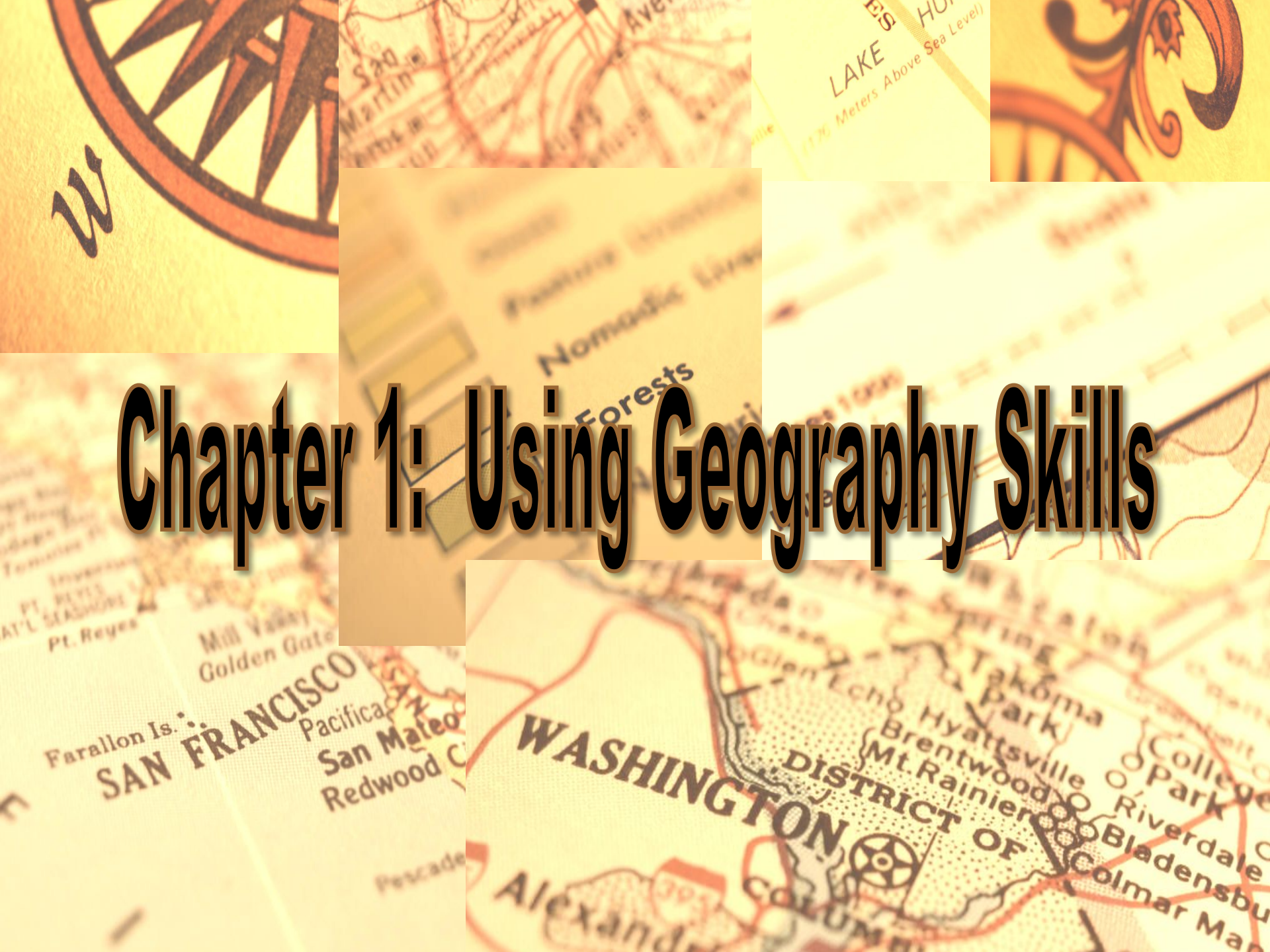

Chapter 1: Using Geography Skills
Forests
Pt. Reyes
Golden Gate
SAN FRANCISCO
Farallon Is.
Pacifica
San Mateo
Redwood
WASHINGTON
DISTRICT OF
Mt. Rainier
Brentwood
Hyattsville
Takoma Park
Riverdale
Bladensburg
Colmar Manor
College Park
LAKE
Meters Above Sea Level

Section 1:
Understanding the Earth

Things to Think About...

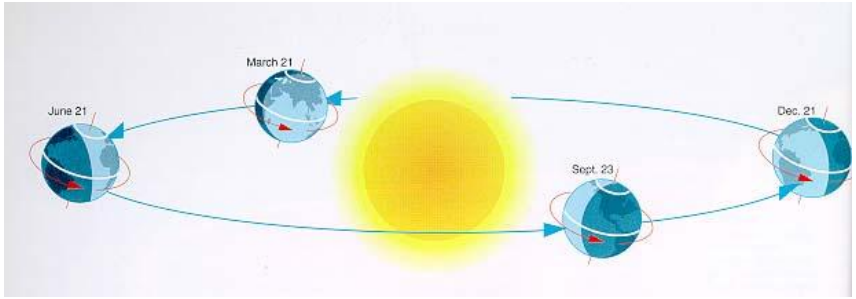
- How does the movement of the Earth around the sun affect our environment?
- What is the effect of latitude on climate?

The Earth, Sun, and Our Environment

- The sun is a star in our galaxy called the Milky Way
- It provides light & energy needed for life on Earth
- It affects our environment (our surroundings) in countless ways.

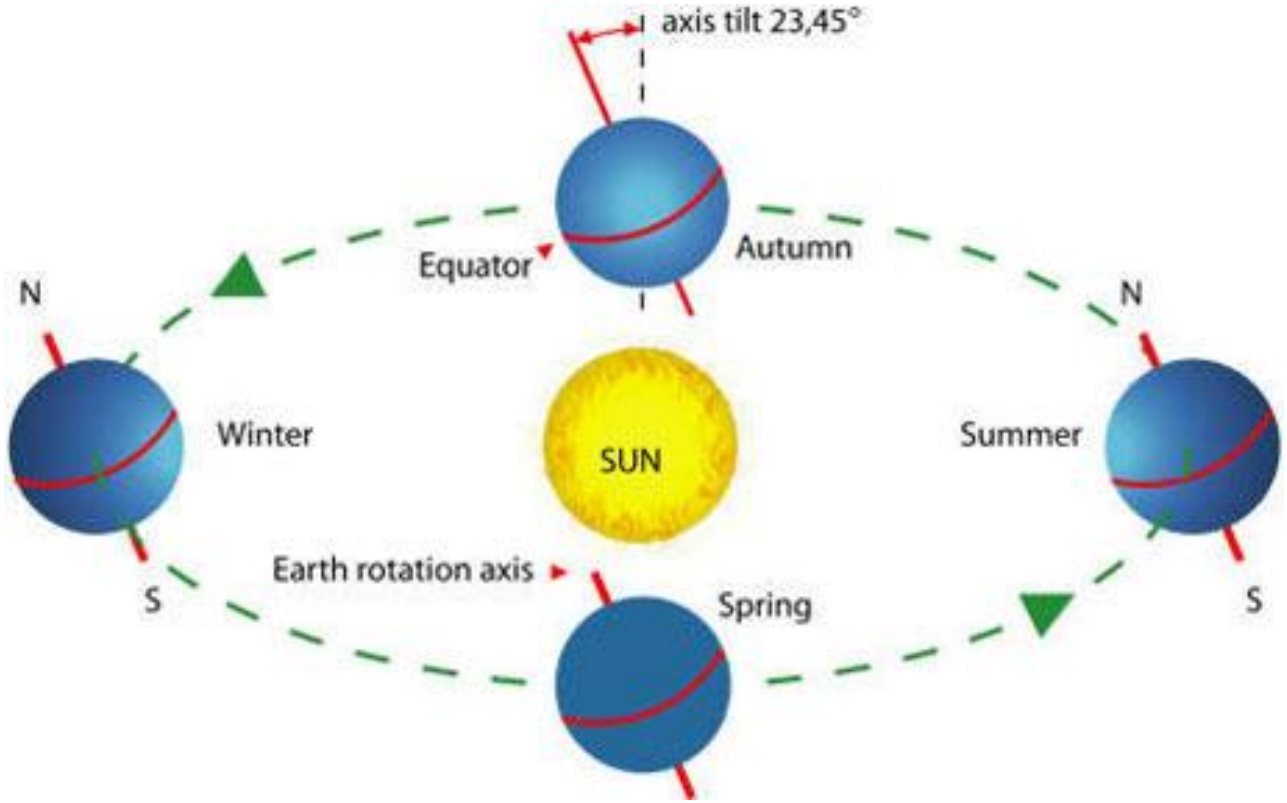
Day & Nights

- The Earth travels around the sun in an oval shaped path called an orbit.
- It takes 365 ½ days for it to complete one revolution or journey around the sun.
- The Earth spins around on its axis– an imaginary line running through its North & South poles.



Seasons

- During the year days or nights might seem longer because of the Earth's tilt on its axis.
- The Earth's tilt/orbit cause changes in temperature.

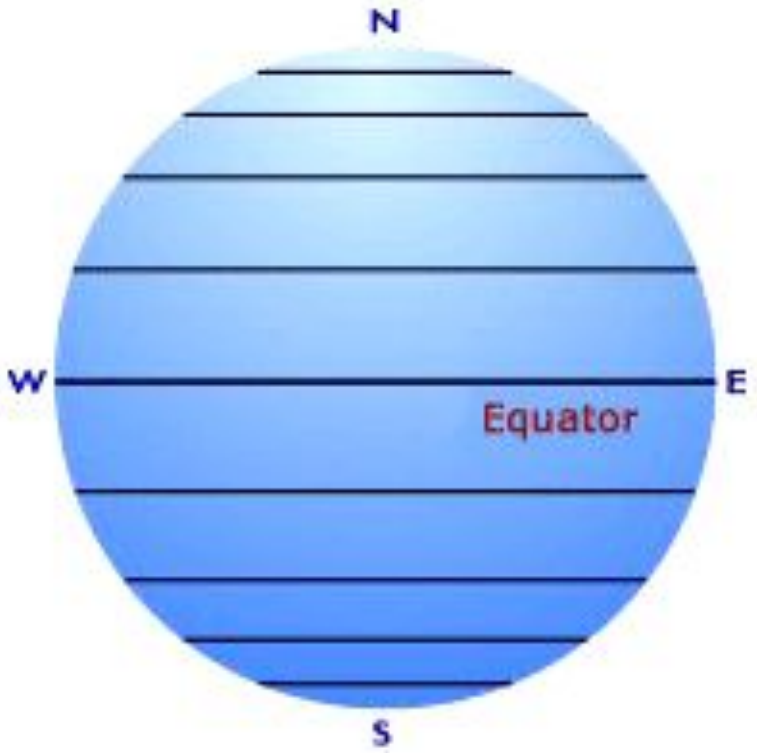


Seasons

- The amount of warmth one feels depends on how directly the sun falls on a region.
- The amount of sunlight also affects how much food is produced.

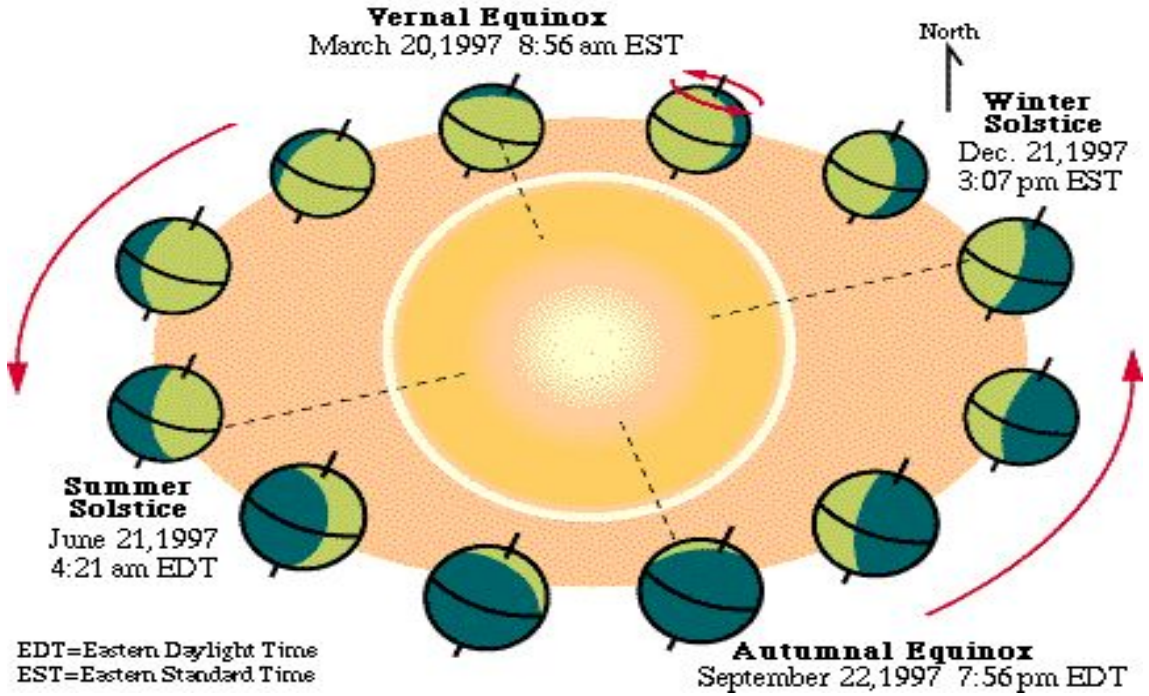
Effect of Latitude

- Imaginary lines, called lines of latitude, are east-west circles around the globe
- They divide the Earth into regions according to the sunlight they receive
- The equator is a latitude line that circles the Earth exactly halfway between the North & South pole.



Effect of Latitude

- On/near March 21 & September 23, the sun is directly over the equator making both days and nights exactly the same length
- These days are the spring and fall equinoxes.



Effect of Latitude

- Two other major lines of latitudes are the **Tropic of Cancer** and the **Tropic of Capricorn**

Effect of Latitude

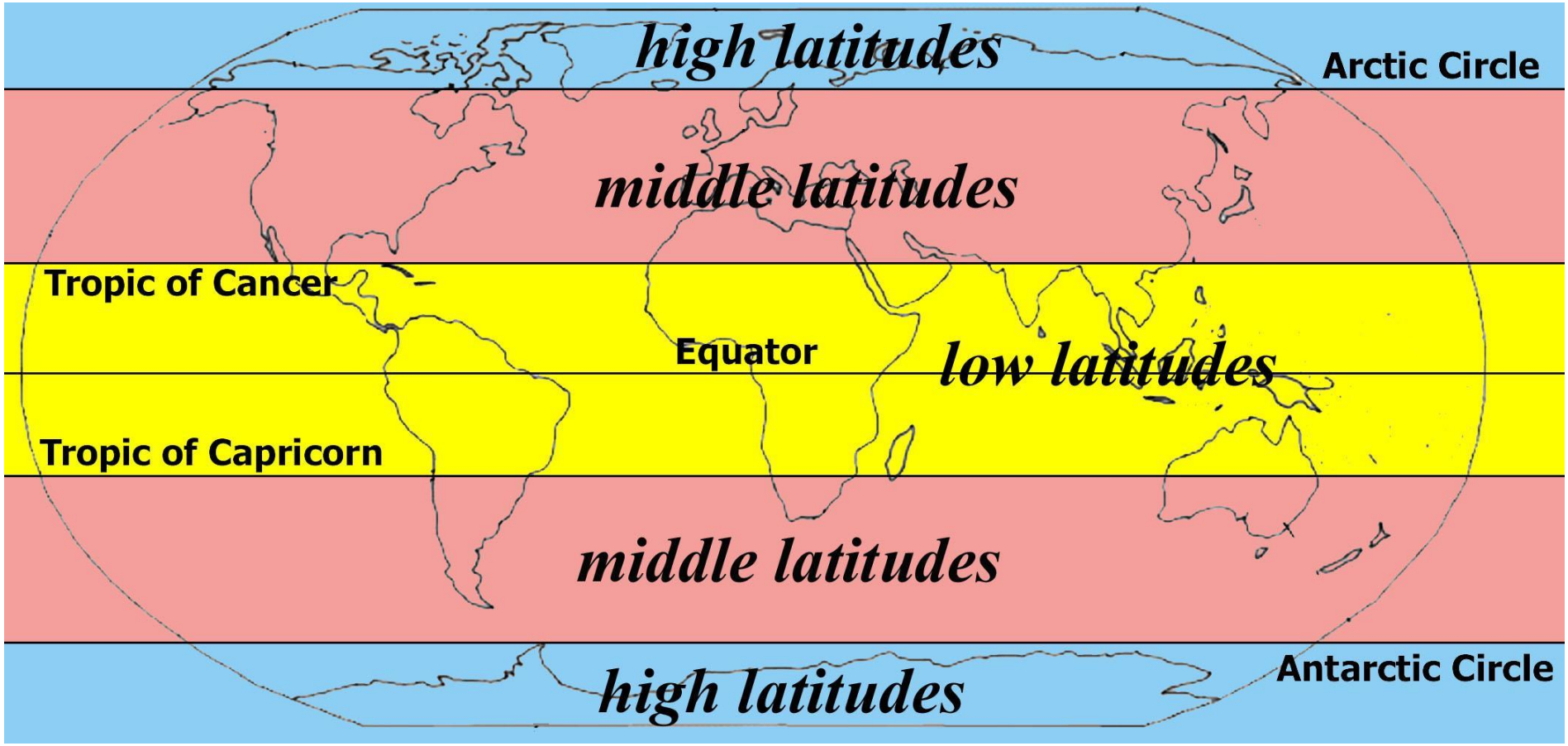
- There are times in the year when the sun is directly over both the Tropic of Cancer and Capricorn creating the **summer** & **winter** **solstices** in the Northern Hemisphere
  - *summer solstice June 21 or 22 when over the Tropic of Cancer*
  - *winter solstice December 21or 22 when over the Tropic of Capricorn*
- During these times, the seasons are opposite in the Southern Hemisphere.

Question: What is the significance of June 21 and December 21?

Effect of Latitude

- The area between the Equator, the Tropics, and the Arctic/Antarctic circles also have specific names and characteristics.
  - low latitudes: area between the Tropics of Cancer and Capricorn; receives direct sunlight; almost always hot
  - high latitudes: area between the Arctic/Antarctic Circles and the North/South poles; a.k.a. “polar zones”; no direct sunlight; always cold
  - middle latitudes: area between the Tropics and Circles; a.k.a. “temperature zones”; have all seasons: spring, summer, fall, winter

Effect of Latitude



Review…

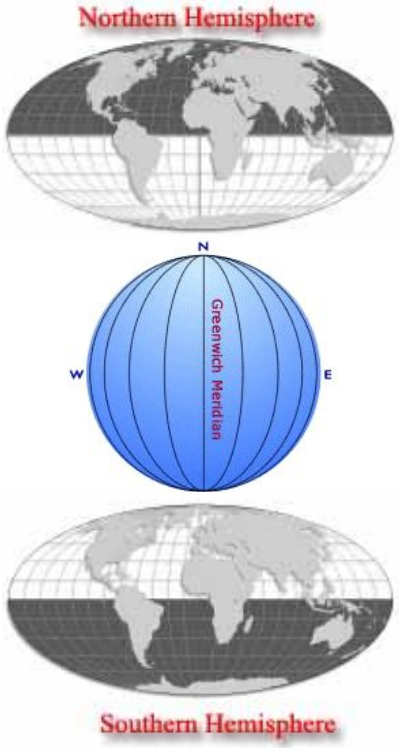
- Orbit
- Revolution
- Rotation
- How does latitude affect climate? Give an example
- How does the Earth's rotation affect our environment?

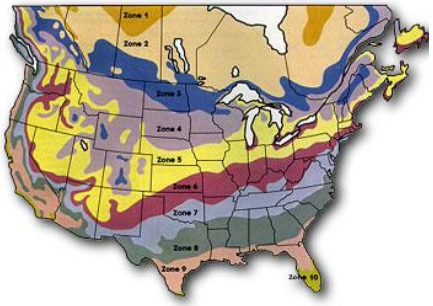
So, What's the Big Idea?

The relationship between the Earth and the sun creates our days, seasons, and climate, and influences our environment.

Your Turn...

- Create a graphic organizer that illustrates the main idea and its supporting details. You can create your own main idea or use the one provided.
- You may help one another, but it's NOT a group or pair assignment. Everyone needs to turn one in.

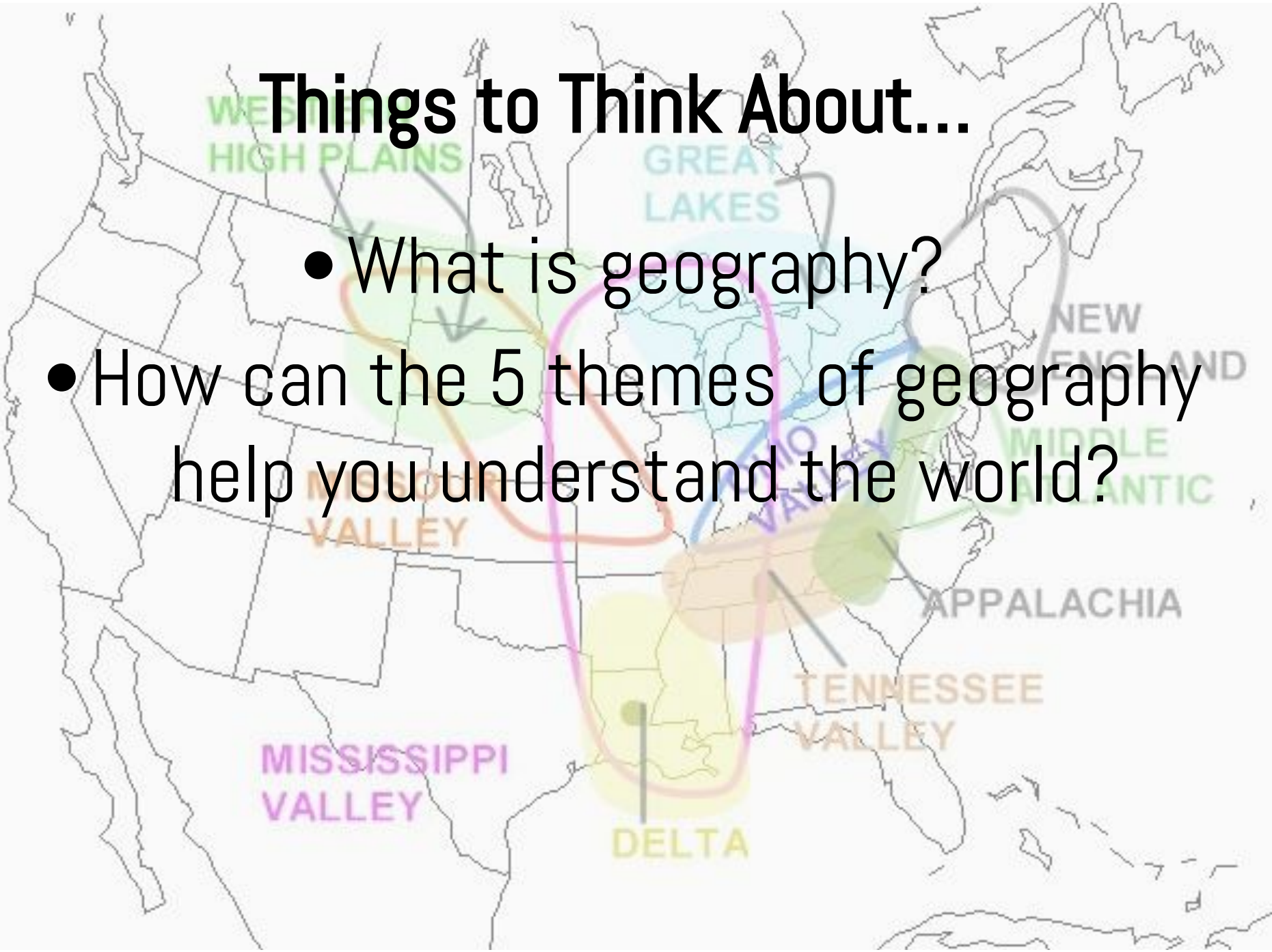




Section 2: Five Themes of Geography

Things to Think About…

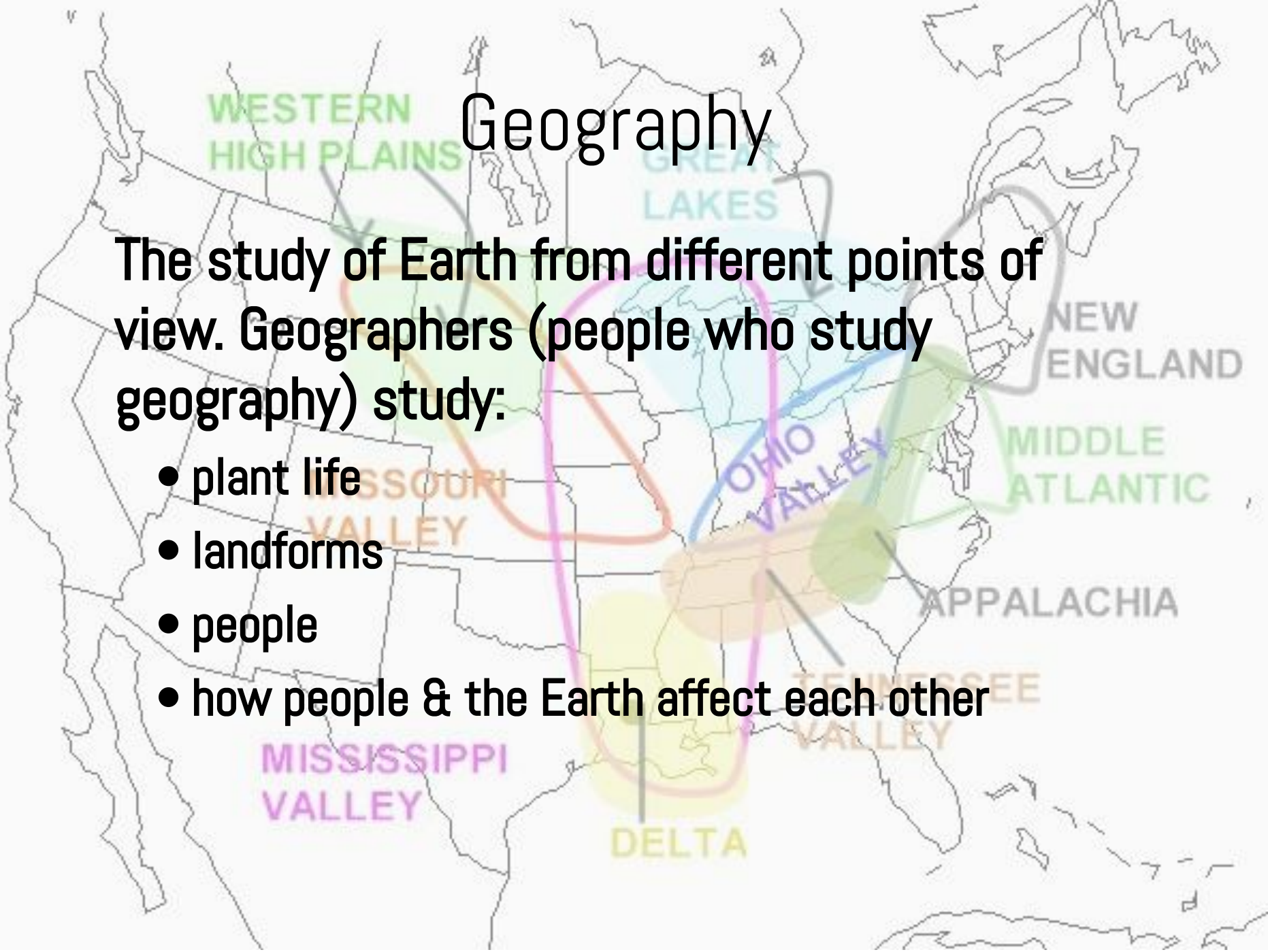
- What is geography?
- How can the 5 themes of geography help you understand the world?



Geography

The study of Earth from different points of view. Geographers (people who study geography) study:

- plant life
- landforms
- people
- how people & the Earth affect each other



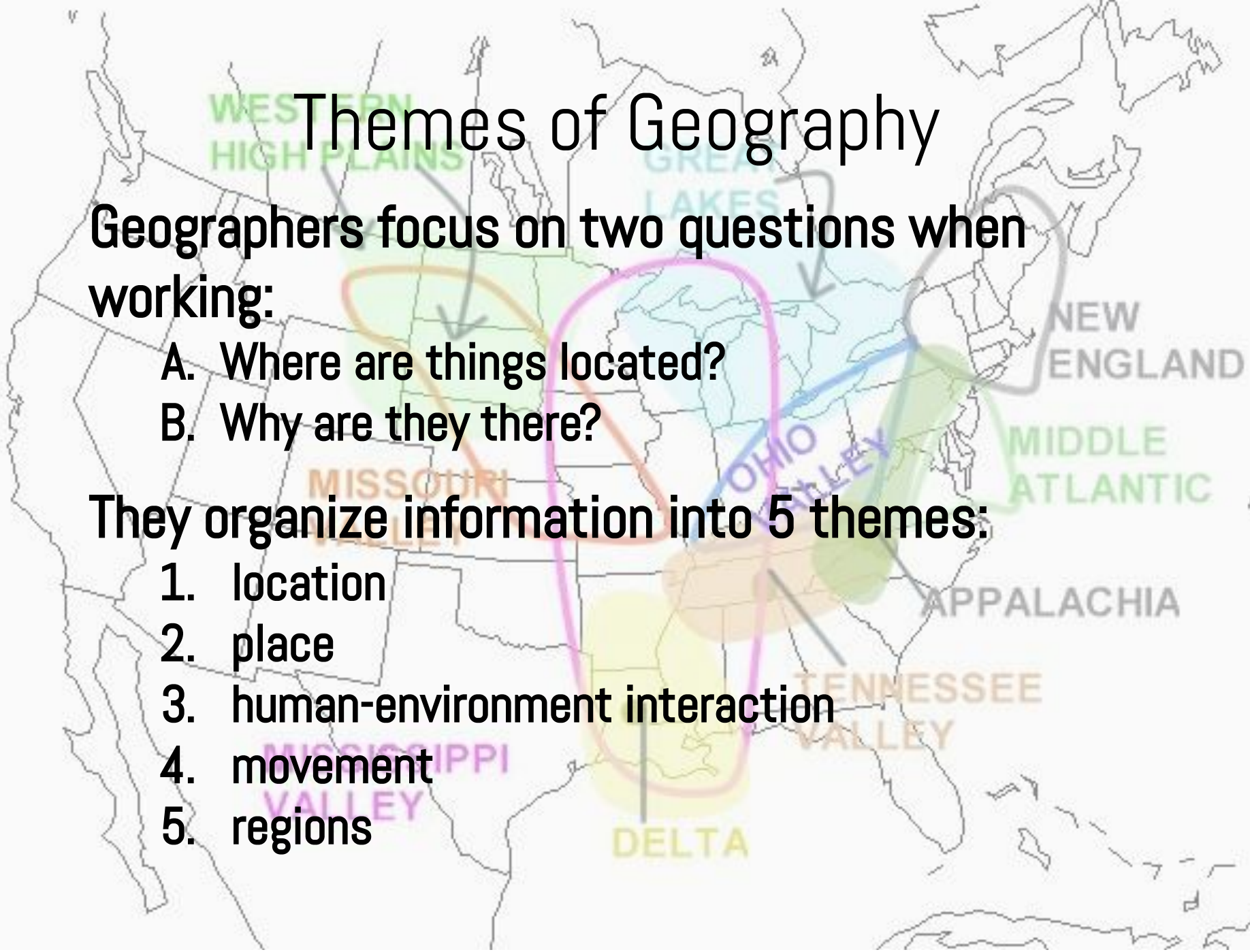
Themes of Geography

Geographers focus on two questions when working:

A. Where are things located?
B. Why are they there?

They organize information into 5 themes:

1. location
2. place
3. human-environment interaction
4. movement
5. regions



LOCATION

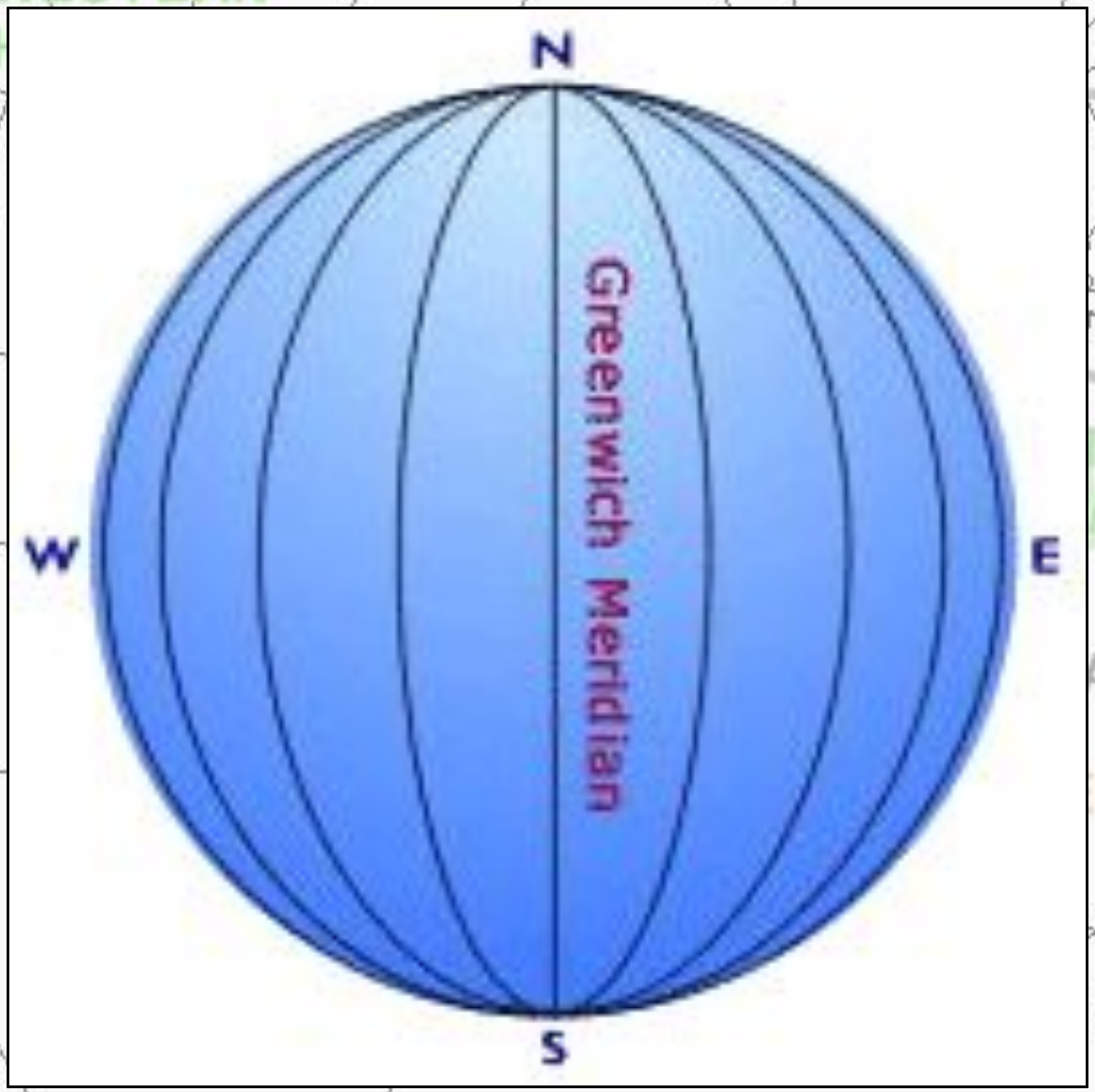
- Geographers study a place be describing it. Find absolute location using two types of imaginary lines: latitude & longtitude

  1. Parallels: east-west circles around the globe; also called latitudes; describe location as north/ south of Equator; divide globe into units called degrees.

  2. Meridians: north-south circles around the globe; also called longitudes; begin & end at the N and S poles; describe location as east/west of Prime Meridian

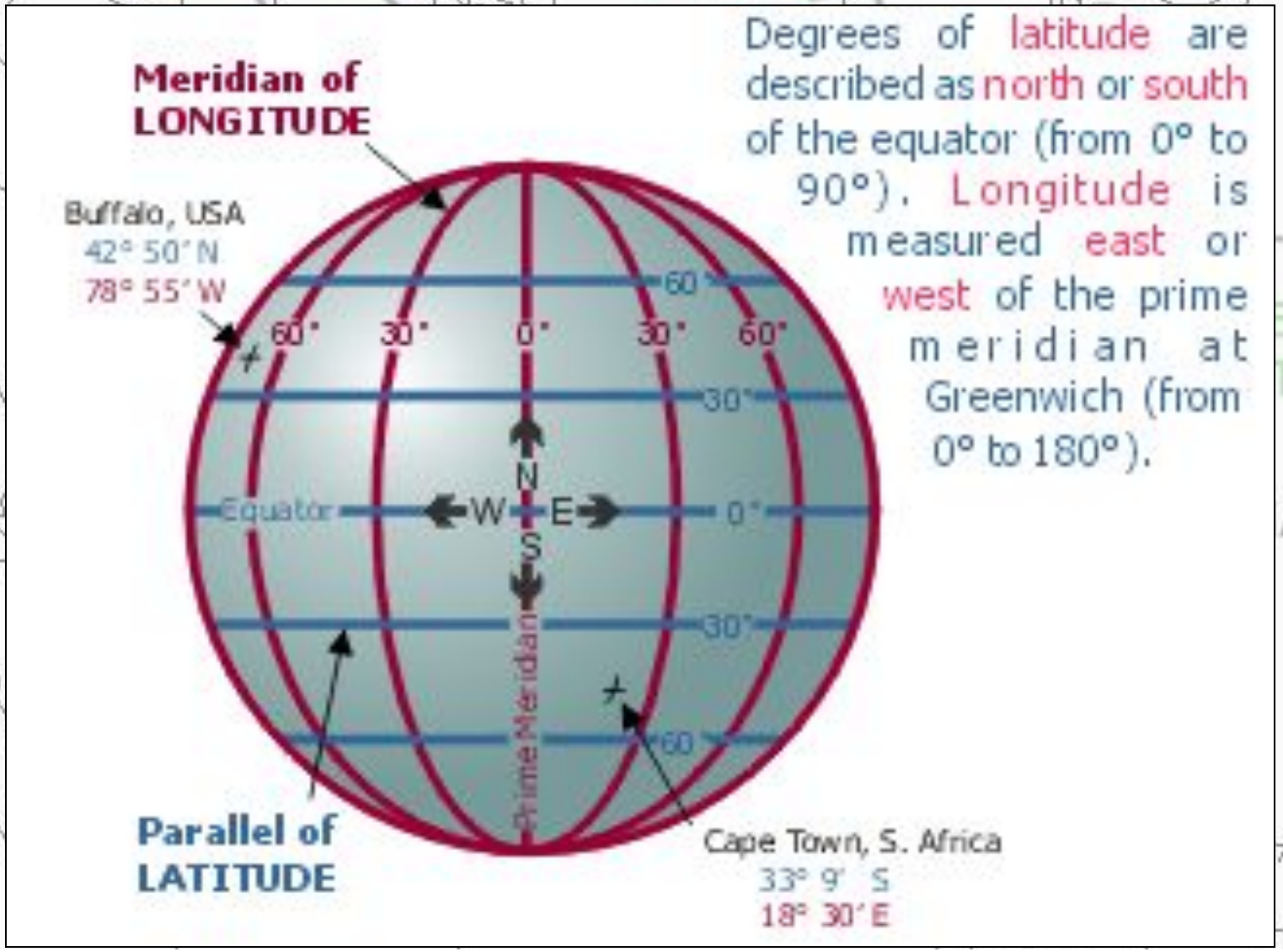
  Prime Meridian (runs through Greenwich, England) is 0° longitude

LOCATION



5 Themes

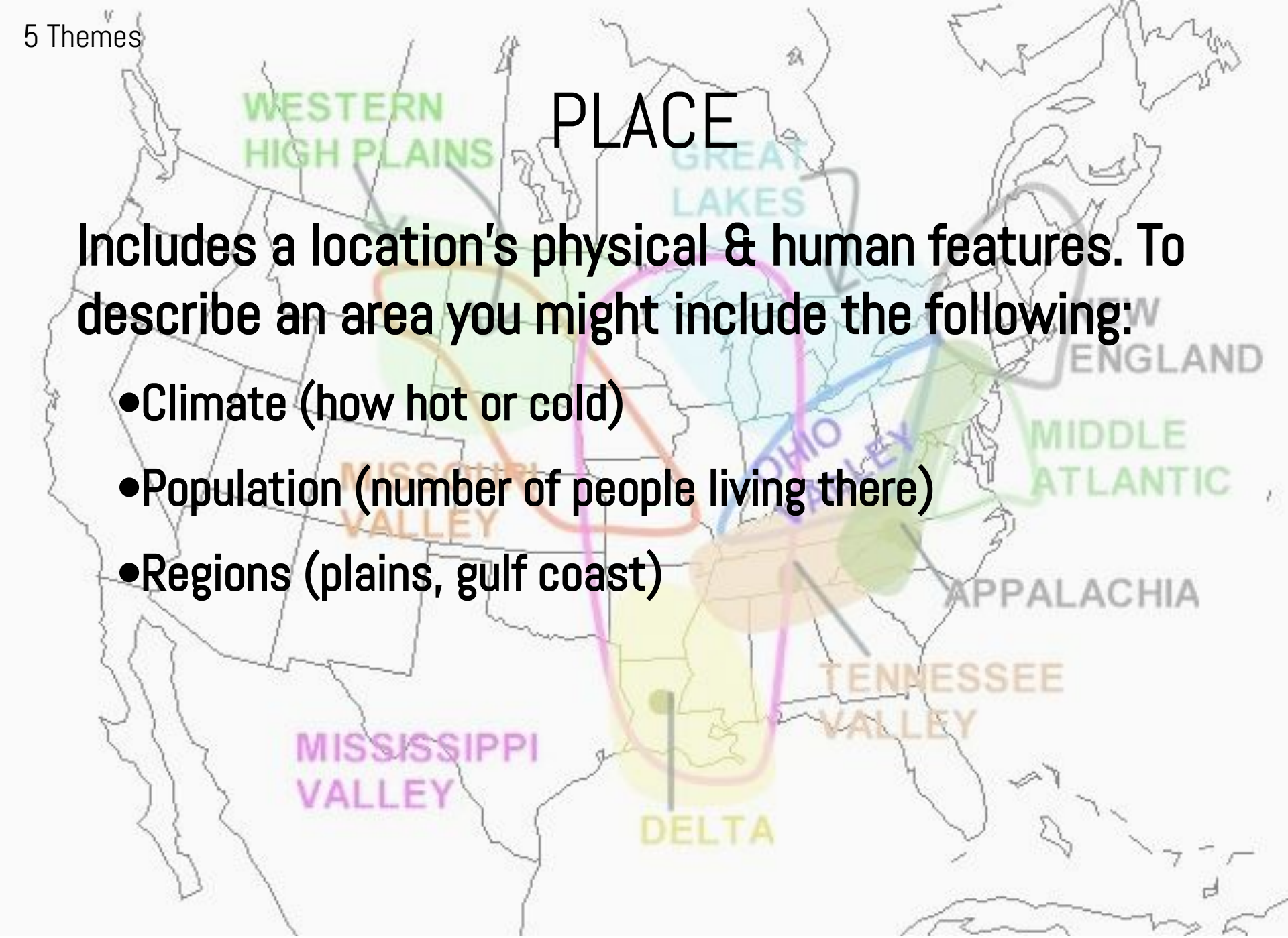
LOCATION



PLACE

Includes a location's physical & human features. To describe an area you might include the following:

- Climate (how hot or cold)
- Population (number of people living there)
- Regions (plains, gulf coast)



HUMAN-ENVIRONMENT INTERACTION

Focuses on how people affect or change the physical characteristics of their environment OR how their environment affects them

Example #1: environment affecting people:

Mexico had very little rain and crops were getting ruined,

so they had to borrow water from the USA.

Example #2: people affecting environment:

A lot of people were migrating to the west in the 1800s,

so people started chopping down trees to make room and

MOVEMENT

Explains the relationship between places and how people, goods, and ideas get from one place to another.

Example:

When the Spanish came to Mexico, they brought their religion, animals, and foods with them. This eventually helped create what we know about the Mexican culture (Catholicism, importance of horses, spices)

REGIONS

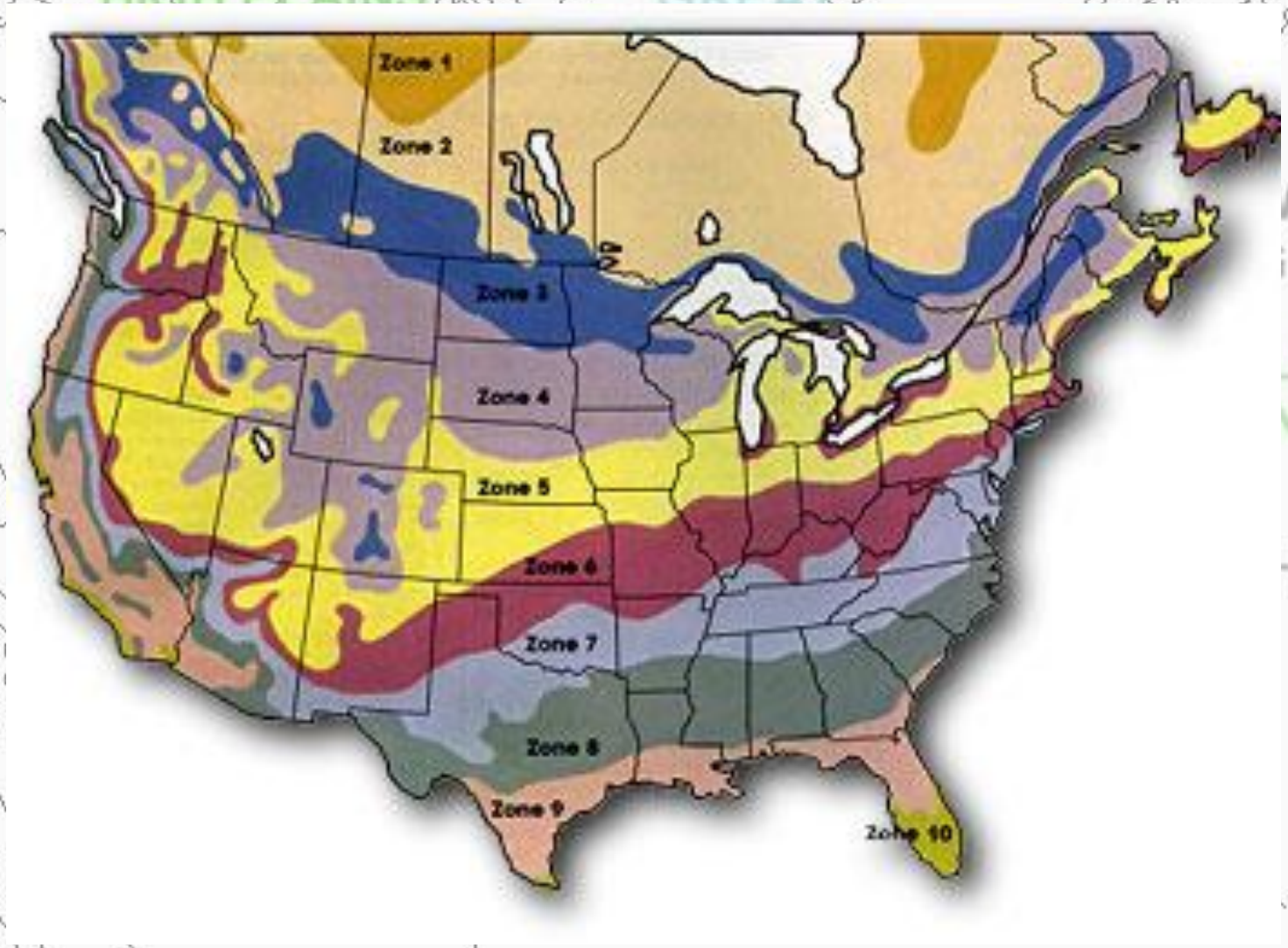
Used to make comparisons and usually grouped by one unifying characteristic such as:

- Climate
- Land
- Population
- History

Example:

People who live in the desert have a much different life than people who live in the country.

REGIONS


Zone 1
Zone 2
Zone 3
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Zone 5
Zone 6
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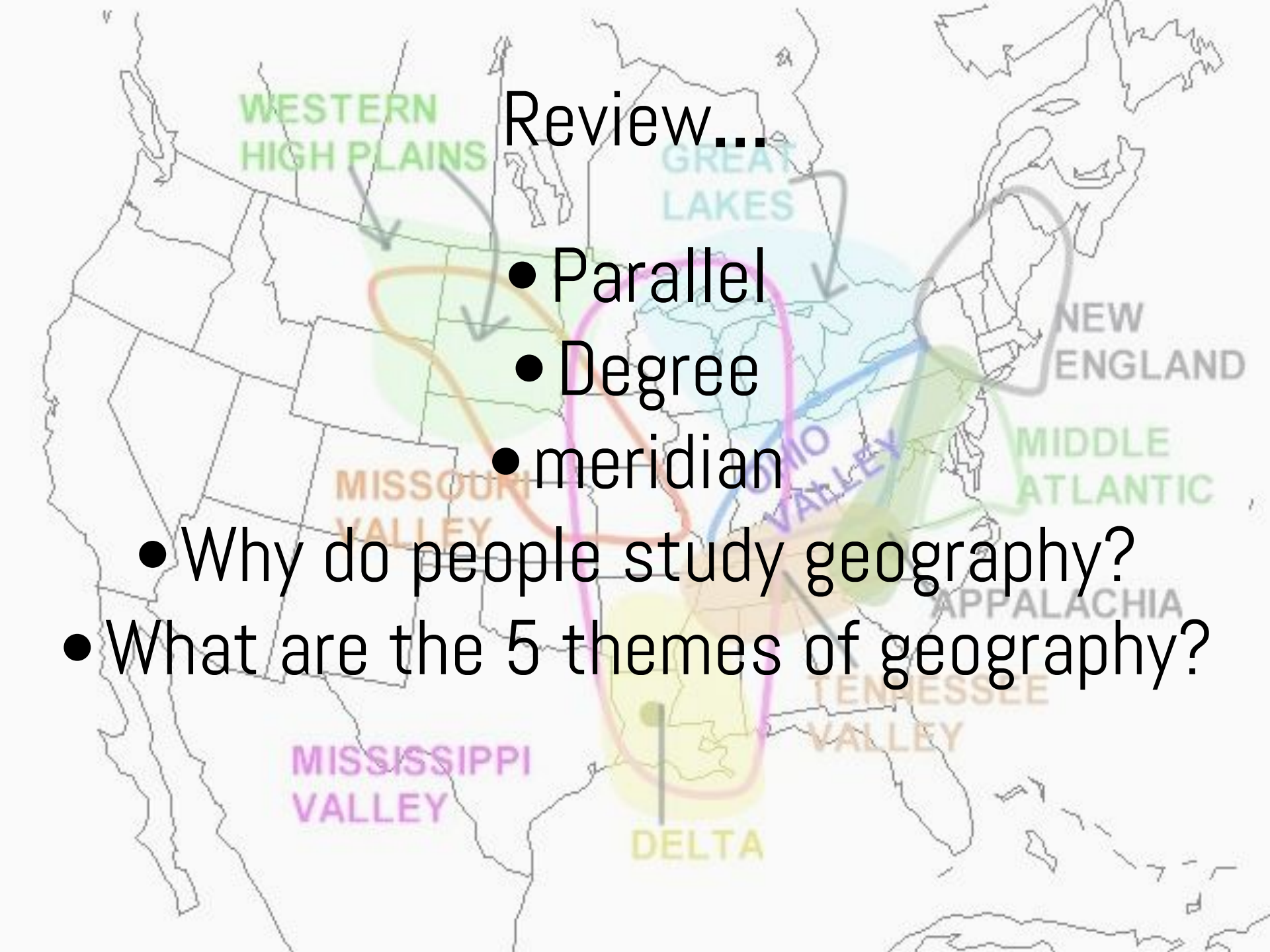
Zone 10

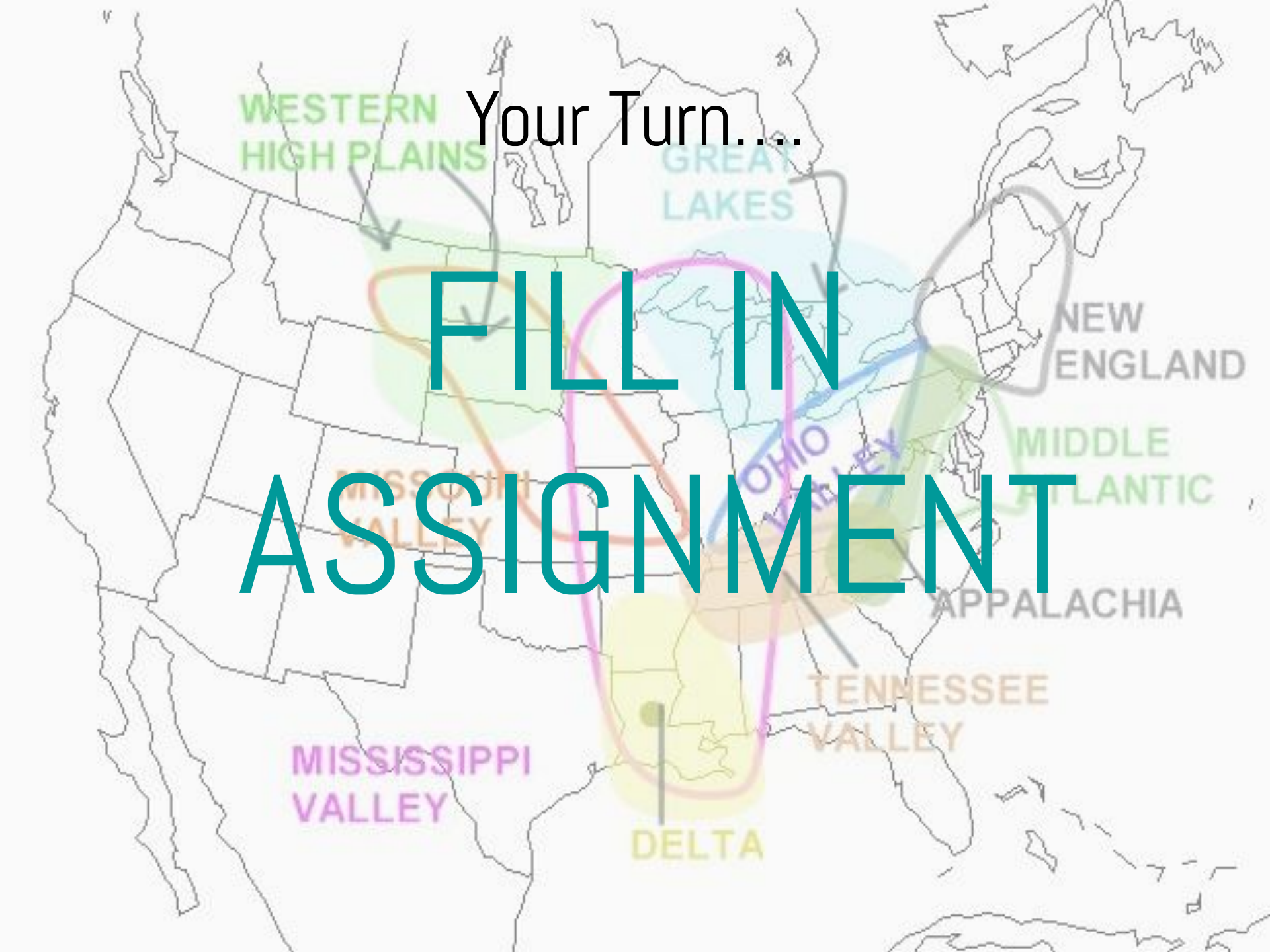


Review…

- Parallel
- Degree
- meridian
- Why do people study geography?
- What are the 5 themes of geography?

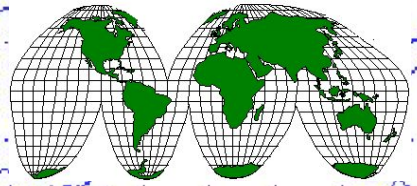
So, What's the Big Idea?

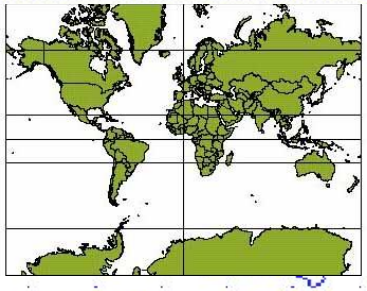
Geographers study the Earth according to the five themes: location, place, human-environment interaction, movement, and regions

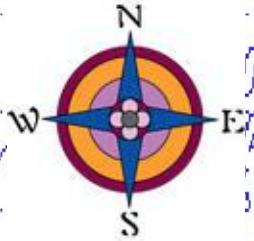

Your Turn….
FILL IN ASSIGNMENT
WESTERN HIGH PLAINS
GREAT LAKES
NEW ENGLAND
MIDDLE ATLANTIC
OHIO VALLEY
APPALACHIA
TENNESSEE VALLEY
MISSISSIPPI VALLEY
DELTA

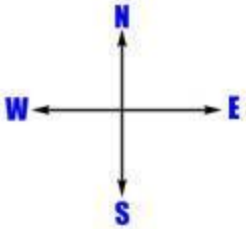
Section 3:

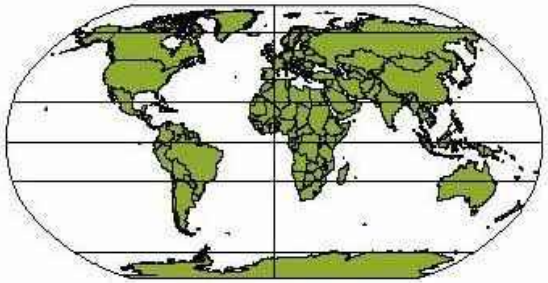
Using the Tools of Geography

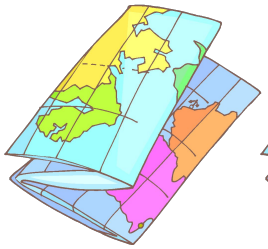


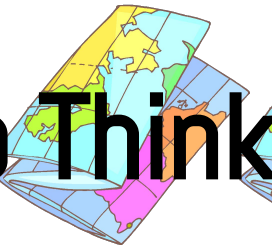
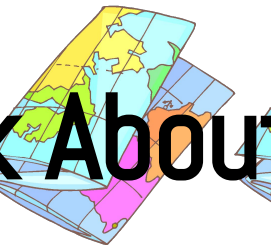
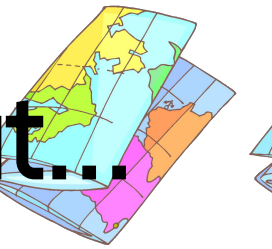
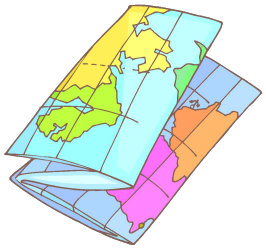










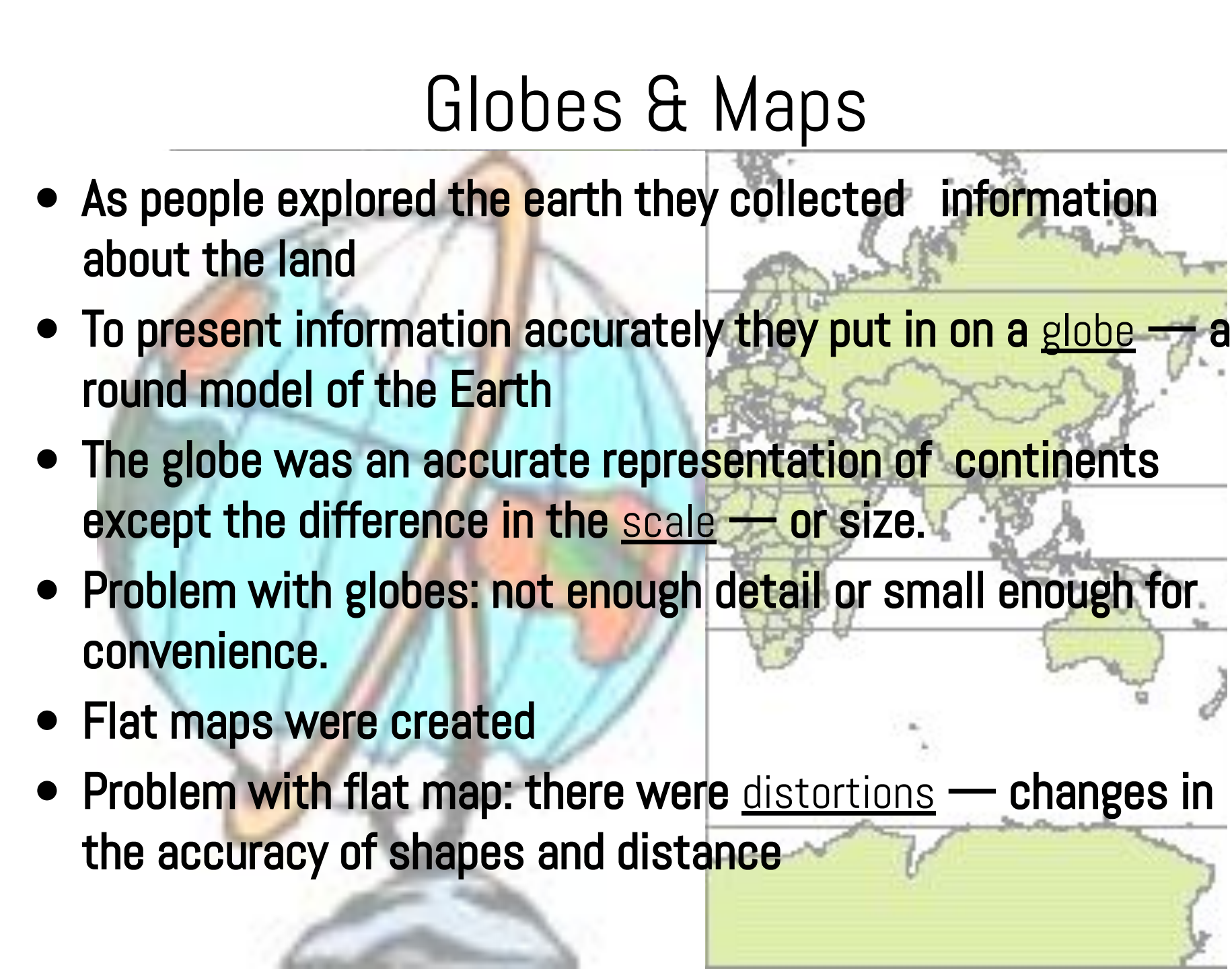






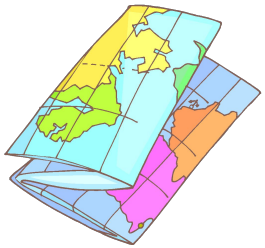
Things to Think About...

- What are the advantages and disadvantages of globes and maps in showing the Earth's surface?
- How did Mercator try to create an accurate map?
- What are the parts of a map?

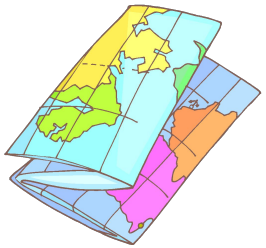
Globes & Maps

- As people explored the earth they collected information about the land
- To present information accurately they put in on a globe — a round model of the Earth
- The globe was an accurate representation of continents except the difference in the scale — or size.
- Problem with globes: not enough detail or small enough for convenience.
- Flat maps were created
- Problem with flat map: there were distortions — changes in the accuracy of shapes and distance

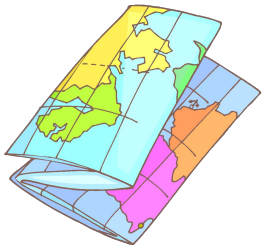




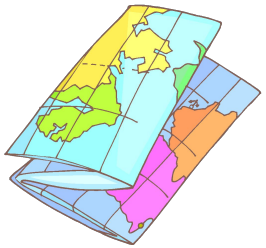
Making Maps



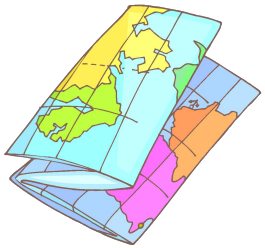
- 1569- Gerhardus Mercator created flat map to help sailors
- He expanded the area between longitudes near the poles making areas near poles bigger than they are
- The Mercator projection — method of putting a map of Earth on a flat piece of paper— is still used in deep-sea navigation



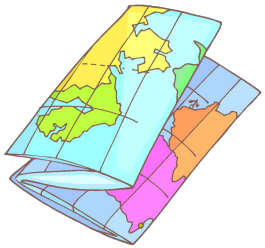
Making Maps

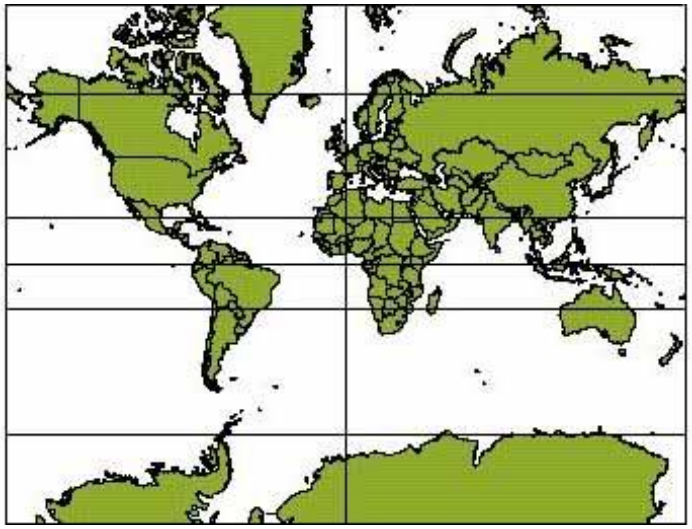


- Other techniques-interrupted projection-show accurate shape of land on flat surface
- Many believe Arthur Robinson's projection is the best world map-it shows accurate shapes of land and oceans
- Problem with Robinson's is that it still has distortions on the edges of map

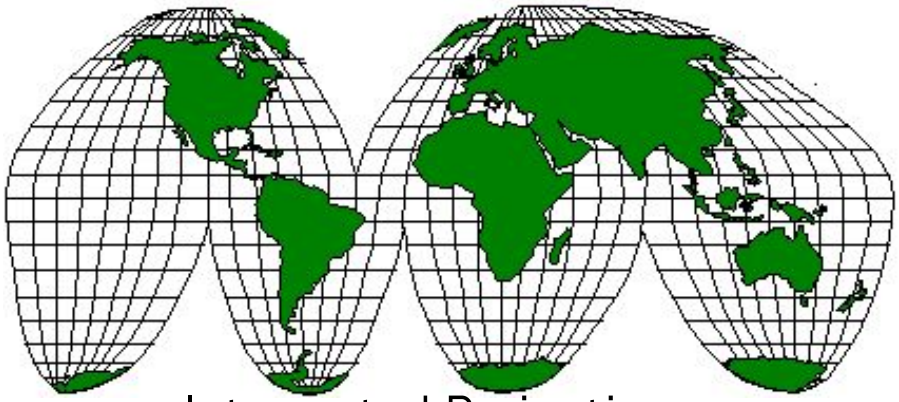


Making Maps

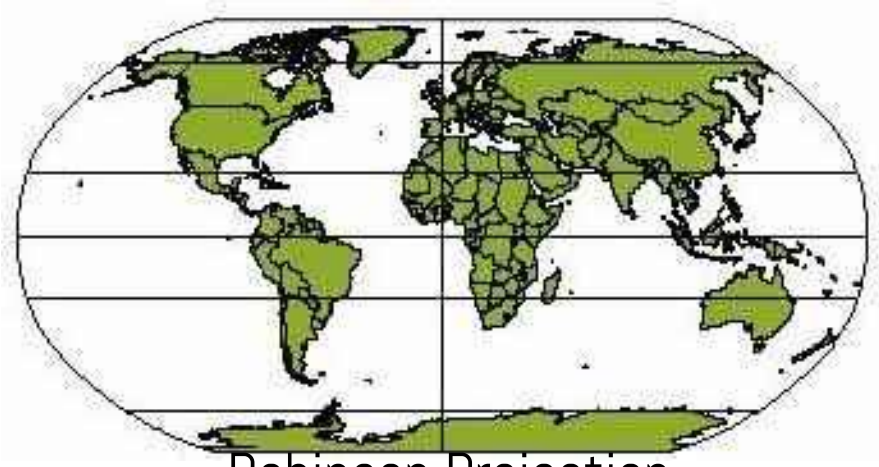




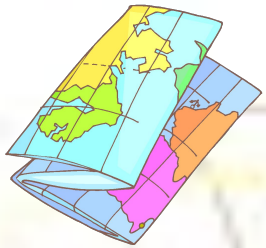
Mercator Projection



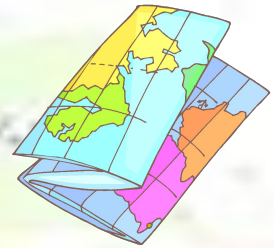
Interrupted Projection



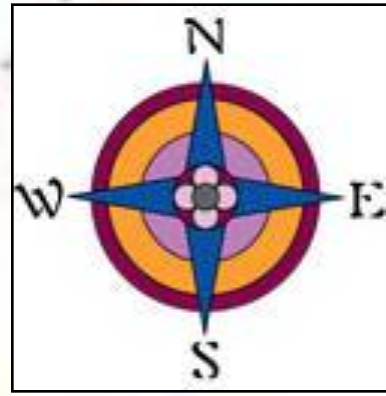
Robinson Projection



Parts of a Map

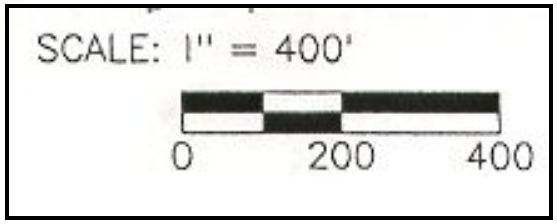


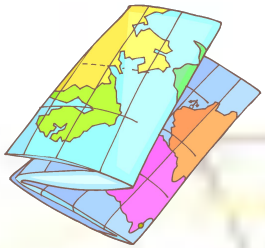
- Map symbols allow people to read and understand a map.



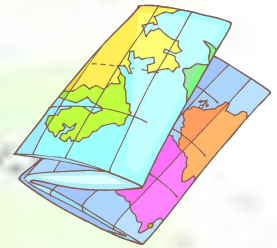
The most important part of a map is the compass rose —which is a model of compass. It tells the cardinal directions —which are north, south, east, and west.

Maps also have indicator for scale —tells what a certain distance on the map stands for on the surface of the earth.



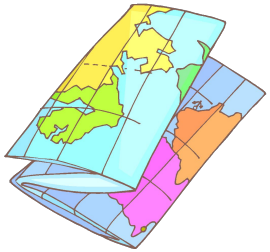


Parts of a Map

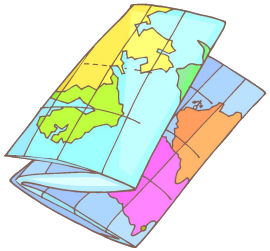


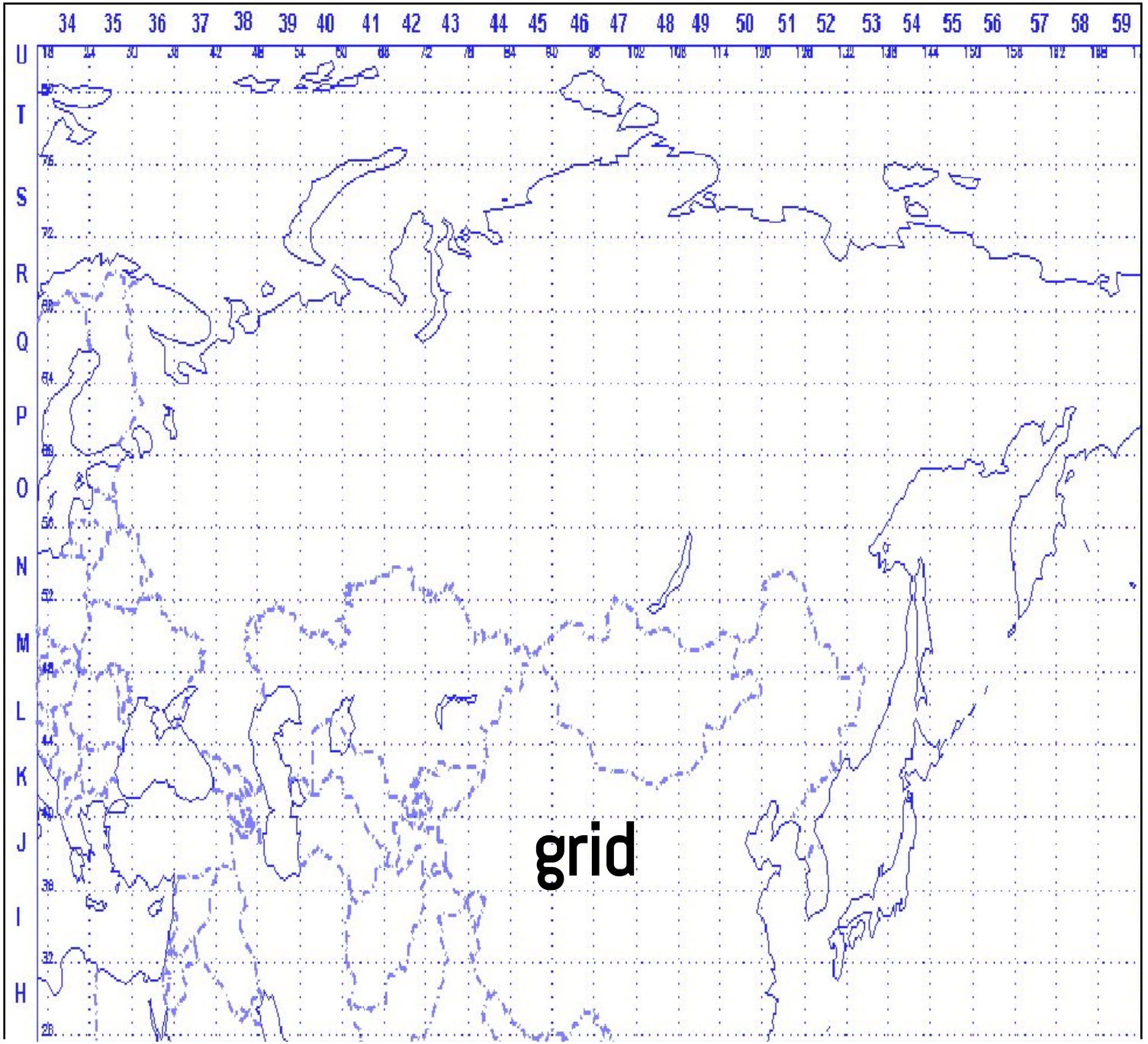
Certain symbols on maps are used to indicate landmarks like roads, rivers, & towns. These symbols are explained in the key — or legend

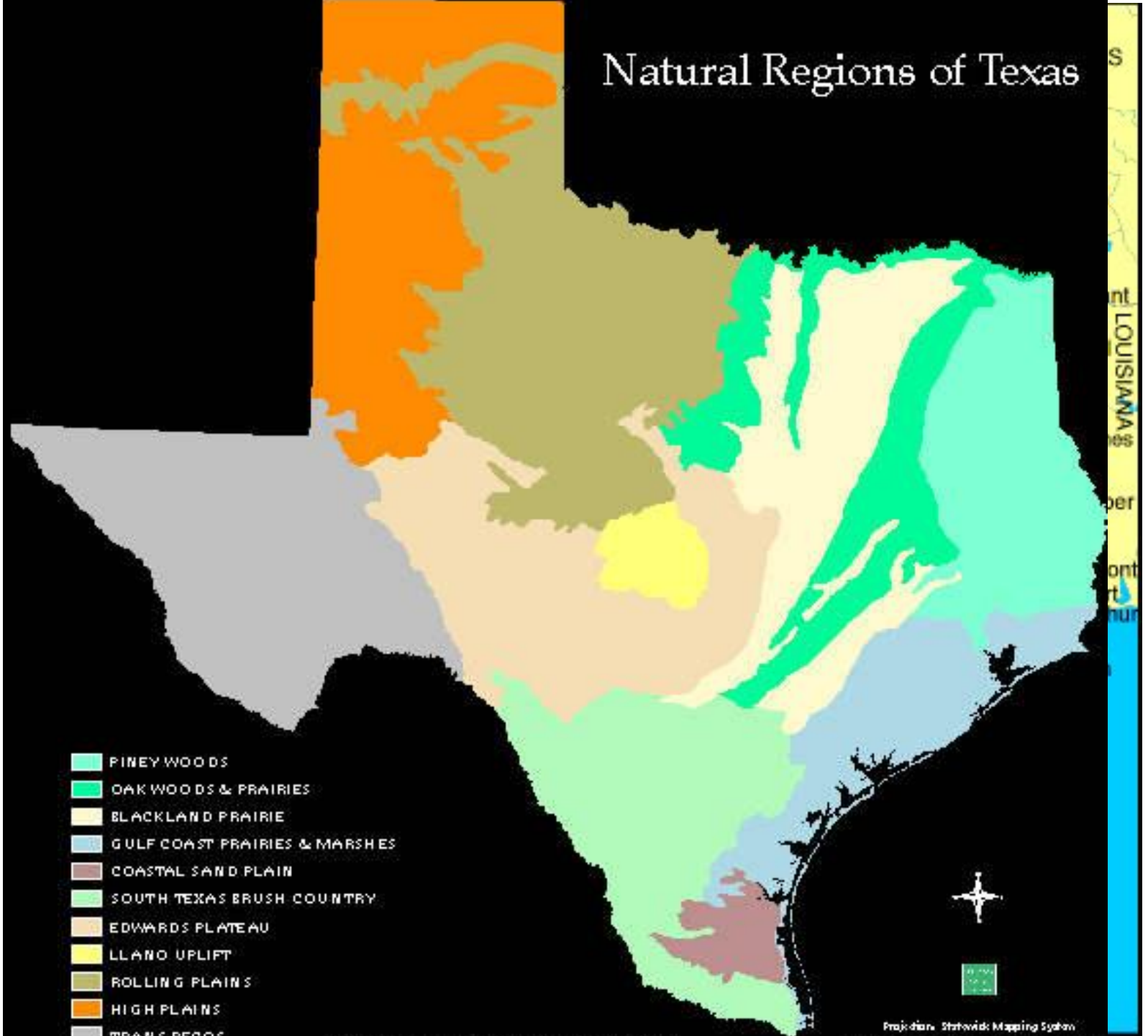
Most maps include a grid — blue lines representing latitude/longitude; some use letters and numbers



Parts of a Map

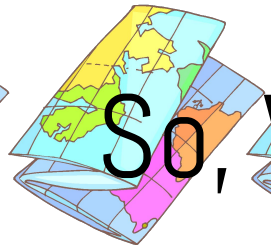


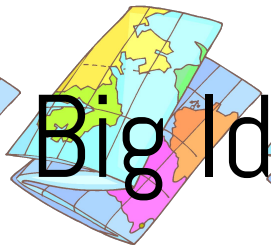


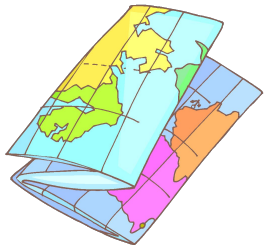

Natural Regions of Texas
PINEY WOODS
OAK WOODS & PRAIRIES
BLACKLAND PRAIRIE
GULF COAST PRAIRIES & MARSHES
COASTAL SAND PLAIN
SOUTH TEXAS BRUSH COUNTRY
EDWARDS PLATEAU
LLANO UPLIFT
ROLLING PLAINS
HIGH PLAINS
Projection: Statewide Mapping System

Review…

- Gerhardus Mercator
- Distortion
- Scale
- What is the main problem with the interrupted projection?
- Why are the different parts of a map important?



So, What's the Big Idea?

- Representing the Earth as a globe and as a flat map presents different problems.