DEFINING GEOGRAPHY

- Word coined by Eratosthenes
  - Geo = Earth
  - Graphia = writing
  - Geography thus means “earth writing”
- Divided the Earth into five climatic regions.
- First person known to have calculated the circumference of the Earth.
  - He calculated the earth’s circumference as 24,662.2 miles, an error of less than one percent.
  - (the actual distance is 24859.8 Miles)

CONTEMPORARY GEOGRAPHY

- Geographers ask where and why?
  - Location and distribution are important terms
- Geographers are concerned with the tension between globalization and local diversity.
- A division: physical geography and human geography.

DIFFERENCE BETWEEN “PHYSICAL GEOGRAPHY” AND “HUMAN OR CULTURAL GEOGRAPHY:

- Physical Geography:
  - is the study of the four spheres
DIFFERENCE BETWEEN “PHYSICAL GEOGRAPHY” AND “HUMAN OR CULTURAL GEOGRAPHY:

- **Human Geography**
  the study of the spatial differentiation and organization of human activity on the earth’s surface.

HUMAN GEOGRAPHY (DEFINITIONS)

- The scientific study of the location of people & activities on the Earth’s surface, where & why human activities are located where they are, reasons geographers look at the world from a spatial perspective & interaction, and diffusion of people & ideas. *(Rubenstein)*

OUR EMPHASIS

How the earth dictates who we are and how we live.

Another way to look at it...

“...a historian studies the logical sequence of human activities in time, whereas geographers will study the logical arrangement of human activities on Earth.”

-Rubenstein
THINKING GEOGRAPHICALLY

Basic Concepts

HOW DO GEOGRAPHERS DESCRIBE WHERE THINGS ARE?

- Maps
- Contemporary tools

WHAT IS THE MOST IMPORTANT TOOL A GEOGRAPHER USES?

- Map
  - a two-dimensional or flat-scale model of Earth’s surface, or portion of it.
  - used for reference and communication.
- Cartography
  - the science of making maps.

EARLY MAPMAKING

- Date back to 7th century BC (more than 2,500 years ago)
- Earliest known map of the world created by Eratosthenes (more than 1,500 years ago)
**CONTEMPORARY TOOLS**

- Geographic Information Science (GIScience)
  - Global Positioning Systems (GPS)
  - Remote sensing
  - Geographic information systems (GIS)

**GPS**

- Global Positioning System
- Satellite based technology
- Most commonly used for navigation.
- Data collected from GPS can be used in GIS (we'll get to this.)

**REMOTE SENSING**

- The acquisition of data about Earth’s surface from a satellite.
- Some satellite’s can sense objects as small as 1 meter across.

**GIS**

- Geographic Information System
- A GIS is a computer system capable of capturing, storing, analyzing, and displaying geographically referenced information; that is, data identified according to location.
U.S. Geological Survey (USGS) digital line graph (DLG) data of roads.

USGS DLG of rivers.

USGS scanned, rectified topographic map called a digital raster graphic (DRG).

USGS digital elevation (DEM).

Remember remote sensing.

USGS geologic map.

Landsat 7 satellite image from which land cover information can be derived.

GIS SIMPLIFIED. IT’S ALL ABOUT LAYERS!!

• Stores information in layers.

• Layers represent a different piece of human or environmental information.

• Layers can be viewed individually or in combination.

THE GEOSPATIAL REVOLUTION

Why is each point on Earth unique?
Geographers use two basic concepts to explain why/how each place on Earth is unique:

1. Place
   + A specific point on Earth distinguished by a particular characteristic.
   + Every place occupies a unique location, or position, on Earth's surface.

2. Region
   + An area of Earth distinguished by a distinctive combination of cultural and physical features.

**PLACE**

- A point on the Earth’s surface.
- A place is identified by location.
  + the position that something occupies on Earth’s surface; it is identified by it’s...
  1. Place name
  2. Site
  3. Situation
  4. Mathematical location

**1. PLACE NAME**

- Also called a toponym
- Most commonly named after
  + Famous people
    - George Washington = 1 state, counties in 31 other states, and dozens of cities.
  + Religion or Religious Icon
    - St. Charles, St. Paul, St. Louis
- Can change over time
  + Hot Springs, NM renamed Truth or Consequences to help boost economy
  + After fall of Communism in early 1990’s Leningrad then changed to Petrograd and reverted back to St. Petersburg

**WORLD’S LONGEST TOPONYM**

Llanfairpwllgwyngyllgogerychwyrndrobwlllantysiliogogogoch boasts the UK’s longest place name and 2nd longest in the world, with 58 letters.
WORLD’S LONGEST TOPONYM

Taumatawhakatangihangakoauatamateaturipukakapiki-maungahoronukupokaiwhenuakitanatahu is the 85 letter Māori name for a hill, 305 metres high, overlooking Hawke Bay, New Zealand. The name translates roughly as “The summit where Tamatea, the man with the big knees, the climber of mountains, the land-swallow who travelled about, played his nose flute to his loved one.”

OTHER TOPONYMS OF INTEREST

• Å – Island in Norway
• Nowhere, Oklahoma
• Lake Chargoggagoggmanchauggagoggchaubunagungamaugg in Massachusetts.

2. SITE

The physical character of a place.

• Includes:
  - climate
  - vegetation
  - soil
  - water sources
  - topography
  - elevation

• Essential for locating building sites
  - hilltops, harbors, along rivers
• Sometimes site can modifiable
  + We change it to better suit our needs.
3. **SITUATION**

Location of a place in relation to other places.

- helps us find an unfamiliar place by comparing its location to a familiar one
  - SCHS football field is across Hwy 14 from the nursing home.
- helps us understand the importance of a location
  - Shanghai, because of its situation, has become the center of trade and distribution of goods for much of Southeast Asia

**Situation: Shanghai, China**

![Shanghai Map](image)
PLACE

The position that something occupies on Earth’s surface; it is identified by it’s...
Place name:
  Also called a Toponym
Site:
  Tells us what a place looks like
Situation:
  Tells us where it is in relation to something else

Mathematical location:

4. MATHEMATICAL LOCATION

Precise location of any place using meridians and parallels.

REVIEW

Describe the site, situation, and mathematical location of our school.

What created a change in the situation of Shanghai, China?

GEOGRAPHERS USE TWO BASIC CONCEPTS TO EXPLAIN WHY/HOW EACH PLACE ON EARTH IS UNIQUE:

1. Place
   - An area of Earth distinguished by a distinctive combination of cultural and/or physical features.

2. Region
   - Region
The designation “region” can be applied to any area larger than a point and smaller than the entire planet.

Three types of regions:

- Formal, functional and vernacular.

Formal or Uniform:
-defined by a commonality, typically a governmental, economic, cultural linkage or a physical characteristic.

-examples include, Canada, the Rocky Mountains, the Islamic World, or the rice-growing areas.

Functional or Nodal Region:
-defined by a set of social, political, or economic activities or the interactions that occur within it.

-e.g. an urban area, magazine circulation, radio station

Vernacular or Perceptual:
-ideas in our minds, based on accumulated knowledge of places and regions, that define an area of “sameness” or “connectedness.”

-vary in extent from person to person.
REGIONS
Let's Test Ourselves Over Regions:
When the region on the left pops up, you decide if it is Formal, Functional, or Perceptual

- State of Nebraska: Perceptual
- Amazon River basin: Formal
- Dixie: Functional
- The Corn Belt: Perceptual
- Winona County: Functional
- Country of Brazil: Formal
- The I-80 corridor: Perceptual
- Twins Territory: Formal

REVIEW
Name three formal regions that SCHS is located within. Do the same for functional and perceptual regions.
REVIEW
Name and provide a brief explanation for each of the three types of Regions discussed in class yesterday.

WHY ARE DIFFERENT PLACES SIMILAR?
Geographers use three basic concepts to explain why different places on Earth have similar features:

- Scale: From Local to Global
- Space: Distribution of Features
- Connections Between Places

SCALE: FROM LOCAL TO GLOBAL
• Globalization – a force or a process that involves the entire world and results in making something worldwide in scope.
• More simply stated, it is the creation of a global culture, economy, or politics.

GLOBALIZATION
• Globalization of economic activities, a result of increasing connections between places and the rapid movement of goods and information around the world.
Transnational corporations are often seen as the cause of this globalization and many of its positive and negative effects.

In small groups create a list of three positive and three negative effects of globalization.

Economic globalization = spread of cultures, resulting in more uniform cultural landscapes across the world.

Groups with distinctive local cultures may feel threatened by the globalization of culture, causing conflict or a sense of loss.

Global standardization of products does not mean that everyone wants the same cultural products.

Multinational corporation, McDonald's operates 30,000 restaurants in 119 countries around the world.

McDonald's opens a new restaurant every three hours ... 2/3 are located outside the U.S.

There is a McDonald's restaurant on every continent except Antarctica.
McDONALDIZATION

In any one day, McDonald’s...
- serves 35 million customers (<1% of the world’s population).
- opens eight new restaurants around the world.
- opens six new restaurants outside the U.S.
- prepares more than 6.8 million pounds of french fries.
- employs nearly three million people worldwide.

McDONALDS AND WORLD PEACE

- Thomas Friedman’s “Golden Arches Theory of Conflict Prevention”
  - “No two countries that both have a McDonald’s have ever fought a war against each other.” (NYT, December 8, 1996).

CULTURALLY APPROPRIATE!

- Uruguay - “McHuevo”: hamburger topped with a poached egg.
- Norway - “McLaks”: salmon sandwich/wrap with dill sauce.
- Germany - Beer!
- India - “Maharaja Mac”: Big Mac with all lamb patties.
- Hong Kong - Red Bean ice cream sundae.
- Japan - Green Tea Shake.
- Thailand - Sweet Corn Pie.
- New Zealand - “Kiwiburger” - hamburger with a fried egg and slice of beet.
Geographers use three basic concepts to explain why different places on Earth have similar features:

- **Scale:** From Local to Global
- **Space:** Distribution of Features
  - (Reading Guide 1.8)
- **Connections Between Places**

**Space: Distribution of Features**

- Refers to the physical gap or interval between two objects.
- A geographer’s concern for space is comparable to a historian’s concern for time.
- Geographers think about the arrangement of people and activities found in space and try to understand why those people and activities are distributed across space as they are.
- **Density, concentration** and **pattern** are all measures of **distribution**.

**Density:**

- the frequency with which something occurs in space.
  - **Arithmetic Density** - # of something in a given space
  - **Physiological Density** – ability of a space to support the #
Maps Lie!

Why Are Different Places Similar?

Geographers use three basic concepts to explain why different places on Earth have similar features:

- Scale: From Local to Global
- Space: Distribution of Features
- Connections Between Places

(Reading Guide 1.9)
CONNECTIONS BETWEEN PLACES

Space-time compression – reduction in time it takes to for something to reach another place.

Or the decreasing space between people and ideas.

Diffusion – the process by which a characteristic spreads across space from one place to another over time.

1. “Idea or Innovation” hearth-origination point
2. “Movement or Diffusion”
3. “Acculturate or Acceptance”

TYPES OF DIFFUSION

Relocation diffusion:
- Movement of individuals who carry an idea or innovation with them to a new, perhaps distant location

Expansion diffusion: Idea or innovation spreading outward from the hearth
- Contagious: Spreads to next available person
- Hierarchical: Spreads to most linked/powerful people or places first
- Stimulus: Spreads but changes or modifies as it goes
CONTAGIOUS DIFFUSION

- Rapid, widespread
- Spread throughout the population like the flu would.
- Starts from a “center” or hearth and diffuses out from there to the rest of the population.
- Contagious diffusion goes along with many ideas that relate to popular culture each year.

HIERARCHICAL DIFFUSION

- Spread of an idea from persons or nodes of authority/power to other persons/places.
- Generally begin in highly populated locations/cities.
- Hip hop and rap. It started from low-income African Americans in urban areas and diffused from there.

STIMULUS DIFFUSION

- Spread of an underlying principle, even though a characteristic itself fails to diffuse.
- Basic idea or trend is being diffused, but not the exact idea or trend is spread because of the region it spread to.
- Example: McDonald’s diffusing to India. Hindus don’t eat cows because they believe they are holy, so they replace the beef with veggie or chicken.

HALLOWEEN

- HEARTH - Ireland
- Relocation Diffusion - Irish moved to North America due to potato famine
- Turnips to pumpkins - Stimulus Diffusion
- Hierarchical Diffusion - Roman Catholic Church, American Corporations