

Introduction to the Principles of Geography

Chapter 1: Essentials of Geography

Geography Defined

- *Geo* (Earth) *graphein* (writing)
- The science that studies the relationships among natural systems, geographic areas, human culture, and the interdependence of all of these over space (pg. 5)
- Geographic analysis focuses on spatial relationships and variations



Human Geography vs. Physical Geography



Human Geography – Field of geography concerned with the spatial distribution of human systems and processes

Physical Geography – The science concerned with the spatial aspects and interactions of the physical elements and process systems that make up the environment

The Scope of Geography

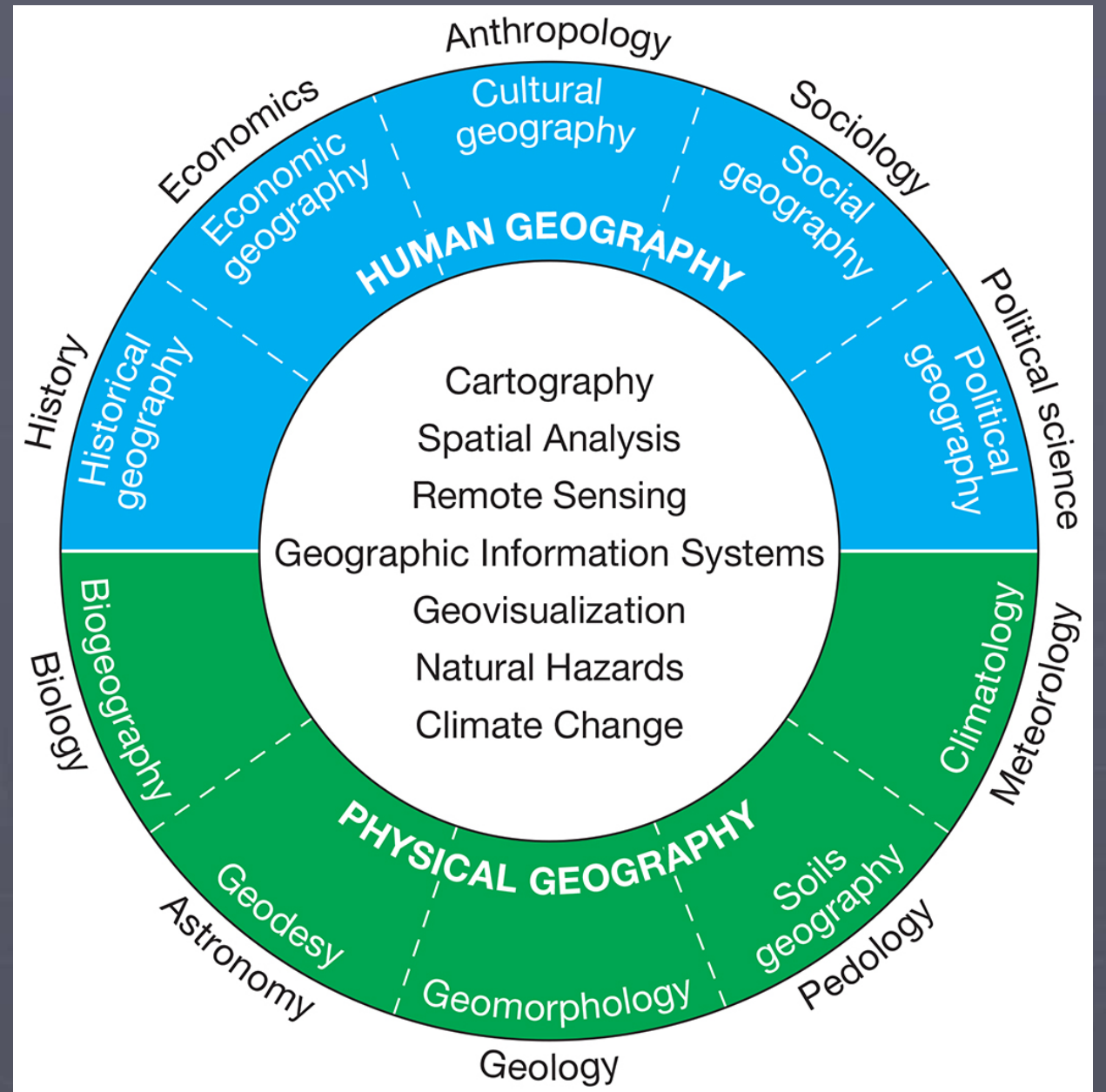


Figure 1.3 (pg. 6)

Five Themes of Geography

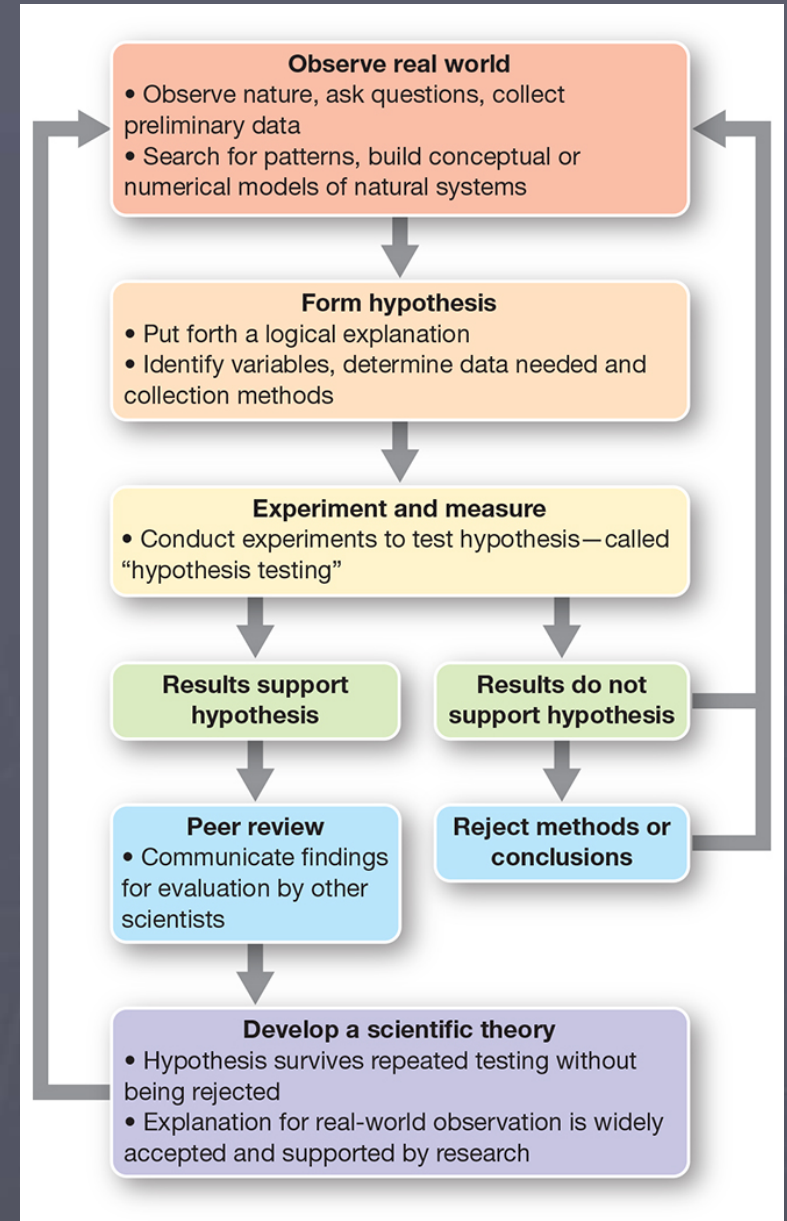
- 1. Location - The Absolute and relative location of different things around the earth's surface
- 2. Place - The human and physical characteristics of a place
- 3. Movement - The forces of human migration, the spread of ideas, and the spread of physical resources and products and how they impact the planet.
- 4. Regions - The formal, functional, and perceptual regions humans use to sub divide the earth.
- 5. Human-Environment Interaction – The impacts that humans have on the environment, the ways they adapt to their environments, and the ways humans use the earth's resources

Reading the Five Themes of Geography



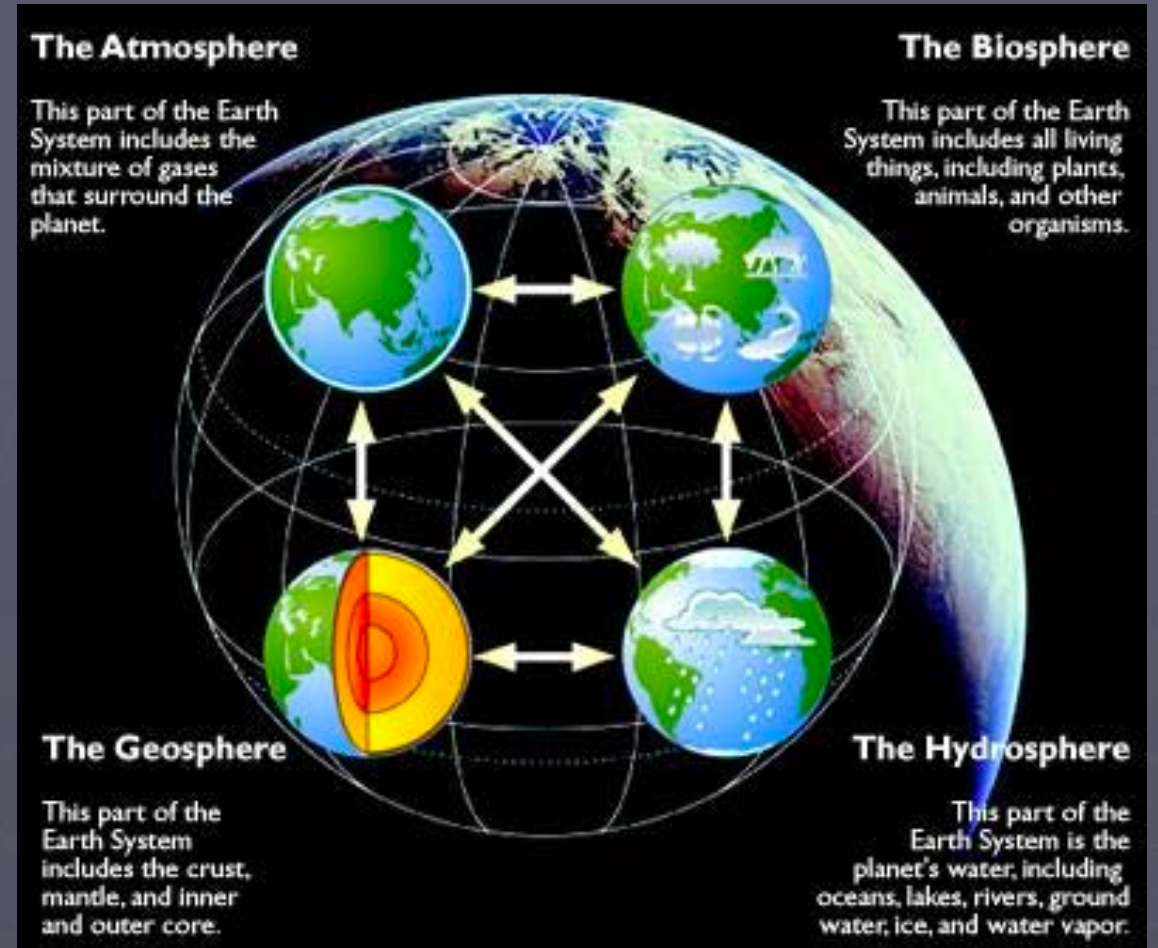
The Scientific Method

- Geography is dependent upon the the formulations of theories based on calculated analysis
 - More dependent upon development of theories, models, and truths
 - Does not develop scientific laws
 - Does not “prove” anything – only proves or refutes hypothesis
 - Reliant upon asking geographic questions and making observations

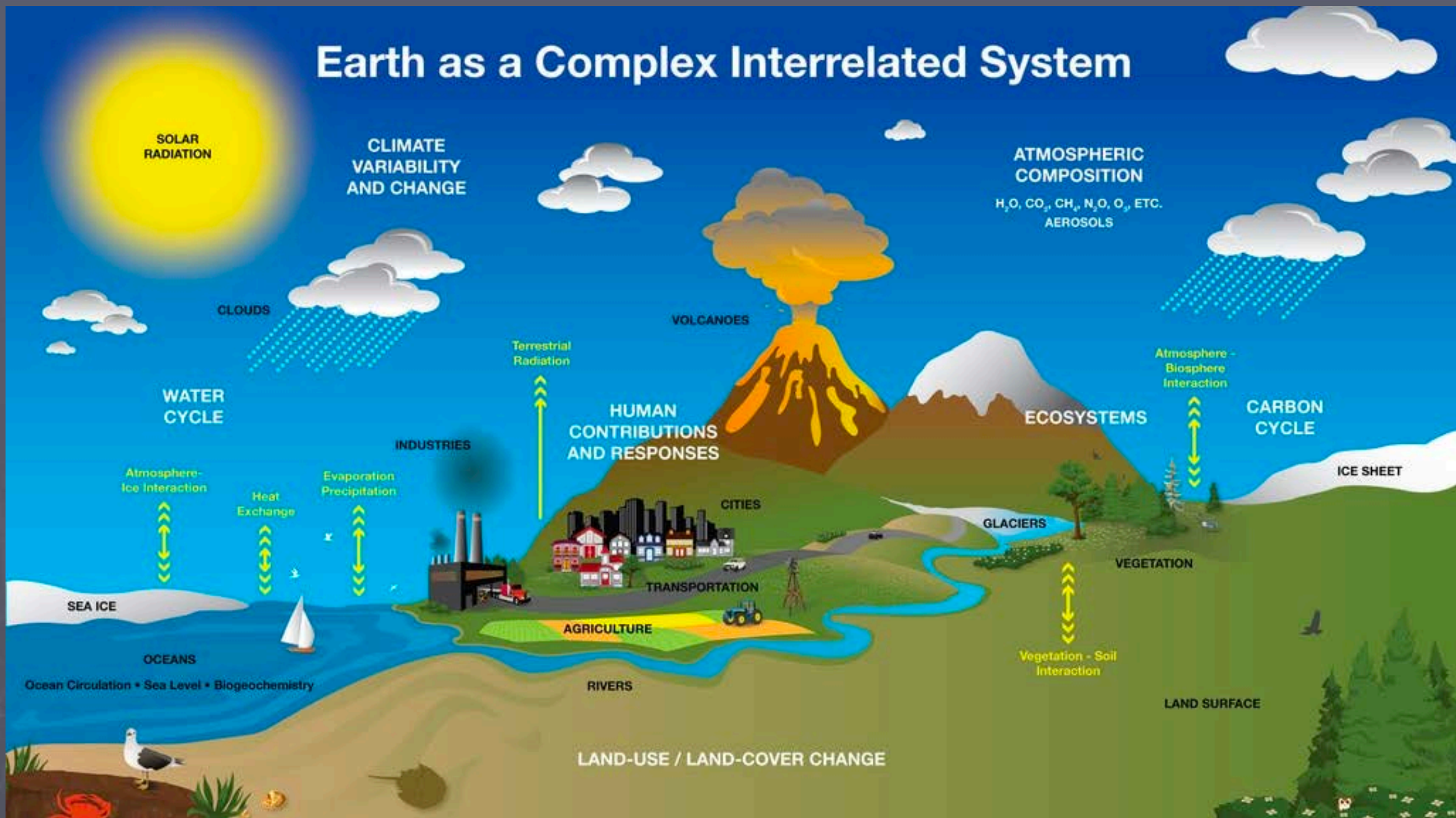


Earth Systems Concept

- Examines the Earth as a function of codependent and interrelated parts
 - Closed System – Examination of the earth as an enclosed system with little outside influence
 - Can be used for air, water, resources – not as much for energy or gasses
 - Open System – Examination of the Earth that accounts for the input and output of energy and resources into the system
 - Especially for energy

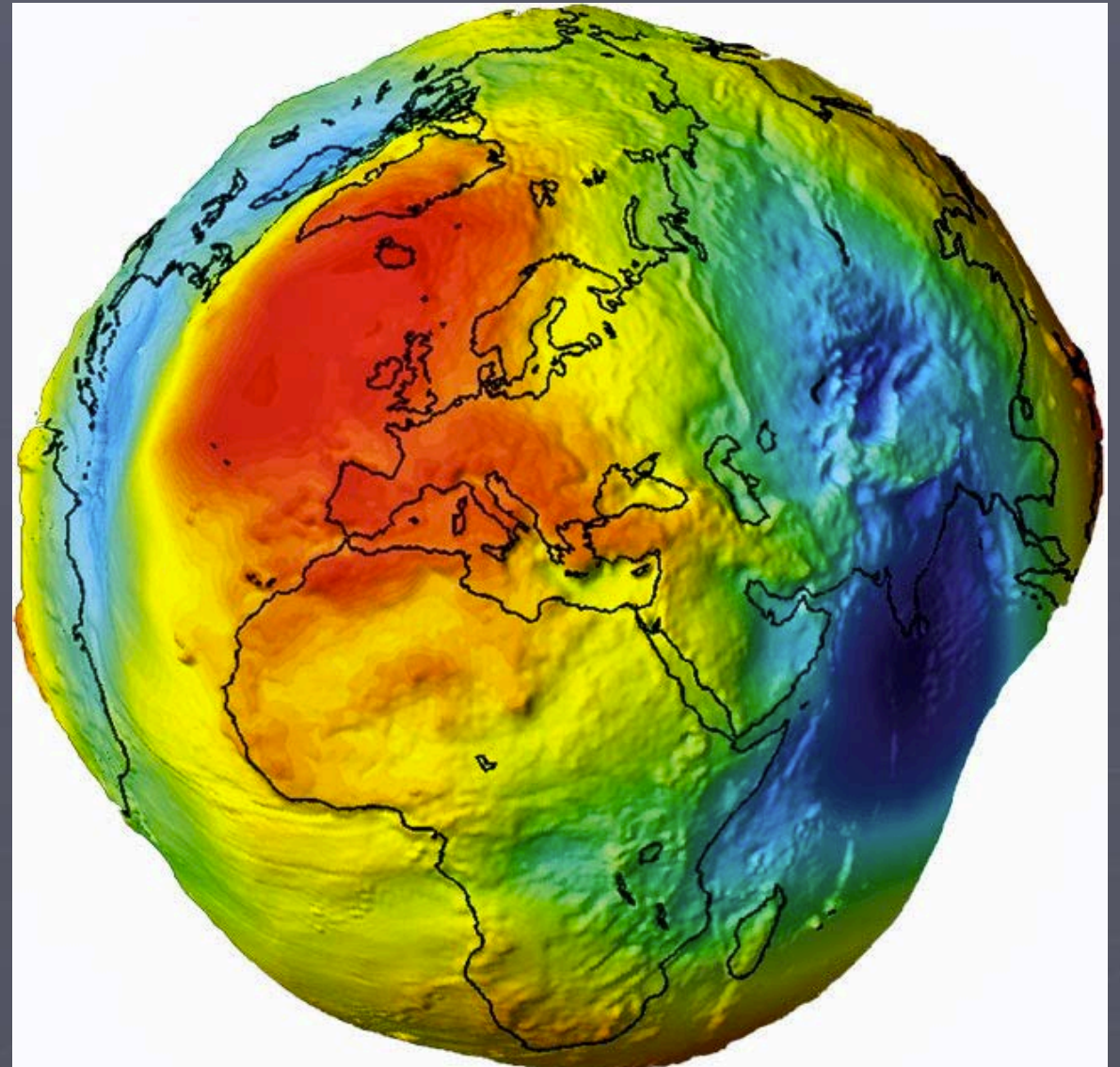
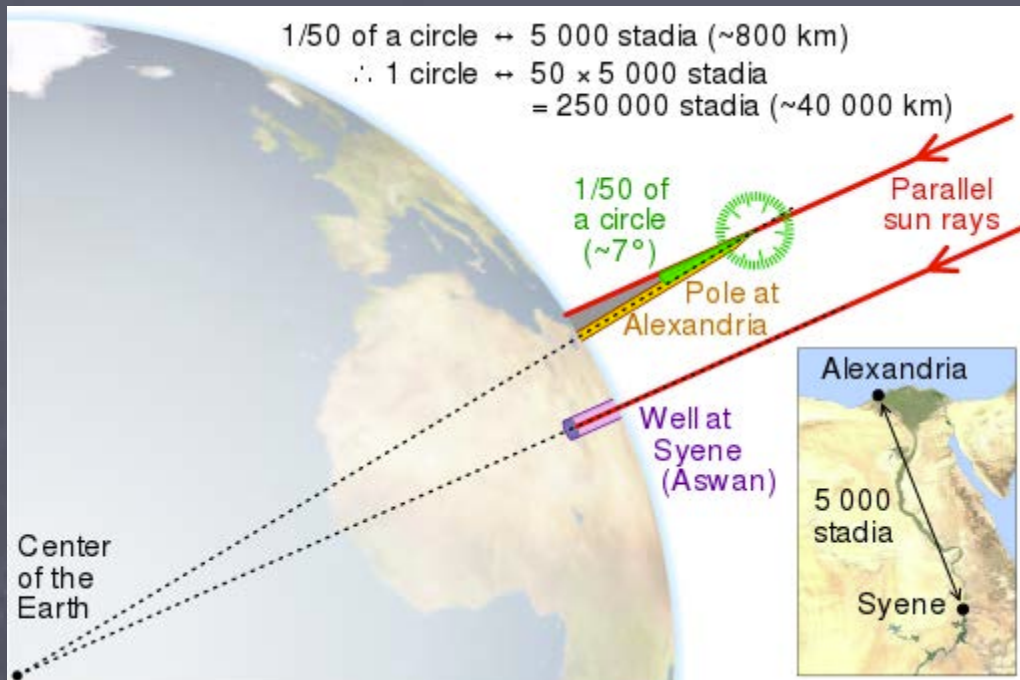


Earth as a Complex Interrelated System



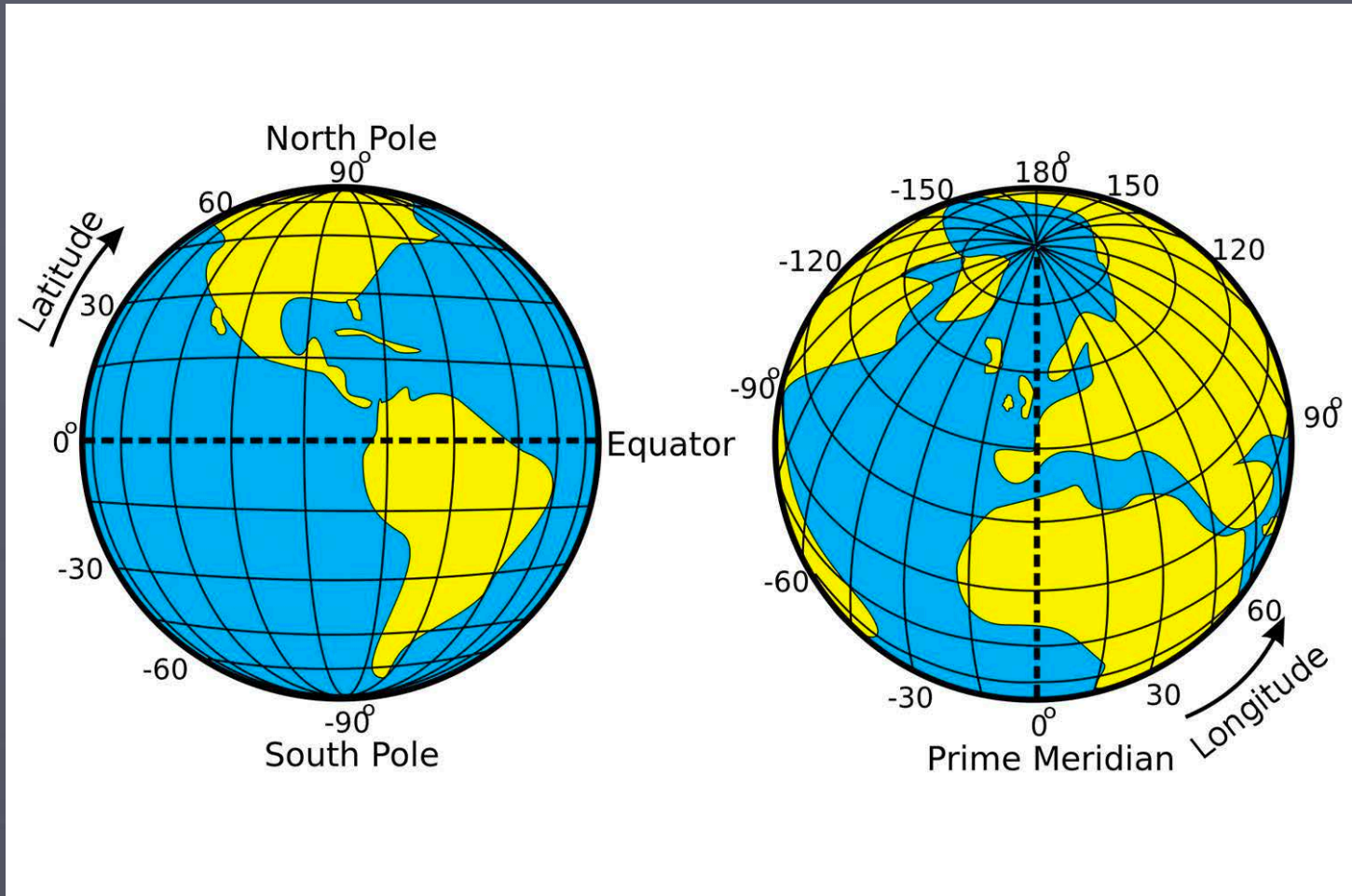
Earth's Shape

- Shape is defined as a “Geoid”
- Eratosthenes – 247 B.C.E.



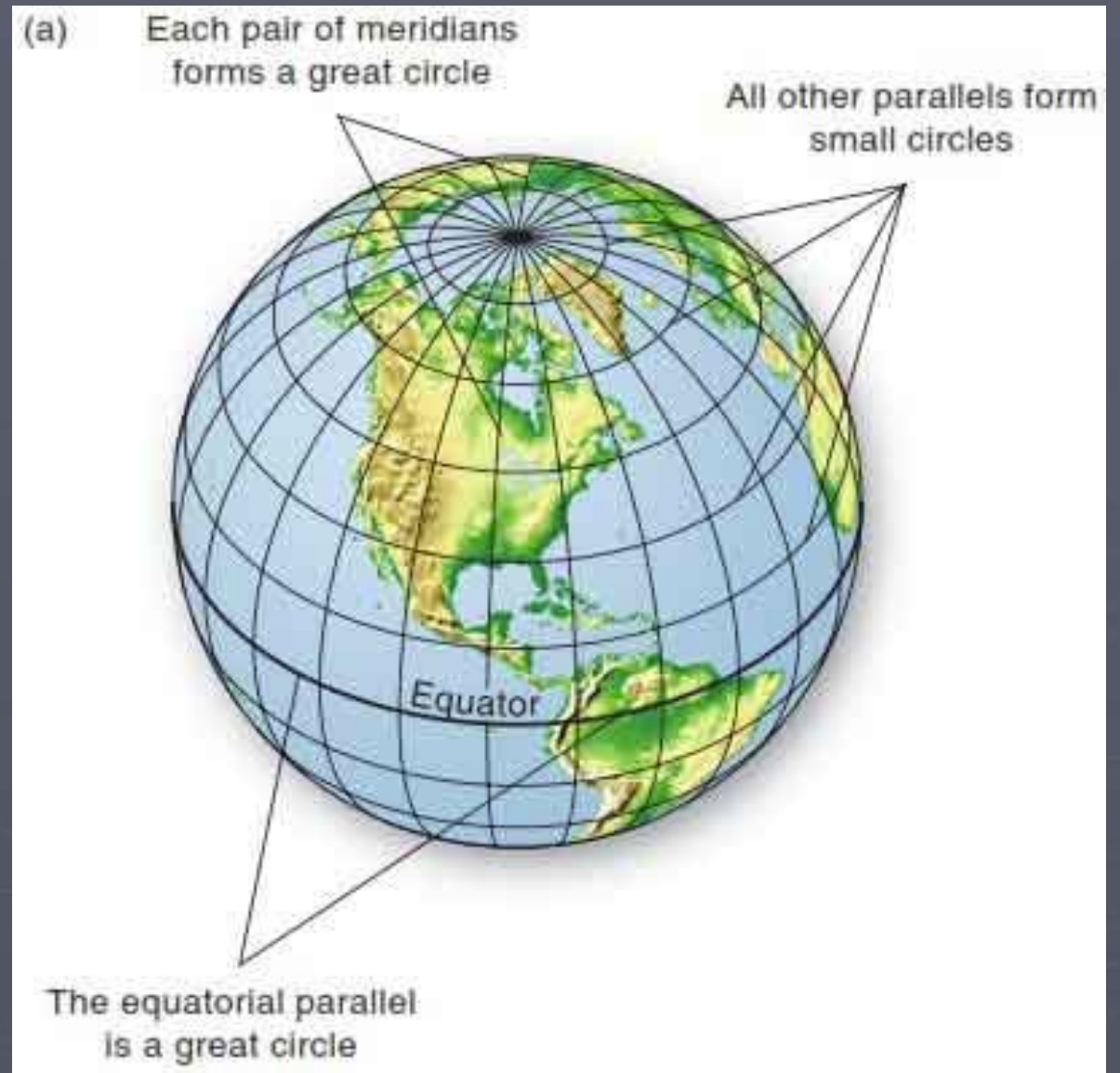
Lat Long

- Lines of Longitude connect North to South but are measured East to West
 - Also known as Meridians
- Lines of Latitude circle the globe East to West but are measured North to South
 - Also known as Parallels

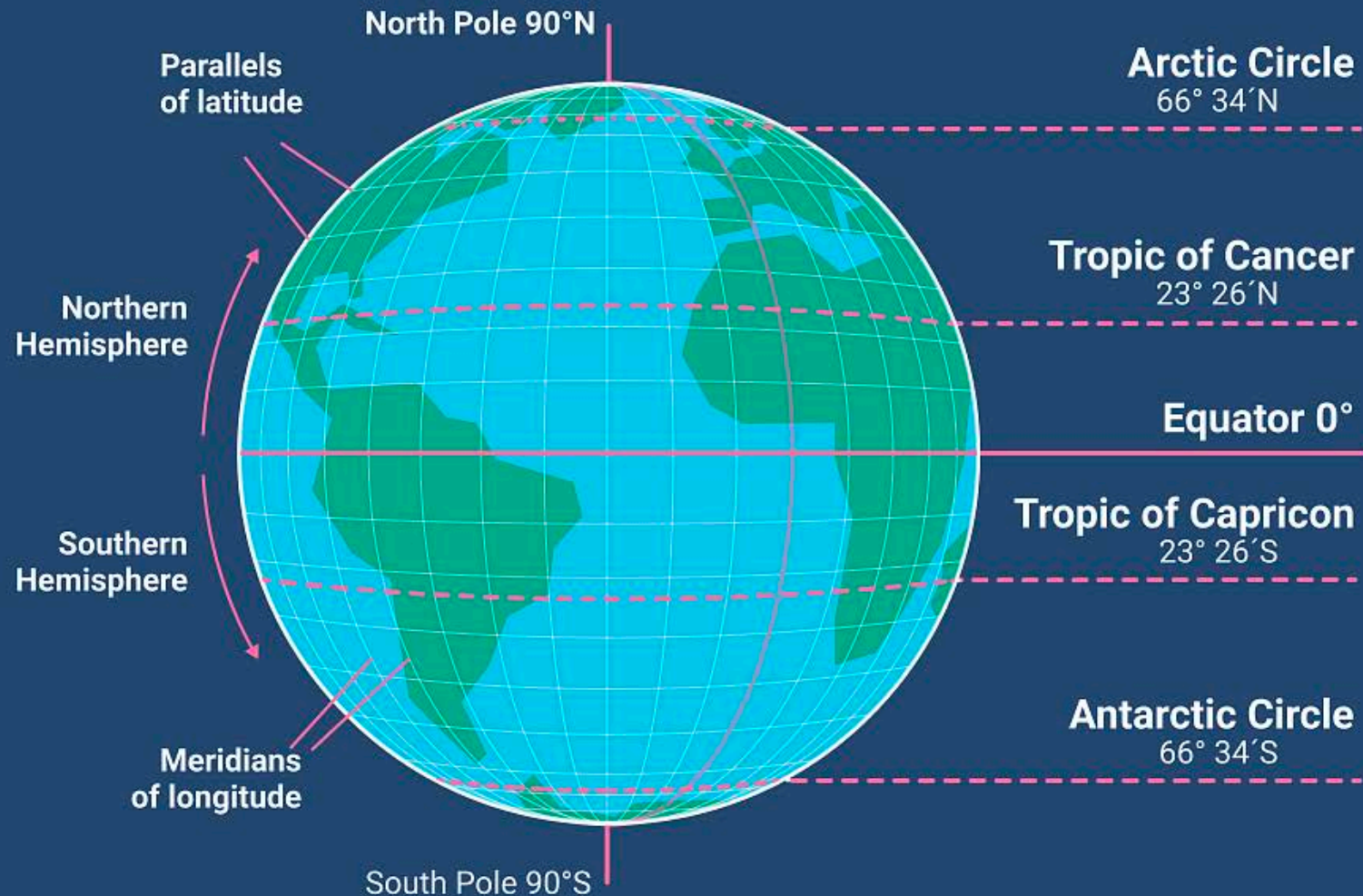


The Great Circle

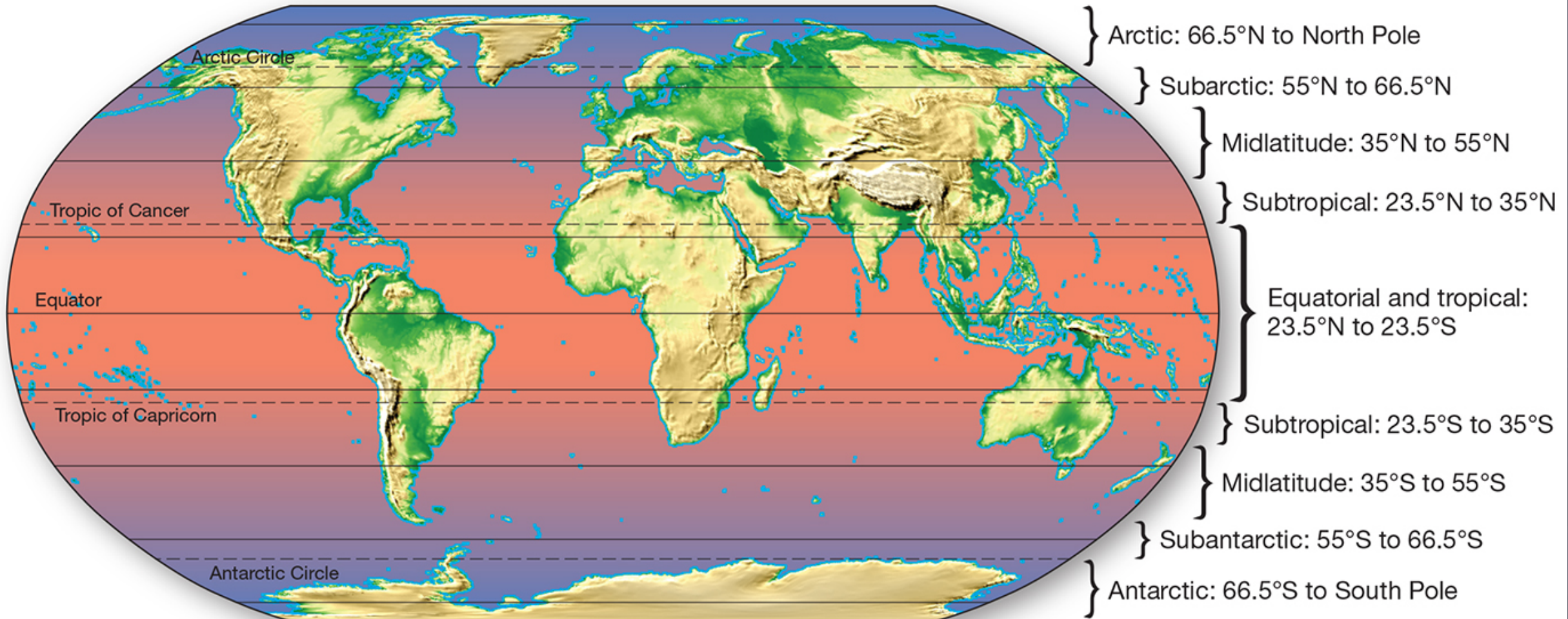
- Earth is comprised of a number of Great Circles and Small Circles
 - Helpful in Navigation
 - All meridians are great circles
 - Equator is only parallel that is a great circle
 - All other Meridians are small circles



Important Lines of Longitude and Latitude



Latitudinal Geographic Zones



Time Zones

