The 6 Elements of Geography
6 Elements

Many geographers use the six essential elements to organize their study.

1. The World in Spatial Terms
2. Places and Regions
3. Physical Systems
4. Human Systems
5. Environment and Society
6. Uses of Geography
The World in Spatial Terms

- Geography is the study of the special physical and human characteristics of a place or region.
- An important part of geography is the relationship between humans and their environment.
- A geographer may study culture, or a learned system of shared beliefs, traits, and values.
The World in Spatial Terms

- Geographers look at where things are on the Earth’s surface.
- Changes in settlement patterns over time are also important.
The World in Spatial Terms

- Geographers use many tools in their studies, including maps, charts, and graphs. They also use field notes, interviews, photographs, reference books, and videos.
- High-tech tools such as satellites provide detailed images of the Earth.
- Computer databases, like Geographic Information Systems (GIS) store huge amounts of data.

Satellite image of Texas, Louisiana and the Gulf of Mexico
The World in Spatial Terms

It also tells us where this place is in relation to other places?

- **Absolute Location:**
  The *exact* latitude and longitude or address of a place. (1234 Huntington Lane)

- **Relative Location:**
  The location of a place in relationship to other locations (around the corner from Krogers)
Places and Regions

- A place has physical and human characteristics that make it special.
- **Physical characteristics** include animal and plant life, sources of water, climate and weather, landforms and soils.

Palo Duro Canyon
Places and Regions

- **Landforms** are the natural shapes on the Earth’s surface, such as mountains, hills, and valleys.

Enchanted Rock State Park
Places and Regions

- Human characteristics include ethnicity, language, political and economic systems, population distribution, religion and standard of living.
Places and Regions:

- Think of your favorite city, state, or country.
- Describe it.
- How have the physical characteristics of this place influenced the people there?
Places and Regions

- A region is an area with common characteristics that make it different from surrounding areas.
- A formal region has one or more shared characteristic, such as plant life or can be cultural, economic or political.
- Countries, states and cities are examples of formal political regions.

Downtown Dallas
Places and Regions

- **Functional** region is made up of different places that function together as a unit...such as a metropolitan area such as Dallas-Ft. Worth.

- **Perceptual** regions are defined by people’s shared attitudes, culture and feelings about an area. Central Texas and the Panhandle have vague borders.

The Cadillac Ranch
Amarillo, Texas
The Texas Panhandle
Geographers study the physical processes and interactions among four physical systems – Earth’s atmosphere, land, water and life.

Physical processes shape and change Earth’s physical features and environments.

Climate and weather affect humans.
Physical Systems

- An ecosystem is all of an area’s plants and animals together with the nonliving parts of their environment.
- Earth is the largest ecosystem.
- Natural events and human activity can change ecosystems.
- Studying physical processes and ecosystems because the environment is the setting for all life on Earth.
Physical Systems:

- How did Hurricane Katrina influence New Orleans’ population and economy?
Human Systems

- Studying human systems such as population distribution, growth and movement helps in understanding human events and geography.
- Population growth is affected by a population’s age, birthrate, death rate, and life expectancy.
- Changes in human activity such as advances in medical care and food production have led to population growth.
Human Systems

- Geographers look at where people live and how crowded a region or place is when they study place population density.
- They also study migration or the movement of people.
- One specific type of movement is urbanization, which is an increase in people living or working in cities.

Houston, Texas traffic
Human Systems

- Many geographers study the features of cultural groups.
- People often create groups that separate, organize, or unify areas.
- Geographers also consider human systems of *communication*, trade and transportation in the global community.

Southwest Airlines Jet at Dallas Love Field
Environment and Society

- One of the most important topics in geography is how people interact with the environment.
- Human activities can have positive and negative affects on the environment.

Pollution in Houston, Texas on a clear day.
The environment affects humans as well.

Physical features such as landforms and rivers can influence where people live, and people depend on the environment for survival.

Human life requires three basic resources: air, water, land.

Padre Island, Texas
Other materials such as wood, coal and oil are also important resources.

As the world population grows, demands on resources increase.

Geographers study the locations, quality and quantity of Earth’s resources and the effect of human activity on these resources.
Environment and Society

- Historians use geography to understand history.
- Not only do they look at when things happened, but where and why they happened.
- Geography helps people understand the present as well as the past.
Now you try it!

- Analyze the following image using the 6 Elements of Geography.
Uses of Geography

- Important information about all the planet's systems can be provided by geographers.
- This information can help people plan for the future.

Hurricane in the Gulf of Mexico