock



The South

- ▶ 1950s – Energy resources and air conditioning boosted industry
 - “Sunbelt” attracts manufacturing, tourists, & retirees
- ▶ metropolitan areas—large cities and nearby suburbs, towns
 - Atlanta (hub); Miami, New Orleans, Houston, Dallas, San Antonio



U.S. Population Change, 1950–1970



U.S. Population Change, 1970–1980



U.S. Population Change, 1980–1994



The West

- ▶ Reaches from Great Plains to Pacific, plus Alaska and Hawaii
- ▶ 1/2 of U.S. land, 1/5 of population
- ▶ people settle where climate and landforms are most favorable



The West

- ▶ California is most populous state
 - Los Angeles is the West's cultural & commercial center
- ▶ Rapid 20th-century growth due to air conditioning, & irrigation
 - Colorado River water diverted to Las Vegas, Tucson, Phoenix
- ▶ Economy based on foreign trade with Asia; varied industries
 - farms, ranches, logging, fish, mines, oil, tourism, film, computers



United States Human Geography Review Questions

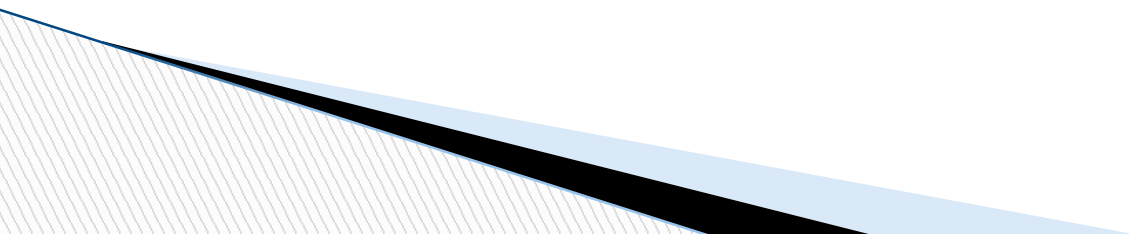
What sub region of the United States was most aided by irrigation & air conditioning?

How has climate affected the growth of the south?

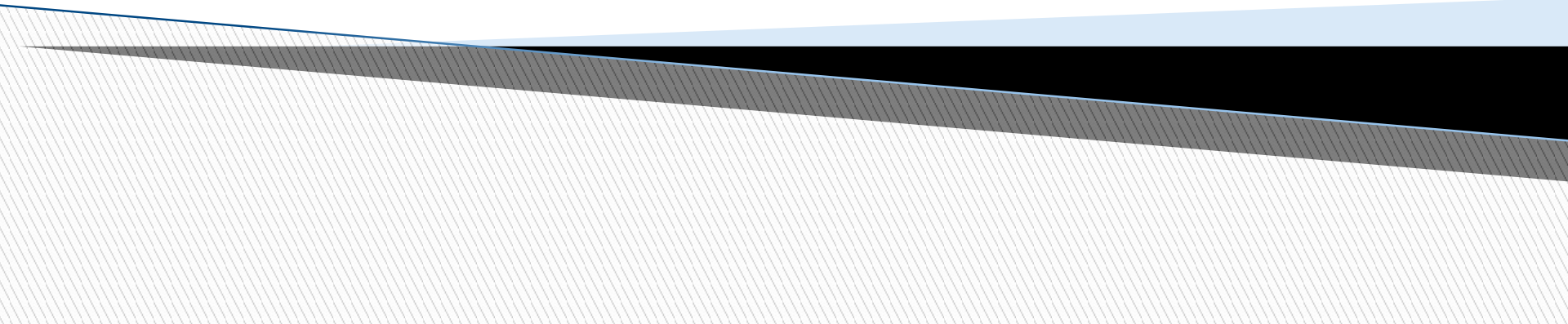
What is a federal republic?

What is a megalopolis?

What is a representative democracy?

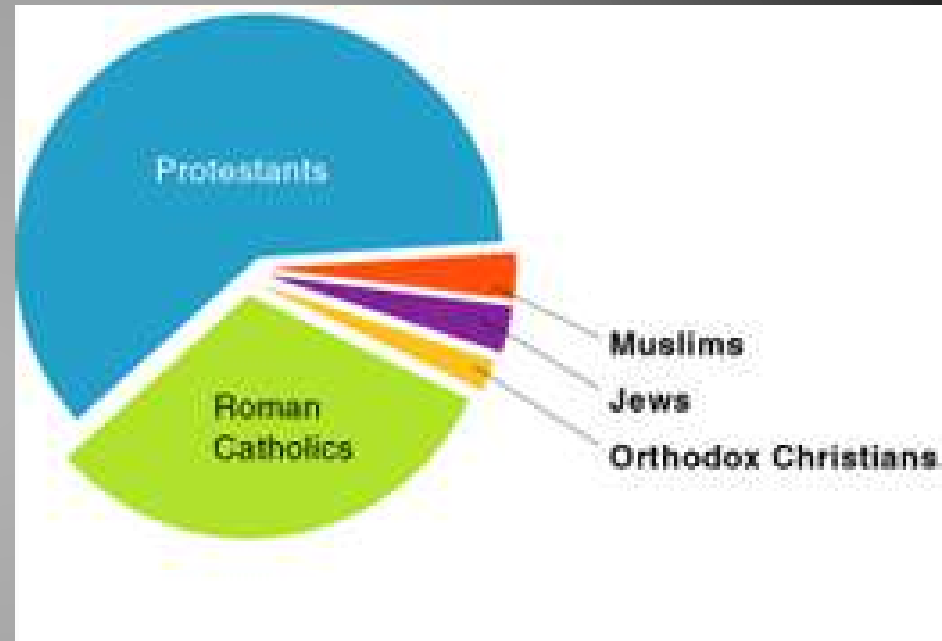


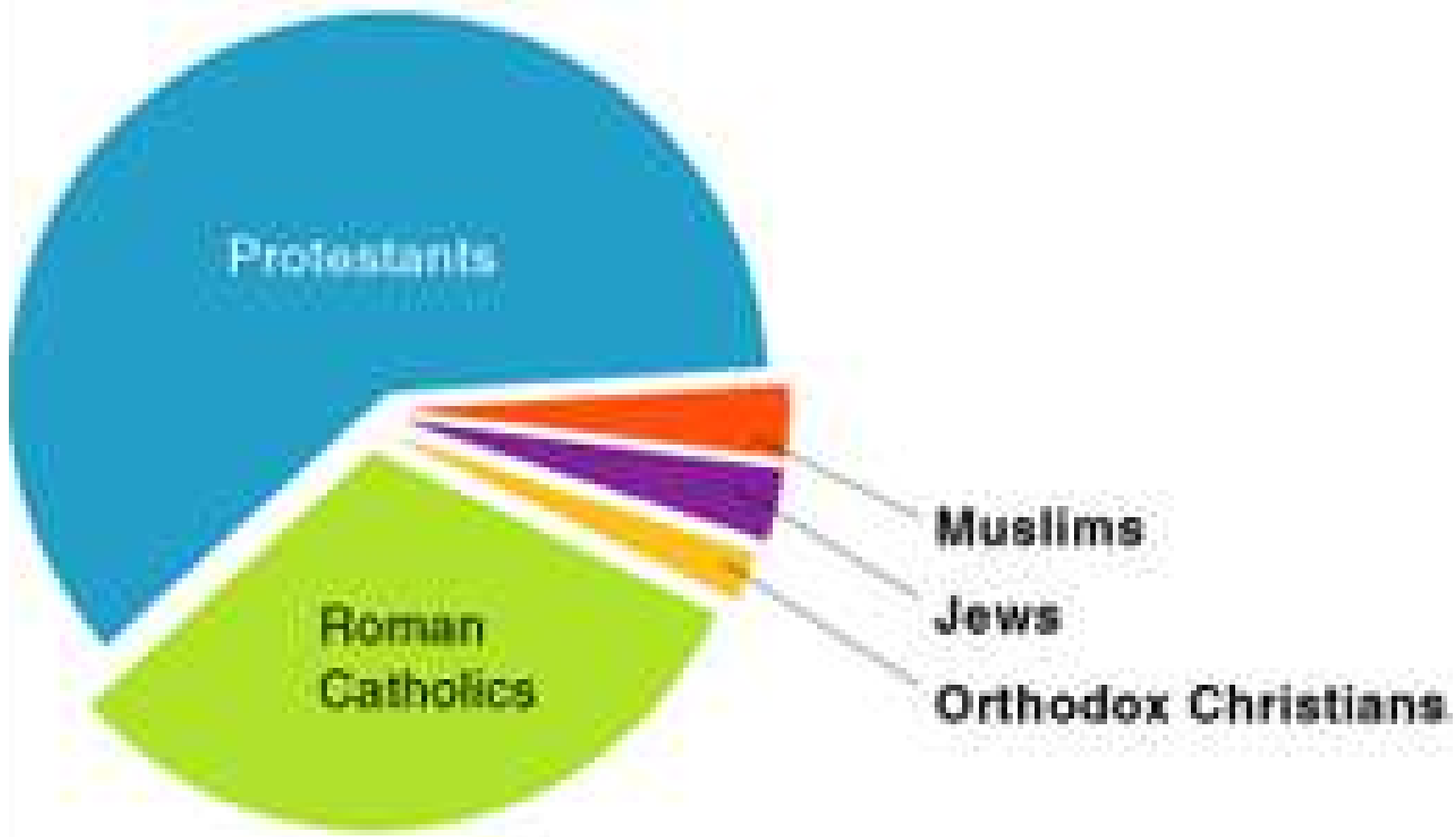
United States Culture



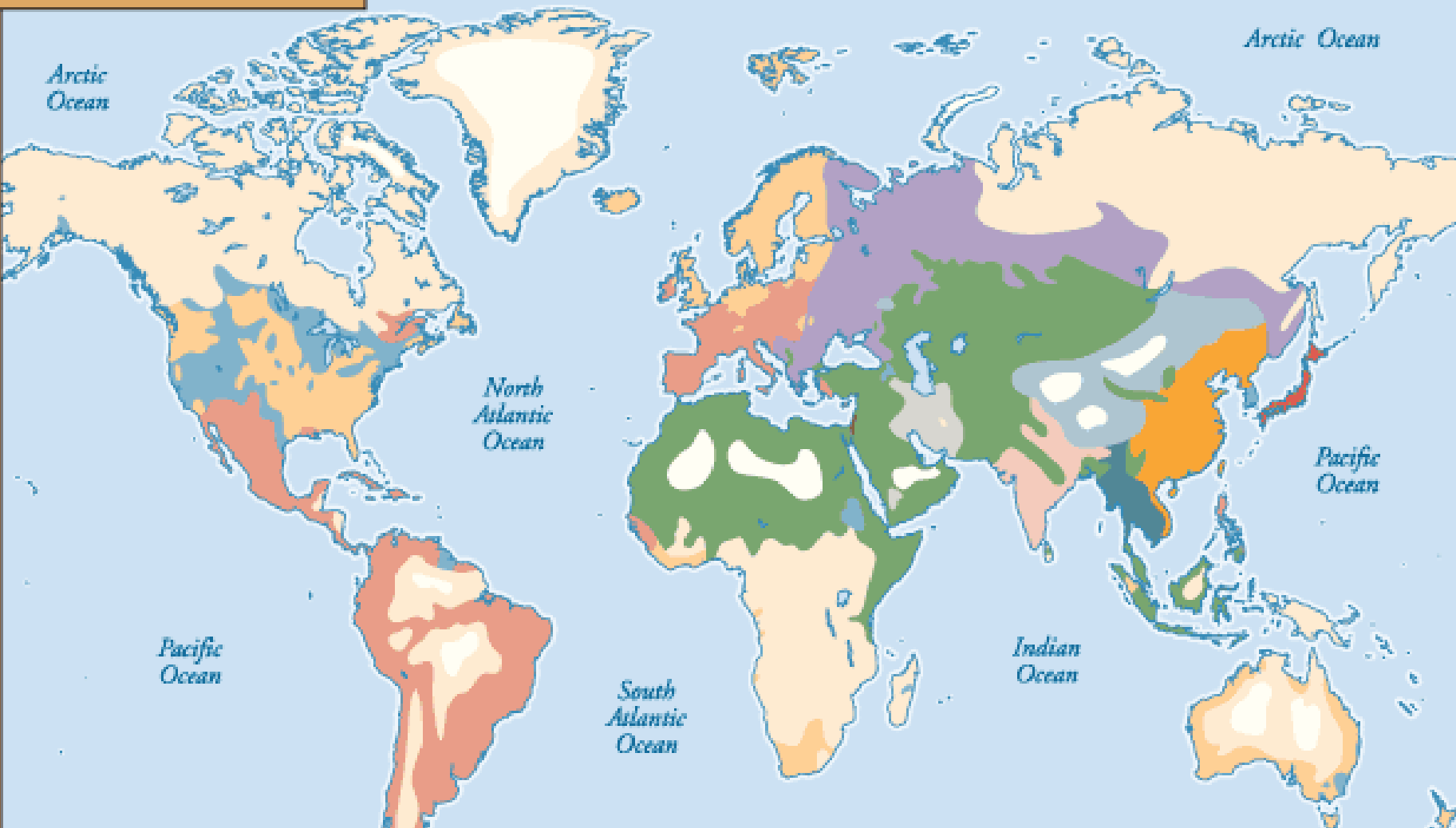
Languages and Religion

- ▶ English is dominant language & Spanish is second most common
- ▶ Religious breakdown:
 - 85% Christian (56% Protestant, 28% Catholic)
 - Jews, Muslims 2% each





WORLD RELIGIONS



Christianity	Japanese	Islam	Hinduism
Roman	Buddhism, Shintoism	Sunni	Also Christianity, Sikh, Buddhism, etc.
Eastern	Chinese	Shia	Judaism
Protestant	Buddhism, Taoism	Buddhism	And widely scattered communities
Various sects	Local	Lamaism	Uninhabited
	Animism	Southern	

0 4000 miles
0 4000 kilometers

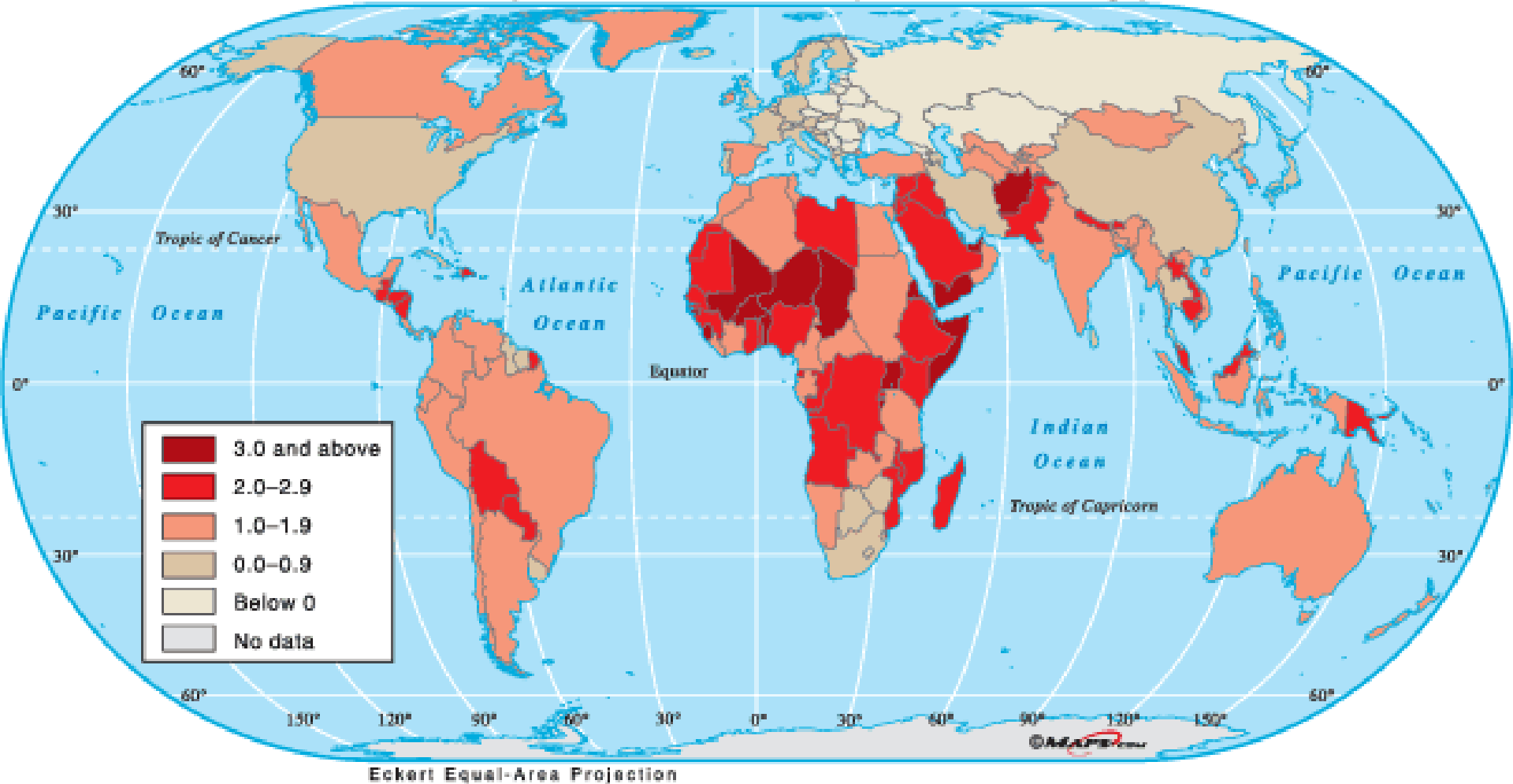
How Americans Live, Work, and Play

- ▶ Almost 50% of working-age Americans are employed
 - almost half are women
 - 70% have service industry jobs
- ▶ More than 10% of Americans live in poverty
- ▶ Kids age 6 to 16 are required to attend school
 - 90% attend public schools, which are free through secondary school
 - U.S. has over 2,300 4-year public and private colleges, universities
- ▶ Leisure activities – hobbies, museums, libraries, TV, films, computers
 - sports: baseball, basketball, football, golf, soccer, tennis, skiing

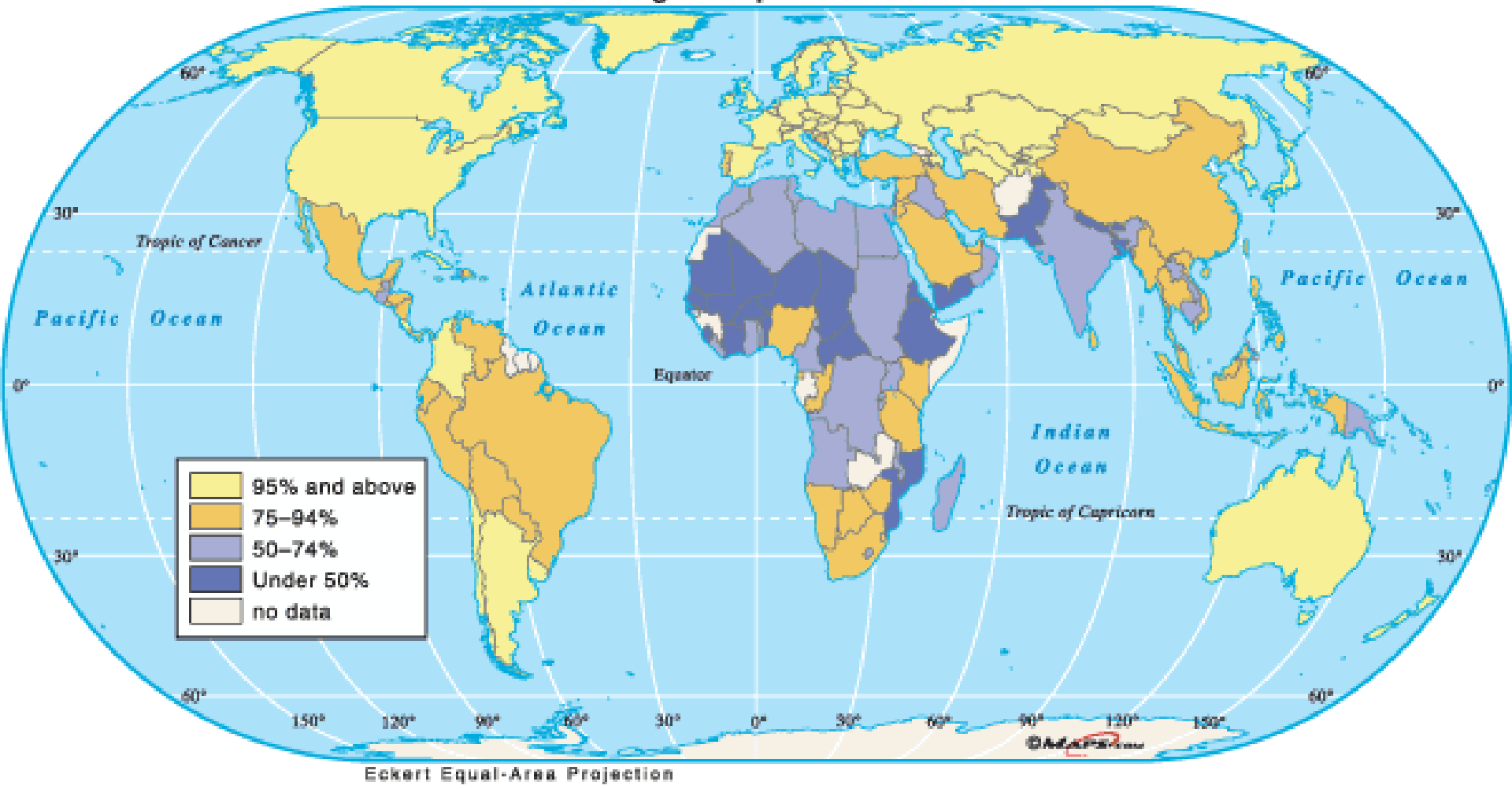
TELEVISIONS AND PERSONAL COMPUTERS



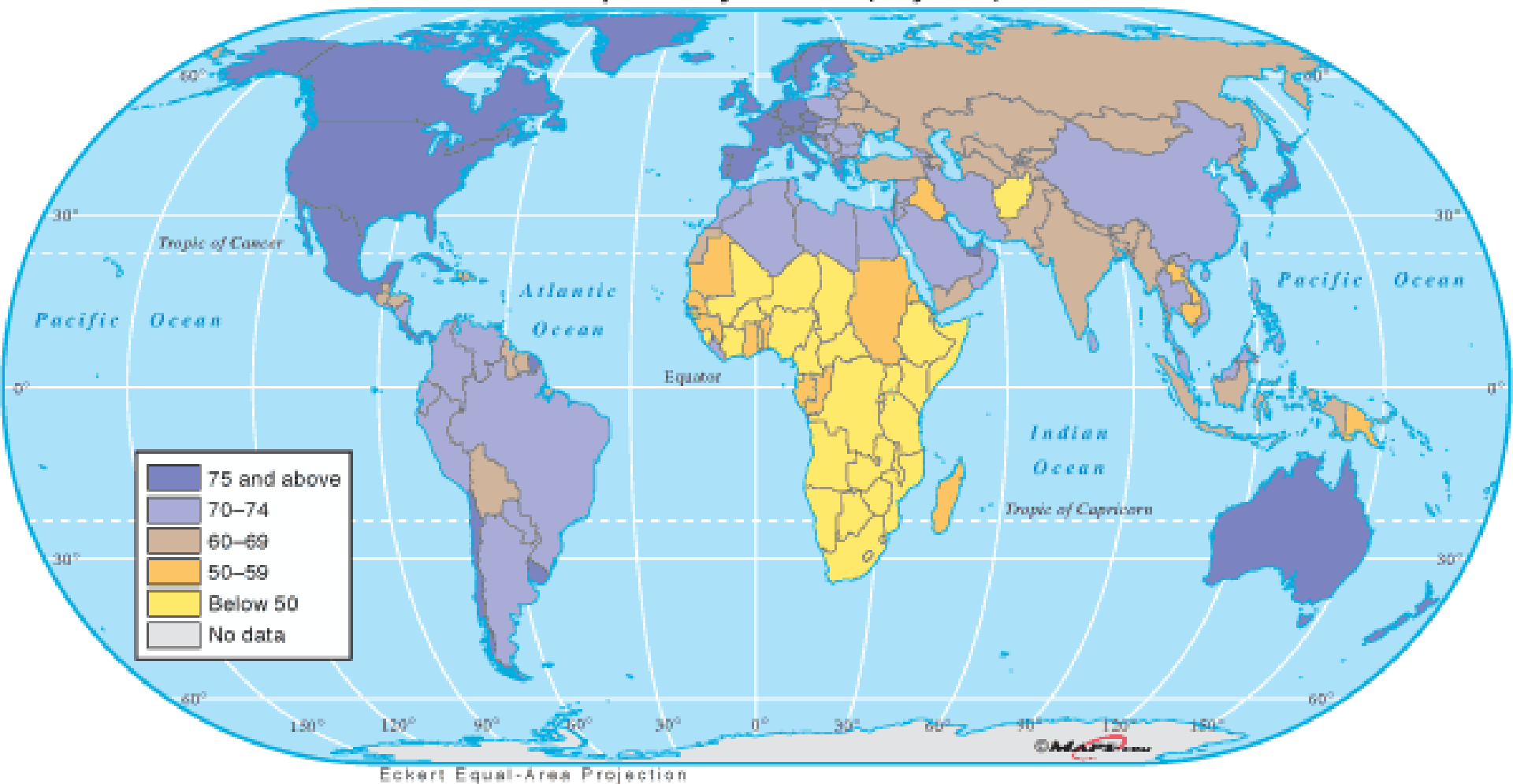
Natural Population Increase Rate (Annual Percentage)



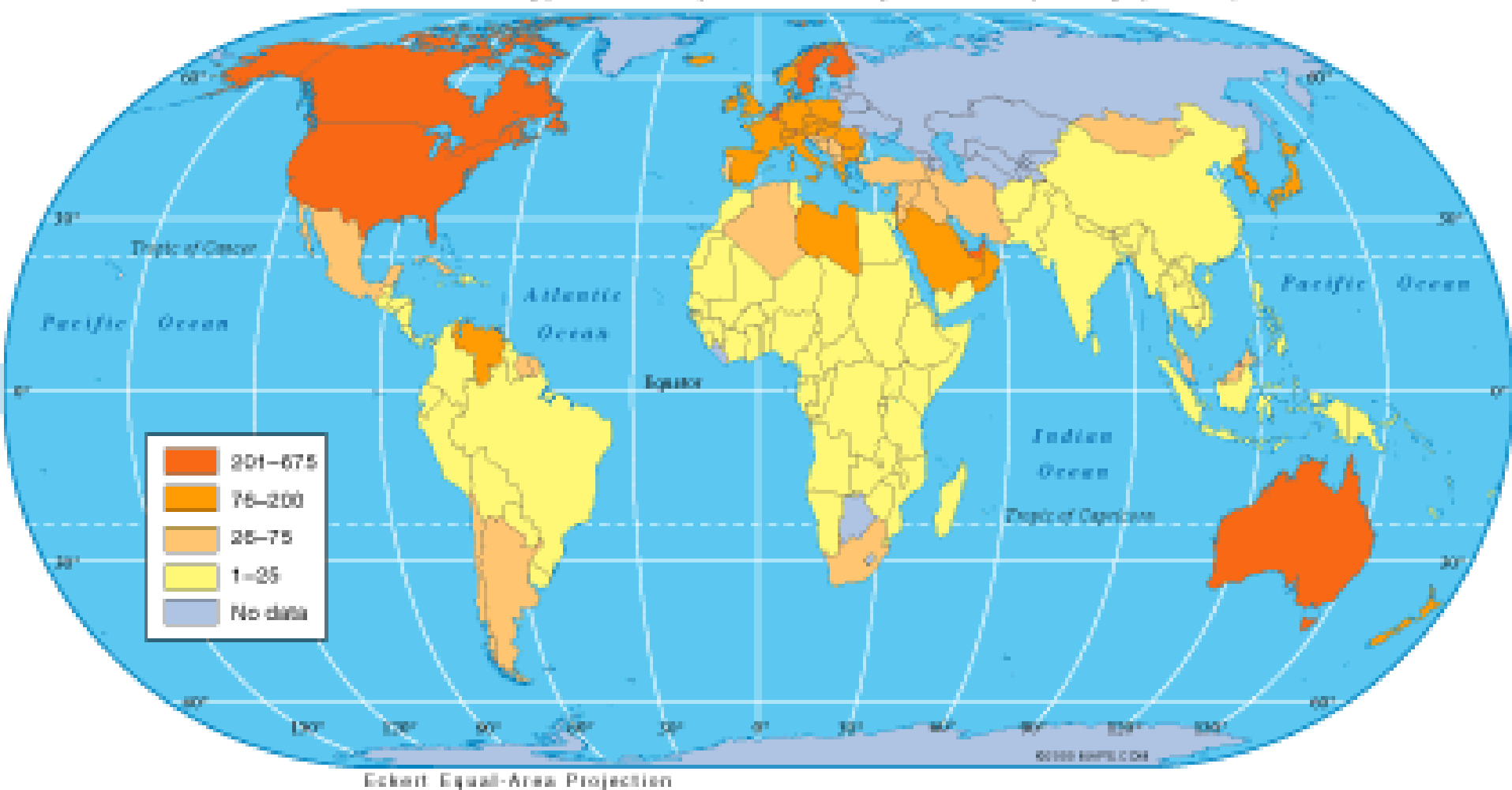
Percentage of Population Literate



Life Expectancy At Birth (In years)



Commercial Energy Consumption Per Capita, 1991 (in Gigajoules)



United States Culture Review

Questions

What is the dominate language in the United States?

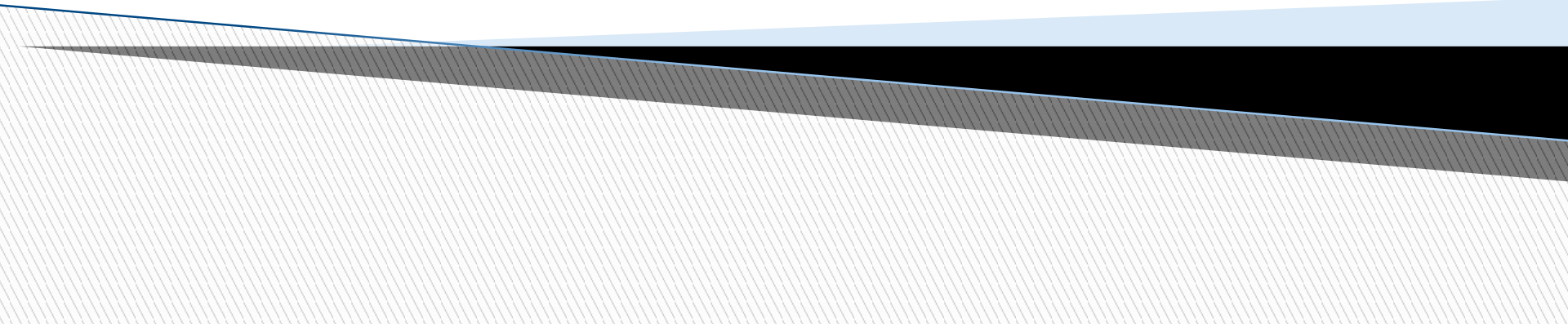
What is the dominate religion in the United States?

What percentage of working age Americans are employed?

What percentages of Americans live in poverty?

Between what two ages are American children required to attend school?

United States Economy



The World's Greatest Economic Power

- ▶ World's largest economy: agricultural, manufacturing, & trade leader
- ▶ U.S. accounts for more than 10% of world's exports
 - exports—goods sold to another country
- ▶ Success is due to resources, skilled labor, stable political system



The World's Greatest Economic Power

- ▶ **Free enterprise economy:**
 - privately owned resources, technology, businesses
 - businesses operate for profit with little governmental control
- ▶ Due to fertile soil, early farm mechanization, U.S. accounts for:
 - 40% of world's corn; 20% of cotton; 10% of wheat, cattle, hogs
 - Crop farming in Midwest, South; livestock ranching in West

The World's Greatest Economic Power

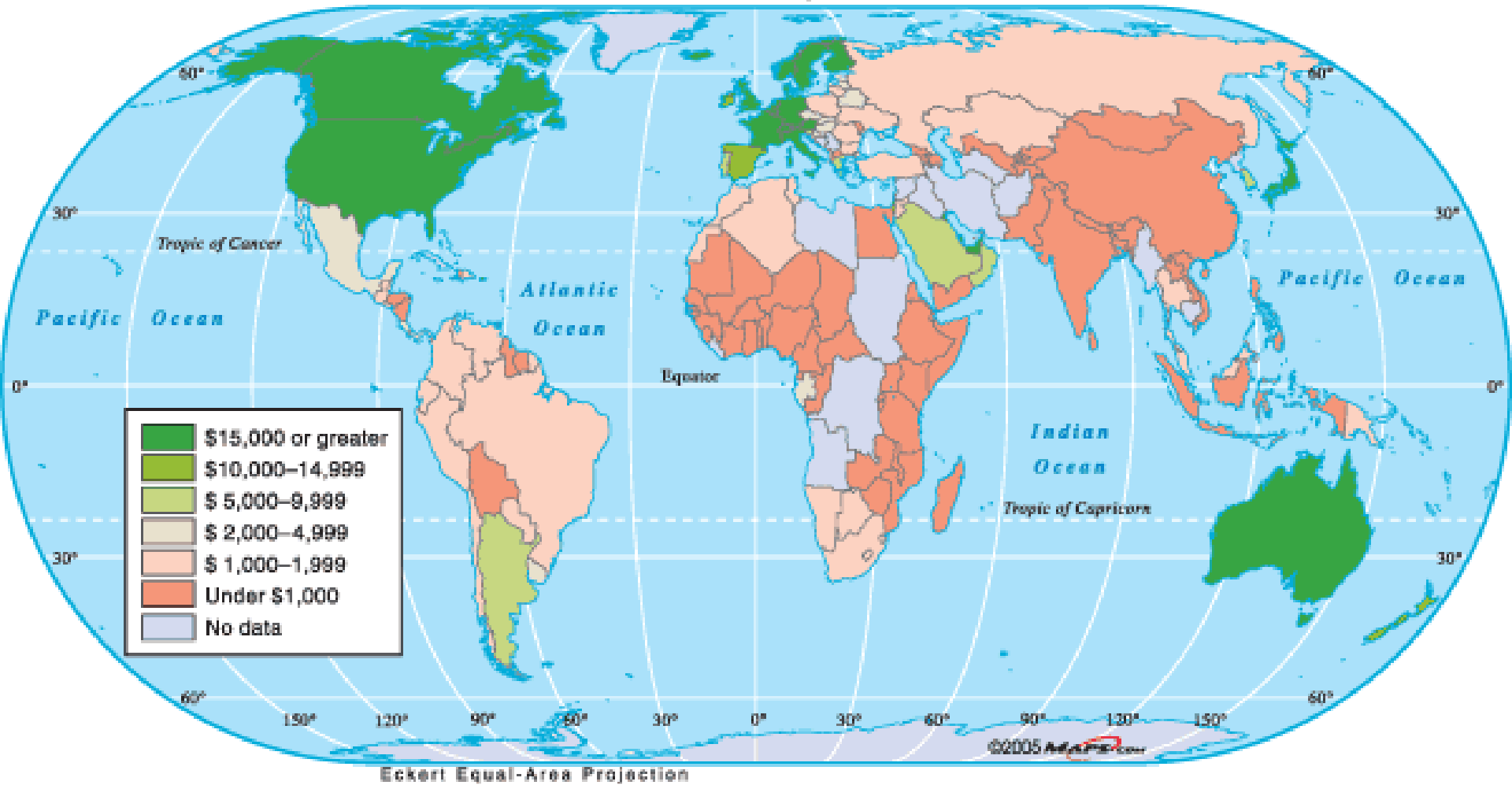
- ▶ Largest industrial output in world includes:
 - petroleum, steel, electronics, telecommunications, lumber, mining
- ▶ U.S. advances in electronics, computers revolutionize industry
- ▶ Areas become associated with certain products:
 - Detroit: automobiles
 - Seattle: aircraft
 - Silicon Valley (northern California): computers

 National capital

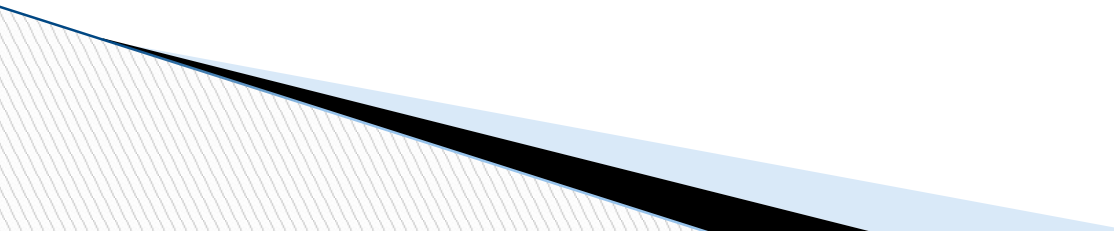
United States



GNP Per Capita



A Postindustrial Economy

- ▶ A **service industry** produces a service rather than a product
 - Examples: information processing, transportation, medicine, education
 - ▶ **Postindustrial economy**—manufacturing no longer dominant
 - ▶ U.S. is leading importer and exporter
 - exports raw materials, agricultural products, manufacturing goods
 - imports automobiles, electronics, machinery, apparel
 - Canada and Mexico are major trade partners
 - ▶ **Multinationals**—corporations that do business all over the world
- 

United States Economy

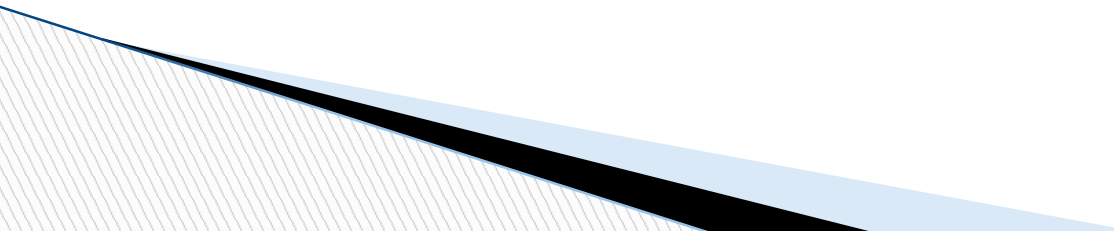
Review Questions

What is a free enterprise system?

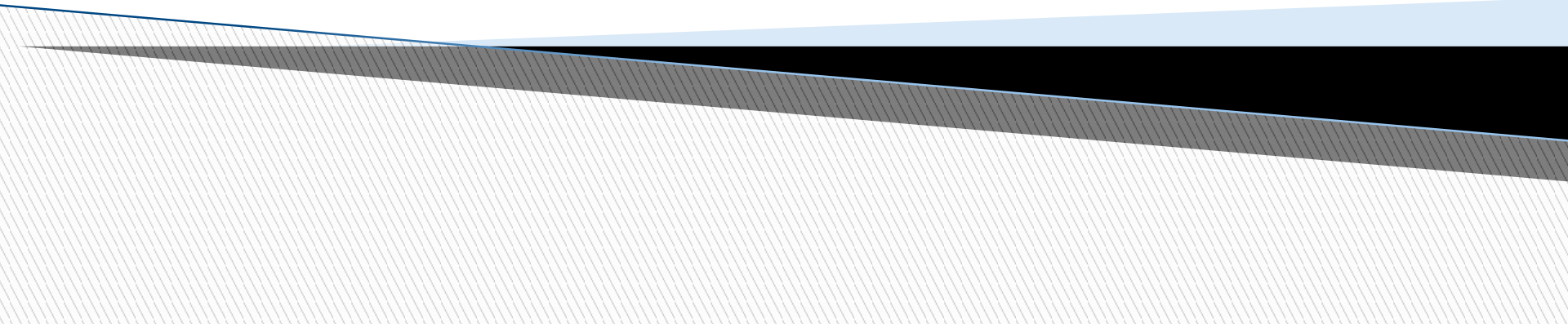
What are multinationals?

What is a service industry?

What is a postindustrial economy?



Canada Human Geography



Government

- ▶ **Parliamentary government:**
 - **parliament**—legislature combining legislative and executive functions
 - consists of an appointed Senate, elected House of Commons
 - **prime minister**, head of government, is majority party leader
- ▶ All ten provinces have own legislature and premier (prime minister)
 - federal government administers the territories





BEAUFORT SEA

BAFFIN SEA

YUKON
TERRITORY

NUNAVUT TERRITORY

NORTHWEST
TERRITORIES

Whitehorse

Yellowknife

Iqaluit

BRITISH
COLUMBIA

ALBERTA

MANITOBA

SASKATCHEWAN

ONTARIO

QUEBEC

NEWFOUNDLAND

Gulf of Alaska

Edmonton



Regina

Winnipeg

Hudson Bay

Labrador Sea

PACIFIC
OCEAN

Victoria

PRINCE
EDWARD
ISLAND
St. John's
Charlottetown

OTTAWA

Quebec

Fredericton

Halifax

NOVA SCOTIA

UNITED STATES

ATLANTIC
OCEAN

CANADA Political Map 0 km 300 600 900
© Trail Canada www.trailcanada.com

Population

- ▶ 60% Canada's population live in Core Provinces of Ontario and Quebec
 - Ontario has largest population & Quebec has largest land area







BEAUFORT SEA

BAFFIN SEA

YUKON
TERRITORY

NUNAVUT TERRITORY

NORTHWEST
TERRITORIES

Whitehorse

Yellowknife

Iqaluit

BRITISH
COLUMBIA

ALBERTA

MANITOBA

SASKATCHEWAN

ONTARIO

QUEBEC

NEWFOUNDLAND

Gulf of Alaska

Edmonton



Regina

Winnipeg

Hudson Bay

Labrador Sea

PACIFIC
OCEAN

Victoria

PRINCE
EDWARD
ISLAND
St. John's
Charlottetown

OTTAWA

Quebec

Fredericton

Halifax

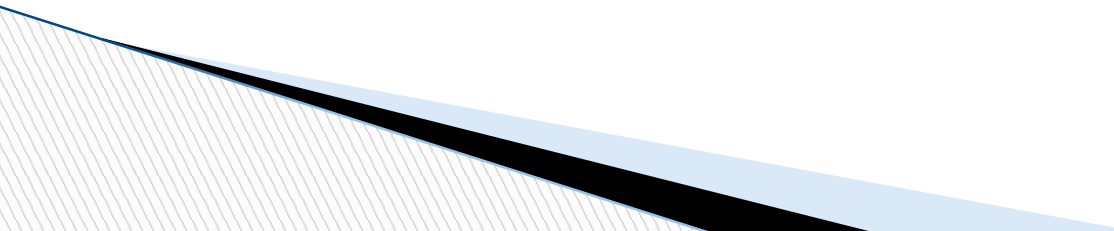
NOVA SCOTIA

UNITED STATES

ATLANTIC
OCEAN

CANADA Political Map 0 km 300 600 900
© Trail Canada www.trailcanada.com

Culture

- ▶ Relatively high standard of living, well-educated population
 - ▶ Labor force is 55% men & 45% women
 - 75% in service industries & 15% in manufacturing
 - ▶ Today, Canada has a 97% literacy rate
- 

Sports and Recreation

- ▶ Popular sports: skating, ice hockey, fishing, skiing, golf, hunting
 - Canada has own football league; other pro teams play in U.S. leagues
 - native peoples developed lacrosse & European settlers developed hockey



Economy

- ▶ Farming, logging, mining, fishing: 10% of gross domestic product
 - Canada is the world's leading exporter of forest products
- ▶ Mining – uranium, zinc, gold, and silver are exported
- ▶ Fishing – domestic consumption is low, so most of catch is exported
- ▶ 15% of Canadians work in manufacturing & create 1 / 5 of GDP
 - make cars, steel, appliances, equipment (high-tech, mining)
 - centered in heartland, from Quebec City, Quebec, to Windsor, Ontario

Economy

- ▶ Most Canadians work in service industries, which create 60% of GDP
 - finance, utilities, trade, transportation, communication, insurance
 - land's natural beauty makes tourism the fastest growing service
- ▶ Heavy trade with U.S – same language & open border (world's longest)
 - 1994 North American Free Trade Agreement (NAFTA) with U.S., Mexico
 - 85% of Canadian exports go to U.S.
 - 75% of Canada's imports come from U.S.



Canada Human Geography

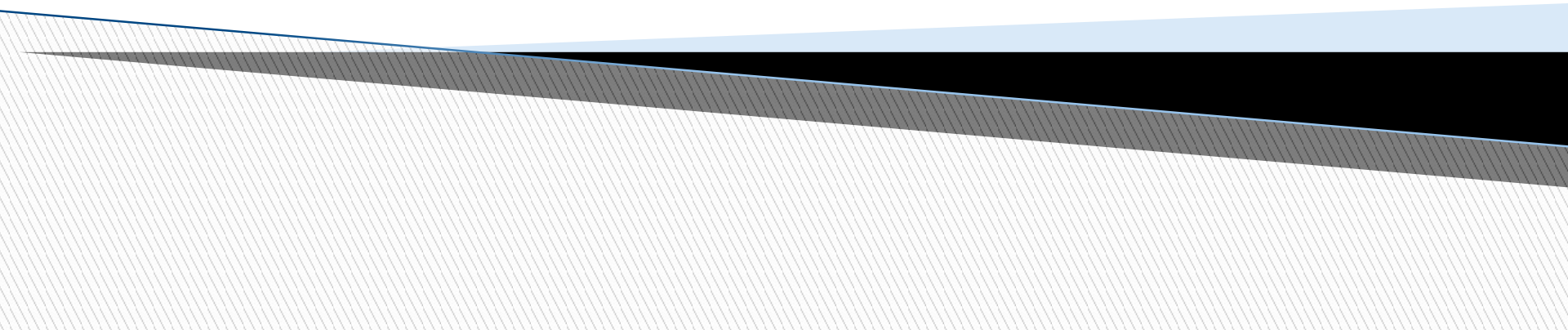
Review Questions

What type of industries are most Canadians employed in?

Who is Canada's main trading partner?

Who are Canada's two Core Princes & why?

Issues Today in the United States & Canada



The Fight Against Terrorism

- ▶ Terrorism threatens the safety and security of society.
- ▶ The United States launched a war against international terrorism after being attacked on September 11, 2001.
- ▶ **Terrorism**—unlawful use, or threat, of force or violence:
 - against people or property
 - to intimidate, create fear in order to achieve political, social aims



The Fight Against Terrorism

- ▶ September 11, 2001 attacks are most destructive on U.S. soil
- ▶ Al-Qaeda – extremist Muslims led by Saudi millionaire Osama bin Laden
 - **global network**—worldwide interconnected group
 - formed in Afghanistan to fight 1979 Soviet invasion
 - later opposed U.S. influence in Muslim lands
 - targeted U.S. and allies after 1991 Persian Gulf War



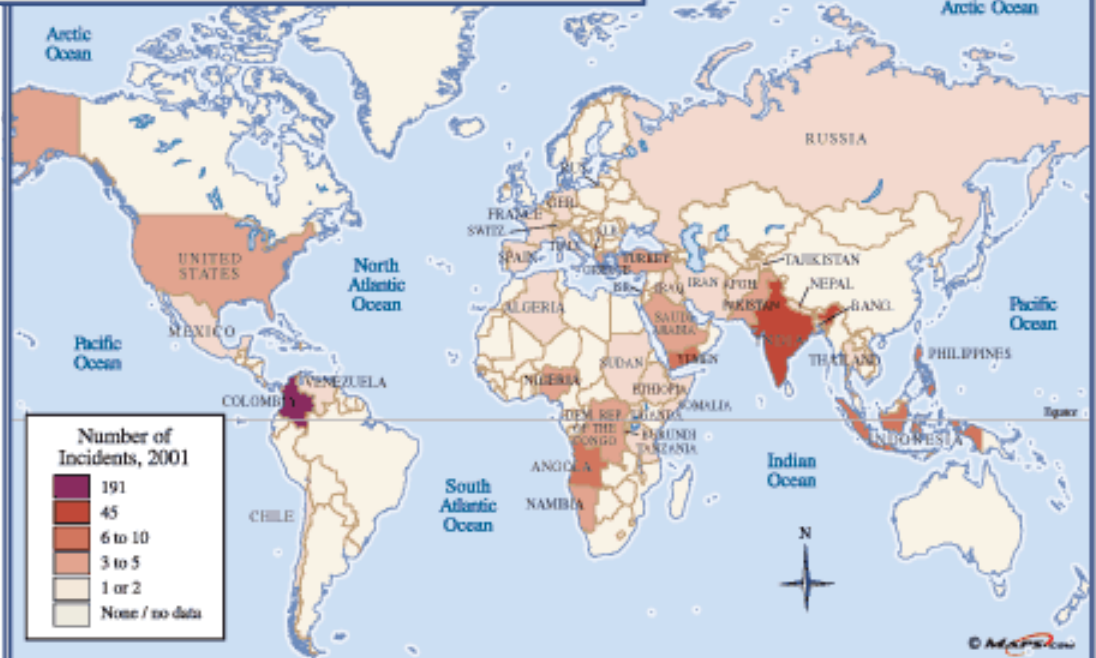


VIEWPLACES





TERRORISM HOTSPOTS, 2001 & 2002



Aftermath of the Attacks

- ▶ George W. Bush declared war on terrorism:
 - pushes for new security measures
 - orders search for terrorist suspects
- ▶ U.S. leads coalition (alliance) of nations in war on terrorism
 - includes Canada, China, Britain, Pakistan, Russia, and others
 - allies share information, make arrests, seize assets



International War on Terrorism

- ▶ Operation Enduring Freedom – coalition military action in Afghanistan, al-Qaeda's base country
 - October 2001 – U.S. bombed & sent in ground troops
 - ruling Taliban removed & al-Qaeda network overthrown
- ▶ March 2003 – Bush expanded war with military action in Iraq
 - claimed dictator Hussein was threat & toppled his regime by May 2003



MIDDLE EAST - PHYSICAL

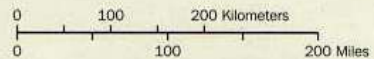




Afghanistan

- International boundary
- Province (*velāyat*) boundary
- ★ National capital
- ⊙ Province (*velāyat*) capital
- Railroad
- Road

The existence of two new provinces of Nurestan and Khowst has not been confirmed.



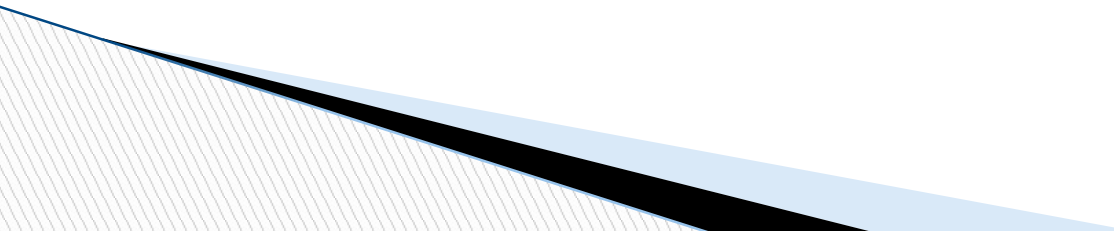
Lambert Conformal Conic Projection, SP 29N/39N

Boundary representation is not necessarily authoritative.





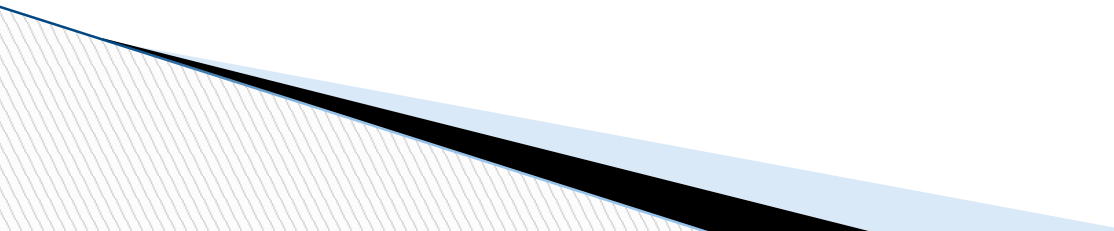
Homeland Security

- ▶ New airport security measures after September 11
 - ▶ Extra safety precautions at public places such as sports stadiums
 - ▶ Other possible targets protected: nuclear power plants, water supply
 - ▶ Department of Homeland Security was created
 - ▶ Canada signed border security pact with U.S
- 

Facing Terrorist Threats

- ▶ Terrorists act in secret & move between countries
 - some want territory, like Palestinian extremists
 - some oppose government policies, like Oklahoma City bombers
- ▶ Could use biological, chemical, or nuclear weapons
 - **biological weapons**—bacteria, viruses that harm or kill people, animals
 - anthrax sent by letter to U.S. congressmen, media in fall 2001

Balancing Security and Freedom

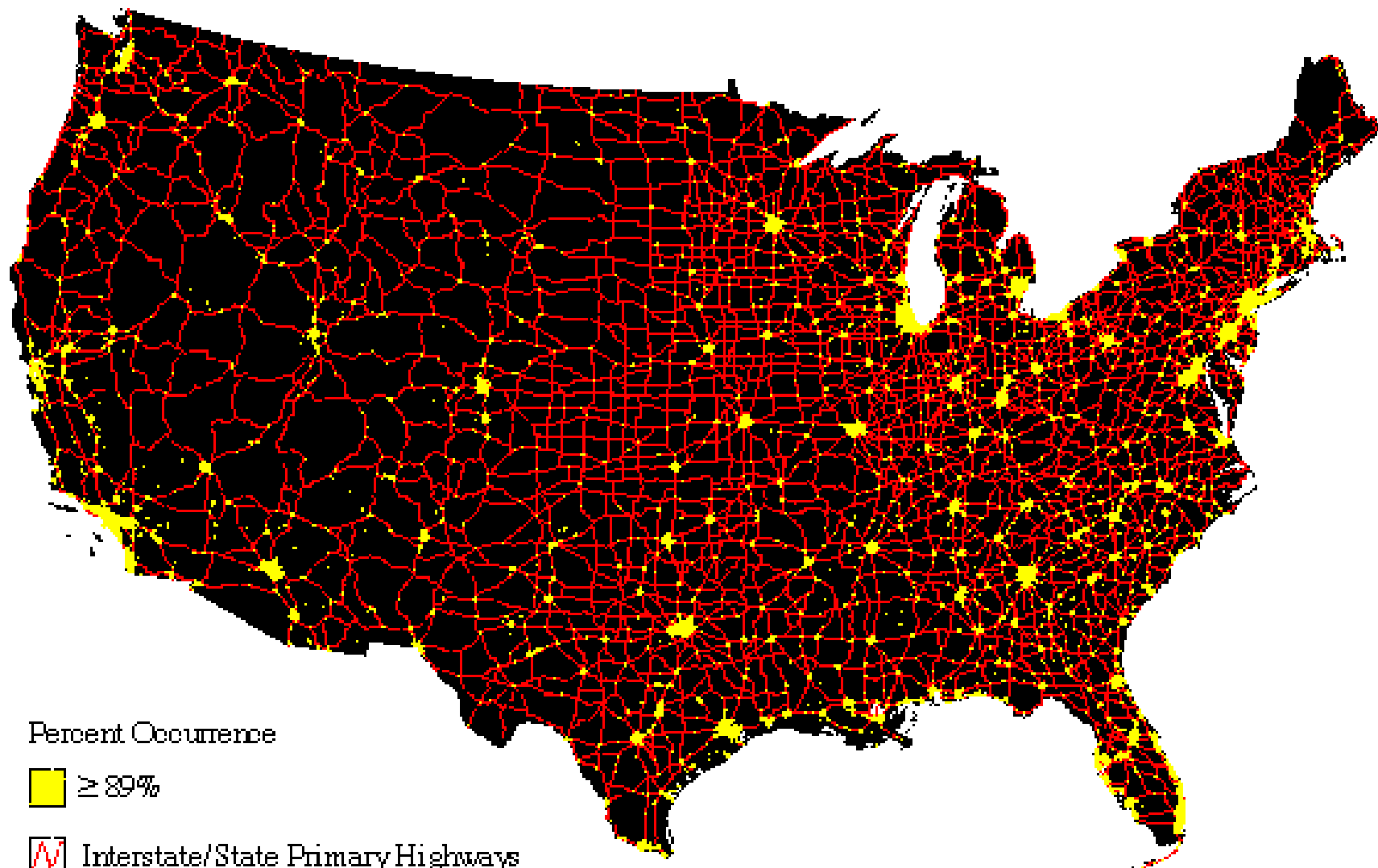
- ▶ U.S. and allies fight terrorism on two fronts:
 - breaking up terrorist groups
 - increasing security
 - ▶ Variety of terrorist threats means the fight could go on for years
 - ▶ Challenge for democratic countries – keep citizens safe while preserving freedom and individual rights
- 

Urban Sprawl


- ▶ Many Americans and Canadians work in cities, live in suburbs
 - suburbs may offer better housing, services; more open space
 - metropolitan areas becoming larger, more difficult to manage
- ▶ **Urban sprawl**—poorly planned city development
 - city's population spreads over an ever-widening area
 - outlying areas become populated, filling land between them and city



Mapping Urbanization from Space using Nighttime "City Lights" Satellite Data from DMSP/OLS



Percent Occurrence

 $\geq 89\%$

 Interstate/State Primary Highways

M.L. Imhoff - NASA/GSFC - PI.
W.T. Lawrence - University of Maryland - Co.I.
D.C. Stutzer - University of Maryland - FRA
Composite data provided by C. Elvidge - NOAA/NGDC

Urban Sprawl

- ▶ From 1970 to 1990, population density of U.S. cities decreased 20%
- ▶ Move from cities to suburbs filled 30,000 sq. miles of rural land
- ▶ In Canada more than 75 percent of people live in urban areas



Urban Sprawl

- ▶ **Causes of Urban Sprawl** – Unrestricted, unplanned growth, Cars, expressways, cheap gas
- ▶ **Commuter traffic hurts infrastructure** – a community's basic facilities, services, machinery
 - more maintenance on roads and bridges
 - increases air pollution
- ▶ **Suburban streets, utilities, facilities cost 25% more than in city**
- ▶ **Class separation** – upper-income people move to suburbs while lower-income people are isolated in inner-city









Solutions to Sprawl

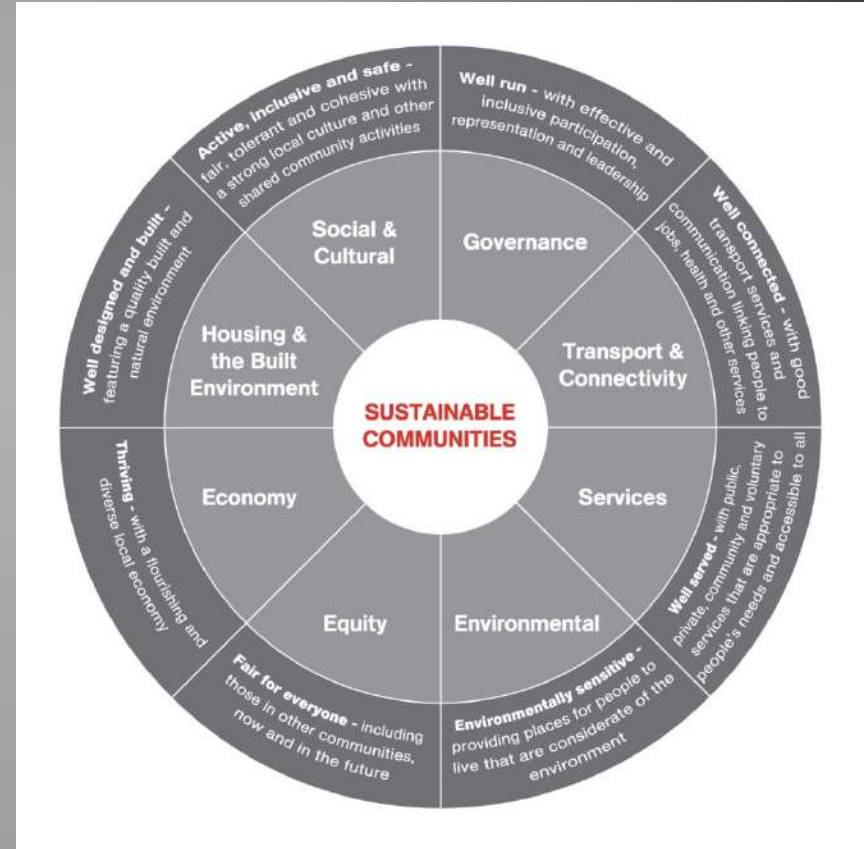
- ▶ **Smart growth**—
efficient use and
conservation of
land, resources
– development
stays in city, public
transportation
keeps traffic low

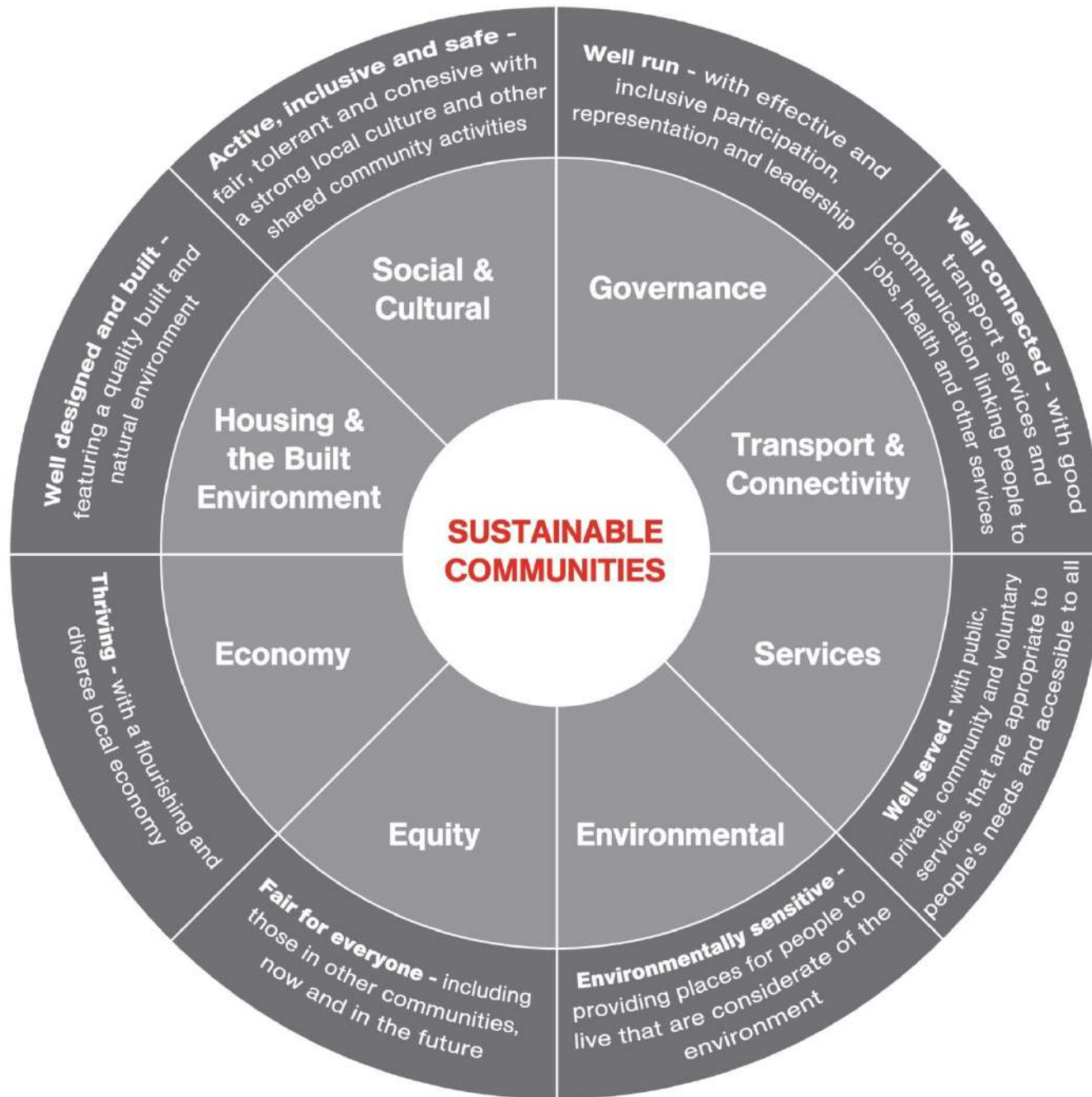




Solutions to Sprawl

- ▶ suburbs become sustainable communities where residents live and work
 - cuts down on commuting
 - also applied to downtown Vancouver; 40% of residents now walk to work





Issues Today in the United States & Canada Review Questions

What is terrorism?

What is a coalition?

What is a global network?

What is a biological weapon?

What is urban sprawl?

What is smart growth?

What is infrastructure?

What are sustainable communities?

What are terrorists trying to accomplish?