## Physical Geography

THE WORLD



**Lithosphere:** the Earth's crust (includes land under water) **Atmosphere:** air (gases) that extends about 6,000 miles above Earth's surface

**Hydrosphere:** water in, on, and above Earth in all its forms **Biosphere:** parts of lithosphere, atmosphere, and hydrosphere that

support life

**Tectonic forces:** lithosphere is divided into large tectonic plates that move relative to each other; movement causes earthquakes and landforms at plate boundaries

Weathering: wearing down of rock by wind, water, ice and living things Erosion: process by which rock, sand and soil are broken down Soil building: weathering, erosion, and deposition can result in the accumulation of sediment; organic matter, water and air combine with sediment to produce soil

## Earth-Sun Relationships summer/winter solstice:

longest and shortest days of year equinox: day and night are equal

#### **Geographic Zones**

tropical (low latitudes) between Tropics of Cancer and Capricorn polar (high latitudes) north of Arctic Circle and south of Antarctic Circle

**temperate** (middle latitudes) between tropical zone and polar zones

**Weather:** conditions in the atmosphere closest to Earth's surface such as wind and precipitation

**Climate:** seasonal pattern of weather conditions in an area over many years; does not change rapidly

#### **Key factors in climate:**

Latitude, elevation, ocean currents, wind direction, mountain barriers

#### **Key biomes:**

In temperate deciduous

**forests** there is ample rain and moderate temperatures with cool winters and a wide range of plant and animal life.

Tropical areas include **tropical rainforests** near the equator where temperatures are warm and there is ample rainfall all year.

Grasslands, such as **savannas or steppes** are generally drier and support large grazing animals.

**Deserts** are regions that receive less than 10 inches of rainfall annually.

Close to the polar regions is **tundra**. No trees and soil is frozen part of the year.

# In what ways does physical geography affect the way people live?

## Human Geography



#### Where people live

**Cities:** large population centers **Urbanization:** growth of cities; more than half of all people live in cities

#### **Human Migration**

**Migration**: movement of people from one location to another; physical geography affects routes, flows and destinations

**Factors of migration**: political, economic, social, environmental

## Population Characteristics population density:

geographers' measurement of settlement; inhabitants per unit area **birth rate**: number of live births

per 1,000 people

**mortality rate**: number of deaths per 1,000 people

**growth rate**: birth rate minus

mortality rate

**population pyramid**: shows population details; typically by gender and age

#### Globalization

Includes the increasingly fast movement of goods, services, money, people, and ideas around the world with positive and negative consequences **connectivity**: people, countries, and economies more connected and dependent on one another

standard of living: jobs are created where efficiencies exist and are lost elsewhere; cheaper goods and services

**pandemics**: disease can spread quickly throughout world

loss of local culture: traditional ways replaced by new cultural norms

#### Resources

meeting today's wants and needs without reducing the ability of future generations to meet their wants and needs requires **sustainable development** 

renewable resources take a short time to replace such as trees and water

Coal and oil are examples of **non-renewable resources** that take a long time to replace

#### **Geographic Regions**

**Formal:** common characteristics that a whole region shares and has clear boundaries

**Functional:** organized around a focal point and the areas connected to it

**Perceptual:** defined by people's attitudes or emotions about an area and boundaries may differ

How does globalization affect the economic and political landscape of the world?

## **Cultural Geography**



#### **Culture**

behaviors and ideas shared by a group of people

#### **World Religions**

Some of the major world religions are Judaism, Christianity, Islam, Sikhism, Hinduism, Buddhism and Animism

#### **Cultural Change**

**Diffusion**: ideas, products and cultural traits spreads from another culture

Processes and factors of diffusion include migration, war, trade, freedom of expression, economics, and education access

The process by which cultures become more similar is referred to as **cultural convergence** 

**Cultural divergence** occurs when cultural areas divide

How does geography and cultural interactions shape the development of societies?

#### Government



#### **Forms of Government**

**Monarchy**: ruler determined by birth; types include **absolute**, constitutional **and parliamentary** 

**Theocracy**: political leaders are also religious leaders

**Dictatorship:** single ruler or ruling party maintains power by whatever means necessary; no real voting rights for people

**Totalitarian:** government controls political, economic and social sectors

**Democracy**: people vote for leaders and on laws; types include

constitutional and parliamentary

**Republic**: people vote for leaders; leaders create and vote on laws

Where, when and why have different forms of government emerged?

### **Economics**



#### **Systems**

Voluntary participation by producers and consumers are key to **free enterprise** where consumer demand drives production; capitalism/market economy

**Socialism** includes the most important businesses owned by the government and offers many essential services for free or lowcost.

Under **communism** a strong government plans and controls the production and distribution of goods and services. Government owns all land, factories, farms and major resources.

In a **traditional economy** people meet their basic needs as their ancestors had.

**GDP:** gross domestic product is the total value of all goods and services in a country and **per capita GDP** measures the GDP per person and is used as a measure of economic development

## Levels of Economic Activities

The production or extraction of food or raw materials such as oil are **primary** activities.

**Secondary** activity includes the processing of materials to increase value such as manufacturing.

Providing services to people such as teachers, doctors and lawyers are within **tertiary** activities.

In **quaternary** activities professional services are provided to businesses such as management or information services by consultants

## Levels of Economic Development

**More developed** nations have advanced economies, low birth rate, low mortality rate, low infant mortality rate, long life expectancy, high literacy rate and a high G.D.P.

**Less developed** nations have lower standards of living, high birth rate, high mortality rate, high infant mortality rate, short life expectancy, lower literacy rate, and low G.D. P.

Countries moving from less to more developed are known as newly industrialized or emerging economies.

#### **Production methods**

Farmers engaged in **subsistence agriculture** grow only enough food for their family.

Farmers who produce goods to sell to others rather than meet their own needs practice **commercial** agriculture.

**Cottage industries** make goods by hand in homes or small workshops for family or local use.

Goods mass-produced in factories for sale by businesses to consumers and other businesses are produced by **commercial industries**.

# In what ways does geography affect the economics of a place?

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## **Historical** Geography

**Spatial Diffusion**- To spread from within a community or from one community to another

#### Examples:

**Bubonic Plague**- The epidemic experienced during the Middle Ages which killed nearly 1/3 of western Europe. Also known as the **Black** Death.

Columbian Exchange- The exchange of crops, animals, disease, and ideas of different cultures after Europeans landed in the Americas.

The American contributions	European contributions
Maize, potatoes, sweet potatoes, tomatoes, peanuts, most beans, and squash Environmental preservation	Horses, pigs, sheep, goats, burros, and cattle  Wheat, oranges, onions, lemons  Disease such as small pox, influenza, and the measles

#### **Global trade examples:**

Silk Road- overland trade route from China to Mediterranean Sea from 100 B.C. to 15<sup>th</sup> Century

triangular trade- slaves transported from West Africa to New World ports: cash crops from the Americas went to Europe and European goods went to Africa

## **Region 1: States &** Canada



#### **Economic Characteristics**

Highly Developed (GDP, Lit. Rate, Life Expectancy)

Highly Developed infrastructure (roads, rail, airways, etc.)

Rich in natural resources; allows for **diverse** economies

Economic center of the world:

#### **New York City**

Major Exports: Technology, information systems, foodstuffs Major Imports: Oil, cloth goods

#### **Cultural Characteristics**

Region shares a common history of European colonialism

Diverse, multicultural societies; reflected in the arts

Very **urbanized**, with a highly mobile population

Growing gap between rich and

Highly educated; with large postsecondary system (colleges)

Conflicts: Quebec vs. English Canada (Political & Cultural)

#### MAP ITEMS:

(plot on map)

#### Rivers

Colorado

The United

**Water Features** Great Lakes Gulf of Mexico **Hudson Bav** Mountains Appalachian Rockies Pacific Coastal Ranges **Land Features** Atlantic & Gulf Coastal Plains **Great Plains** Interior Lowlands Canadian Shield Grand Canvon Basin & Ridge Aleutian Is. Hawaiian Is.

Columbia

Oceans Arctic Ocean

Mississippi Rio Grande

St. Lawrence

Atlantic Ocean

Pacific Ocean

#### **Cultural Landmarks to** know

**US Capitol Building** Golden Gate Bridge

VA Capitol Building Statue of Liberty

White House St. Louis Gateway Arch

Bilingual signs, skyscrapers, shopping malls, wheat fields

**Nations to Know:** (label on map)

Canada

United States of America Cities to Know: (dot them on map)

Chicago, Houston, Los Angeles, Montreal,

New York City, Ottawa, Quebec, St.

Louis

Vancouver, Washington DC

#### **Questions**

1. The US & Canada participate in an economic

alliance with M	lexico called
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2. The US & Canada participate in a major defense alliance called

3. What is the dominant religion found in the US & Canada?

4. Major languages of the

JS?	&	
5. Major languages of Canada? &		
^		

(Quebec)

6. This region exports its culture via the global marketplace. In what ways could someone "purchase" a piece of American culture?

What role has geography played in the economic success of the U.S. and Canada?

Region 2: Europe



#### **Economic Characteristics**

Highly Developed ( GDP, Lit. Rate, Life Expectancy) Highly Developed **infrastructure** 

(roads, rail, airways, etc.)

Eastern Europe still lags behind West after Communism

Highly educated; many work in industry, technology

Advanced farming techniques = great food production

Advanced water management= Polders; windmills

Air & Water pollution—Black Forest, Venice, Rhine, Danube Governments heavily involved in managing the economy

#### **Cultural Characteristics**

Ethnically Diverse, with many languages, religions, customs European culture spread around the world (imperialism)

Very **urbanized**, densely

populated region
Birthplace of industrial revolution
(London); western

democracy (Athens and Rome)

Conflicts: Ethnic divisions in former Yugoslavia on Balkan Pen (Serbia, Montenegro, & Kosovo) Religious tensions in Northern Ireland (Cath/ Prot)

#### **MAP ITEMS:**

(plot on map)

#### Rivers

Danube

Rhine

### Seine Oceans

Arctic Ocean Atlantic Ocean

#### Seas

Adriatic

Aegean

Baltic Black

Mediterranean

North

#### **Water Features**

Strait of Gibraltar

#### **Mountains**

Alps

Pyrenees

#### **Peninsulas**

Iberian

Italian

Jutland

Scandinavian

#### **Islands**

British Isles (Great Britain)

Ireland

Sicily

#### **Land Features**

Fjords (Norway) North European Plain Ruhr Valley

### Cultural Landmarks to know

Notre Dame Arc de Triomphe The Louvre Eiffel Tower Big Ben; Westminster Abbey

St. Peter's Basilica

Ancient Structures: Coliseum,

Parthenon, castles

Nations to Know: (label on map)

Belgium Netherlands Denmark Norway France Poland

Germany Sweden

United Kingdom Switzerland

Greece Ukraine

Italy Former Yugoslavia

Luxembourg

Cities to Know: (dot them on man)

Athens (Greece), Berlin (Germany), London

(UK), Madrid (Spain), Paris (France), Rome

(Italy), Warsaw (Poland)

#### Questions

1. Name the major economic & political union in Europe.

2. Along with the US, many European nations are part of what defensive org?\_\_\_\_

3. What is the dominant religion found throughout Europe?

4. What ocean current helps to stabilize the climate of Europe? \_\_\_\_\_

5. **T** or **F**: Europe has varied climate regions, from Tundra to Mediterranean.

6. Large oil reserves can be found under what European water feature?

How has geography affected the ethnic and religious conflicts in Europe?

How have the cultures of Europe been affected by geography?

## Region 3: Latin America



#### **Economic Characteristics**

All **developing** (GDP, Lit. Rate, Life Expectancy) Resource rich; oil (Mexico, Venezuela), copper (Chile) Economies are diverse, focus on **primary** level (extraction)

Agriculture is key: **subsistence**, plantation, slash & burn

Great **disparity** in income distribution; large poor population Deforestation of Amazon Rainforest; Pollution around cities

**NAFTA** & **OAS**—important international economic alliances

#### **Cultural Characteristics**

European heritage: Rigid social structure, Roman Catholic African heritage: Music & dance

(calypso); social customs

European languages: Portuguese (Brazil); Spanish

Rapid population growth; coastal settlement in South America

Region is **urbanizing**; megacities & squatter settlements

**Out-migration**—people leaving home countries to find work

#### Map Features:

Rivers

Amazon

#### **Oceans** Atlantic Ocean Pacific Ocean Seas Caribbean **Mountains** Andes Sierra Madres Occidental Sierra Madres Oriental **Land Features** Atacama Desert Amazon River Basin Llanos Pampas **Cultural Landmarks** Catholic Cathedrals Incan/Aztec/Mayan Pyramids Haciendas Ejidos (communal land) Machu Picchu Tikal Nations to Know (Mexico & C. Am.): Belize Costa Rica El Salvador Guatemala Honduras Mexico Panama **Nations to Know (South** America): Argentina Bolivia Brazil Columbia Chile Ecuador French Guiana Guvana Paraguay Peru Suriname Uruguay Venezuela Nations to Know (Caribbean): Cuba Dominican Rep. Haiti Jamaica Puerto Rico (US)

Cities to Know: Mexico City (Mexico), Santiago (Chile), Buenos Aires (Arg.), Rio de Janeiro (Br.) **Ouestions** 1. List two cash

Two crops. food crops.

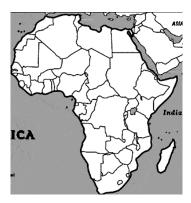
2. One could find large cattle ranges throughout

Argentina's region.  3. <b>Mestizos</b> are individuals of &
descent
4. Tierra caliente, templada, & fria are vertical zones of the Mountains 5. T or F: If it is summer in Mexico City, it must be summer in Buenos Aires.
6. Regions of what climate zone dominate Latin America?

What role did cultural diffusion have in the cultures of Latin America?

How do the varied geographic regions, climates and natural resources of Latin America affect the cultures, governments and economics of the region?

## **Region 4: Sub-Saharan Africa**



#### **Economic Characteristics**

All developing (GDP, Lit. Rate, Life Expectancy) Agriculture is key (subsistence, nomadic herding, plantation) Poor infrastructure; many landlocked countries Resource rich; export raw materials (gold, diamonds) Great variation in per capita income; many live in poverty Productivity lags behind population growth in many nations

#### **Cultural Characteristics**

Ethnically diverse—over 1,500 languages, diverse customs Cultural Diversity: masks, sculpture, dance, music, clothing Most people live along coast or along major rivers (Nile) Population is mainly rural; few cities over 1 million people Large number of refugees due to

conflict (Rwanda) Christianity and Islam are the two

major religions

Conflicts: Rwanda (Tutsi vs. Hutu—genocide of Tutsi in 1994) **Map Features:** 

#### Rivers

Congo Niger Nile

Zambezi

#### Seas

Red

#### Oceans

Atlantic Indian

#### **Water Features**

Lake Victoria Lake

Tanganyika

#### **Land Features**

Kalahari Desert Namib Desert Saharan Desert Sahel

#### Man-Made

Aswan Dam Suez Canal

#### **Cultural Landmarks**

Mosques & minarets Churches Markets Villages Modern City Cores

#### Nations to Know:

Botswana Chad Democratic Republic of the Congo (DRC)

Ethiopia Gabon Kenya Madagascar Mozambique Senegal South Africa Sudan Tanzania

#### Cities to Know:

Dakar (Senegal), Johannesburg (S. Africa),

Lagos (Nigeria)

#### **Nations Named After Ancient** Civilizations

Ghana Mali Zimbabwe

#### **Ouestions**

<ol> <li>The bul</li> </ol>	k of Africa	is			
composed	of a huge	plat	e	a	u,
with high		-			
<u> </u>			_		_

2. Name three ways in which river traffic in Africa is impeded.

3. Due to its relatively smooth coastline, Africa has few natural for trade. 4. T or F: Similar climate patters are NOT found north & south of the equator. \_\_\_\_ 5. People who flee their homes to avoid conflict are called 6. How do many ethnic groups throughout Africa

How have the natural resources and climate of Africa affected the

lifestyles and

cultures?

preserve their histories?

How has the physical geography of Africa affected the politics and economics of the nations of Africa?

## **Region 5: North Africa** & Southwest Asia (Mid East)



#### **Economic Characteristics** All developing (GDP, Lit.

Rate, Life Expectancy)

Poor **infrastructure** (Suez Canal; Aswan High Dam)

Relies on agriculture,

pastoralism, tourism, & extraction (oil)

Reliance on oil revenue = little economic diversity

Wealthy nations line the **Persian** 

Gulf: S. Arabia #1 in oil

Great variation in standard of living; many live in poverty

Water management is vital to the economy of the region

**Cultural Characteristics** Most nations are Arab... BUT the MAJORITY of Turkey, Israel, & Iran are non-Arab

The Islamic faith dominates the region: BUT Jews in Israel

Population is urbanizing and growing; many under age 15

Art reflects the religious diversity

#### of the region

Modernization in cities conflicts with traditional ways

**Conflicts**: Arab Palestinians (Muslim) vs. Israeli Jews

#### Map Features:

#### Rivers

Nile

**Tigris Euphrates** 

Jordan

#### Seas

Arabian

Black

Caspian

Mediterranean

Red

#### **Water Features**

Persian or

Arabian Gulf

**Bosporus Strait** 

Dardanelles

Strait of

Hormuz

#### Mountains

Atlas

Caucasus

Taurus

Zagros

#### **Land Features**

Arabian Peninsula Saharan Desert

Sahel

#### Man-Made

Aswan Dam

Suez Canal

#### Cultural Landmarks (know

what these look like)

Mosques & minarets Church of the Holy Sepulcher

Western (Wailing) Wall Dome of the Rock

Kaaba (Mecca) Hagia Sophia Bazaars (sugs), oil rigs Walled

#### Nations to Know:

Algeria Libva

Egypt Qatar

Iran Saudi Arabia

Irag Turkey

Israel United Arab Emirates (UAE)

Kuwait

#### Cities to Know:

Baghdad, Cairo, Istanbul, Tehran

#### **Cities of Great Religious** Importance

Jerusalem, Israel Mecca, Saudi Arabia

#### **Questions**

- 1. This region is a cultural & trade crossroads for what 3 continents.
- 2. Name three religions that have their beginnings here.
- 3. What economic organization seeks to control **oil** prices via production?
- 4. Workers that leave their native countries for jobs elsewhere are called?
- 5. What two climate regions dominate this region?
- 6. Name 2 negative impacts of the Aswan High Dam?

How have the natural resources and history of this region affected the lives of those in the region?

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## **Region 6:** South, Southeast, & **East Asia**



#### **Economic Characteristics**

Economic development varies throughout the region

Highly Developed: Japan, Taiwan, South Korea, Singapore

Economies range from subsistence agriculture to high-tech

Region of intense agriculture (rice & tropical crops); fishing

China: making transition from Communism to Free Market Global & regional markets important to economic progress Deforestation of rainforests an issue in Indonesia, Burma

#### **Cultural Characteristics**

Ethnically diverse; wide range of languages & religions Areas of extremely dense and

sparse population; very rural Has the largest populations in the

world (China & India)

Religions: Hinduism (India), Buddhism, Shinto (Japan)

Taoism & Confucianism: Asian religions/philosophies

Heritage items: silks, batik, ideograms (writing), iewels

Conflicts: Pakistan (Muslim) vs. India (Hindu) over Kashmir

Map Features:

#### Rivers

Brahmaputra

Ganges

Indus

Mekong

Yangtze

Yellow (Huang)

#### Oceans

Indian Ocean

Pacific Ocean

#### Seas

Arabian

#### Water Feat.

Bay of Bengal

#### **Mountains**

Himalayas

Mt. Fuji (Japan)

W & E Ghats

#### **Land Features**

Gobi Desert

Plateau of Tibet

#### **Cultural Landmarks**

Taj Mahal Angkor Wat Great Wall of China Floating

markets (SE Asia)

Mosques/minarets Terraced Rice

Fields

Around Buddhist sites: pagodas, temples, shrines

#### Nations to Know (South Asia):

Afghanistan Bangladesh

Bhutan India

Nepal Pakistan

Sri Lanka

#### Nations to Know (SE Asia):

Brunei Burma (Myanmar)

Cambodia Indonesia

Laos Malavsia

Philippines Singapore

Thailand Vietnam

#### Nations to Know (East Asia):

China (PRC) Japan

Mongolia North Korea

South Korea Taiwan

#### Cities to Know:

Beijing (China), New Delhi (India),

Tokyo (Japan)

**Questions** 

1. Name a major economic organization of SE Asia.

Asia's (India) agricultural
system is
termed:
2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

3. List 3 newly industrialized nations of Asia:

4. Name the ancient, rigid class system made illegal in India.

5. T or F: Monsoon winds always have a negative impact on farming in Asia.

6. List three natural hazards

Asia.

What historical issues have influenced the cultures of this region?

What environmental and cultural issues face this region today?

## **Region 7:** Russia & **Central Asia** (the "stans")





#### **Economic Characteristics**

All developing (GDP, Lit. Rate, Life Expectancy)

Poor infrastructure (Trans-Siberian Railroad)

In transition from **communist** to

free market economy

Russia is industrialized; Industry concentrated on Volga/Urals

Vast natural resources (oil, natural gas, timber, minerals)

Central Asia very agricultural; oil reserves along the **Caspian** Air & Water pollution—Aral Sea (shrinking), Chernobyl

#### **Cultural Characteristics**

Ethnically diverse, with many languages, religions, customs Russia has a combination of Slavic, Turkic & Mongol people Housing differs with region; yurts common with nomads Russian Heritage: Ballet, Faberge

eggs, matrioshka dolls, icon **Samovars** (used to brew black tea)

**Conflicts**: Chechen rebels in southern Russia/Azerbaijan Map Features: Rivers Amur Ob Volga Oceans Arctic Ocean Pacific Ocean Seas Aral Black Caspian Water Feat. Bering Strait Lake Baikal **Mountains** Caucasus Urals **Land Features** Siberia **Cultural Landmarks** Orthodox churches St. Basil's Cathedral Red Square The Kremlin Mosques of Central Asia Siberian villages Soviet-era apartment blocks & public buildings Nations to Know: Armenia Azerbaijan Georgia Kazakhstan Russia Turkmenistan Uzbekistan Cities to Know: Moscow, St. Petersburg, Novosibirsk (all in Russia) **Ouestions** 1. Name the division of Christianity most commonly found in Russia.

2. Name the rich, dark soil

found in Eastern Europe &

Russia?

3. What is the name of the
vast "sleeping land" east of
the Urals?
4. What is one reason why
Russia's resources are not
fully developed?
5. T or F: This region has
varied climate regions, from
Tundra to Arid.
6. Some rivers east of the
Urals flow north into what
body of water?

#### How has the size of Russia and its geography affected its history?

How has communism affected the economic development of this region?

# Region 8: Oceania & Antarctica

#### **Economic Characteristics**

Aust/NZ Developed ( GDP, Lit. Rate, Life Expectancy) Great emphasis on primary activities (ranching, mining) Dry climate well suited for cattle & sheep herding

Remote areas of the region rely on air & water transportation

Environmental unbalance due to intro. of non-native species

Antarctica used as research station; little economic activity

#### **Continents/Nations to Know:**

- Antarctica
- Australia
- New Zealand
- •Papua New Guinea

#### Cities to Know:

Canberra, Sydney, Melbourne

#### Map Features:

#### Oceans

Indian Ocean Pacific Ocean

#### **Water Features**

**Great Barrier Reef** 

#### Mountains

Great Dividing Range

#### **Land Features**

Australian Outback

Avers Rock

•Pacific Islands (Volcanic, coral, and continental)

#### **Cultural Characteristics**

Australia & NZ populations live primarily along the coasts Cultures reflect a mixture of

indigenous & Euro. heritage

Pacific Islands sparsely populated; traditional cultures import.

Lifestyles range from urban to **subsistence** farming (rural)

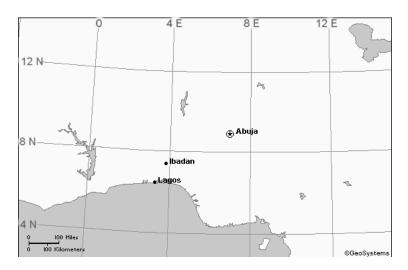
Antarctica lacks native population or permanent residents

#### Questions

- 1. Name the indigenous population of Australia.
- 2. Name the indigenous population of New Zealand.
- 3. What climate region dominates Antarctica?
- 4. T or F: Australia is mostly arid and semi-arid.
- 5. Name two animals unique to Australia or New Zealand.
- 6. What underwater biome is slowly dying due to increasing ocean water temps? (Think Finding Nemo!)

# What environmental and cultural issues face this region today?

How do the environmental issues facing this region affect the Earth as a whole?



**1.** Which city is closer to the Prime Meridian?

**2.** How far apart are Abuja and Lagos?

\_\_\_\_ miles

**3.** What type of map is this?

-What are the other two types of maps?

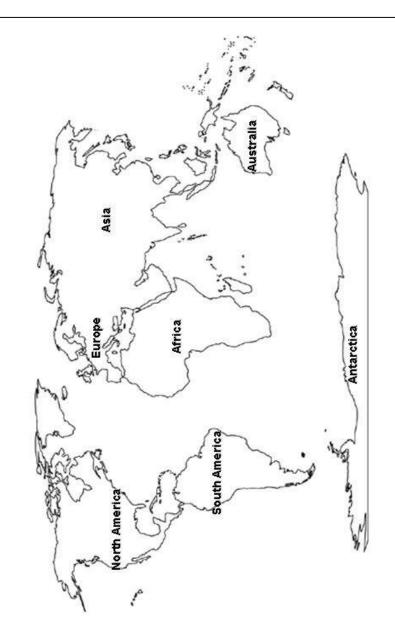
and

**4.** What intermediate direction (NE, SE, NW, or SW) is Abuja from Ibadan? \_\_\_\_\_

**5.** Knowing what you do about geography, what country is shown?

**6.** What is the **absolute location** of Abuja?

### **Continents of the World**



NOTES

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