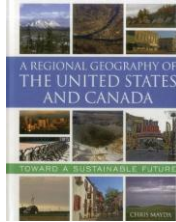


Regions and Ecoregions

Chapter 1



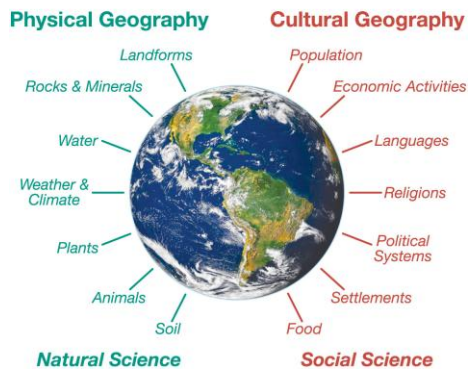
1

Exams

- Beginning of chapters
 - Chapter highlights
 - Terms
- Notes and reading of text
- Discussion questions
- Videos

2

Elements of Geography



3

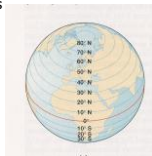
The Five Themes of Geography

- LOCATION
- PLACE
- HUMAN/ENVIRONMENT INTERACTION
- MOVEMENT
- REGIONS

Theme 1 Location Absolute Location Latitude

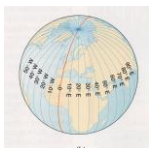
- Angle North or South of the Equator
- Equator is exactly between the two fixed points of the North and the South Pole.
- Latitude goes from 0° - 90° in each hemisphere
- Latitude are East-West lines known as parallels

Where is 20°S ?



Absolute Location-Longitude

- Lines that run North South and are known as Meridians
- 0° is known as the Prime Meridian and runs through Greenwich, England
- Goes from 0° - 180° East and West.

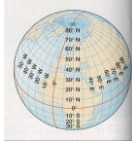


Where is 40°E ?

Longitude and Latitude

- Specific location determined by longitude and latitude reading.
- Coordinate
- Global Grid

Where is 20°N40°E?



Question-Relative Location

- Interaction between and among places.
- How places are connected.

THEME 2: PLACE

- Physical characteristics
 - Animal life, rivers, climate, mountains.
- Cultural characteristics
 - Architecture, patterns of livelihood, land use, languages, religious and political ideologies.

THEME 3: HUMAN/ENVIRONMENT INTERACTION - Question

- Positive and negative ways interact surroundings.

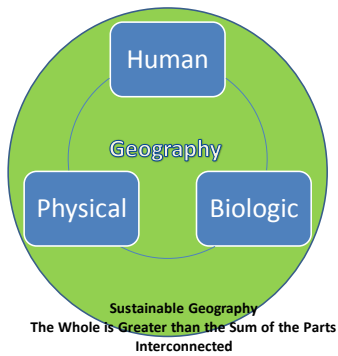
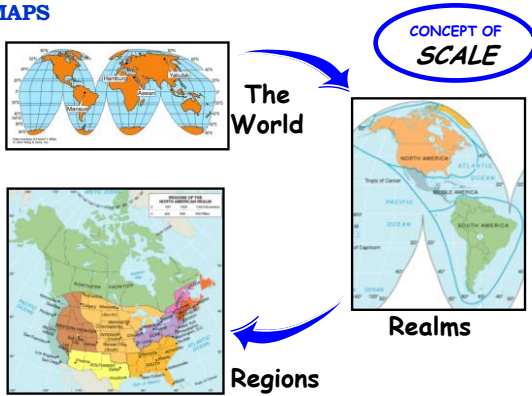
THEME 4: MOVEMENT Question

- People interact with other people, places, and things everyday.
 - Communication, exchange of products, exchange of information.
 - Clothing label. Where does your clothing originate? How did it get here?

THEME 5: REGIONS

- Unifying characteristics-physical, cultural, ethnic. How does this change over time.
- Divide into manageable units of study.

MAPS



14

Ecological Age

- Ecology-Interaction of living organisms and the physical world.
- New way of thinking
- Shift of thinking from conquering nature
 - A part of nature rather than apart.
- Living sustainable. What does that mean?
- Path of U.S. and Canada in relation to sustainability.

15



Anthropocentric= Human-centered

Americans are the most consuming nation and live well beyond their resource supply and do not respect limits. This is an example of living unsustainable.

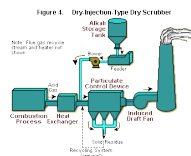
16

Energy Consumption

5% of population that create 25% of greenhouse gases



17



Unintended Consequences Kingston, Tennessee, December 2008

Coal ash, a toxic byproduct of burning coal in a power plant is mixed with water to create slurry which is stored in unlined ponds.

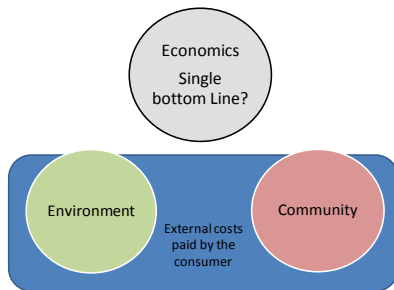
Leaching into groundwater or dam burst

18

Coal Fly Ash

- 131 million tons by 460 plants stored in 1300 locations
- 50% stored in dams
- No federal regulations by EPA to control fly ash as hazardous material
- Contains arsenic, cadmium, chromium, and mercury.

19



Choosing to operate for profit alone has resulted in **unintended consequences**, sometimes for the better, but usually negatively affecting the environment and social equity. These effects are called **external costs**.

20

Global Warming/Climate Change

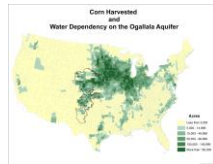
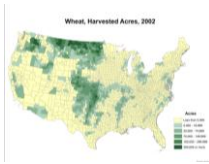
External Costs

Deforestation- Loss of biodiversity
Soil Erosion

Costs to communities?



21



The relationship of regions, water, & crops.

Great Plains to be irrigated from the underlying Ogallala aquifer. Water used to irrigate humid weather crops far exceeds sustainable standards.



22

Ecosystem

- Interconnected geographic area
 - Living organisms (people, plants, animal, microorganisms)
 - Physical surroundings (soil, water, air)
 - Natural cycles (carbon, nitrogen)
- Scale
 - Small (small area in detail-a tree)
 - Large (Entire forest)

23

Ecoregion

- A relative large unit of **land** and **water** defined by influences of shared **climate** and geology, the main factors that determine distribution of plants and animals in the area.
- Subregion

24



Subregions

Black Hills

25

The Ecoregional Divisions of the United States and Canada



26

Boundaries and borders

- Political versus ecoregions



The Colorado River, along the California/Arizona border

27



28

Conclusions

- Geography- Ability to connect information about a place across many disciplines.
- Key to sustainable future
- U.S. and Canada lead world?
 - Consumption (Sustainable)
 - Growth (Ecological)
 - Progress (Cooperative)
- Paradigm shift of holistic systems

29
