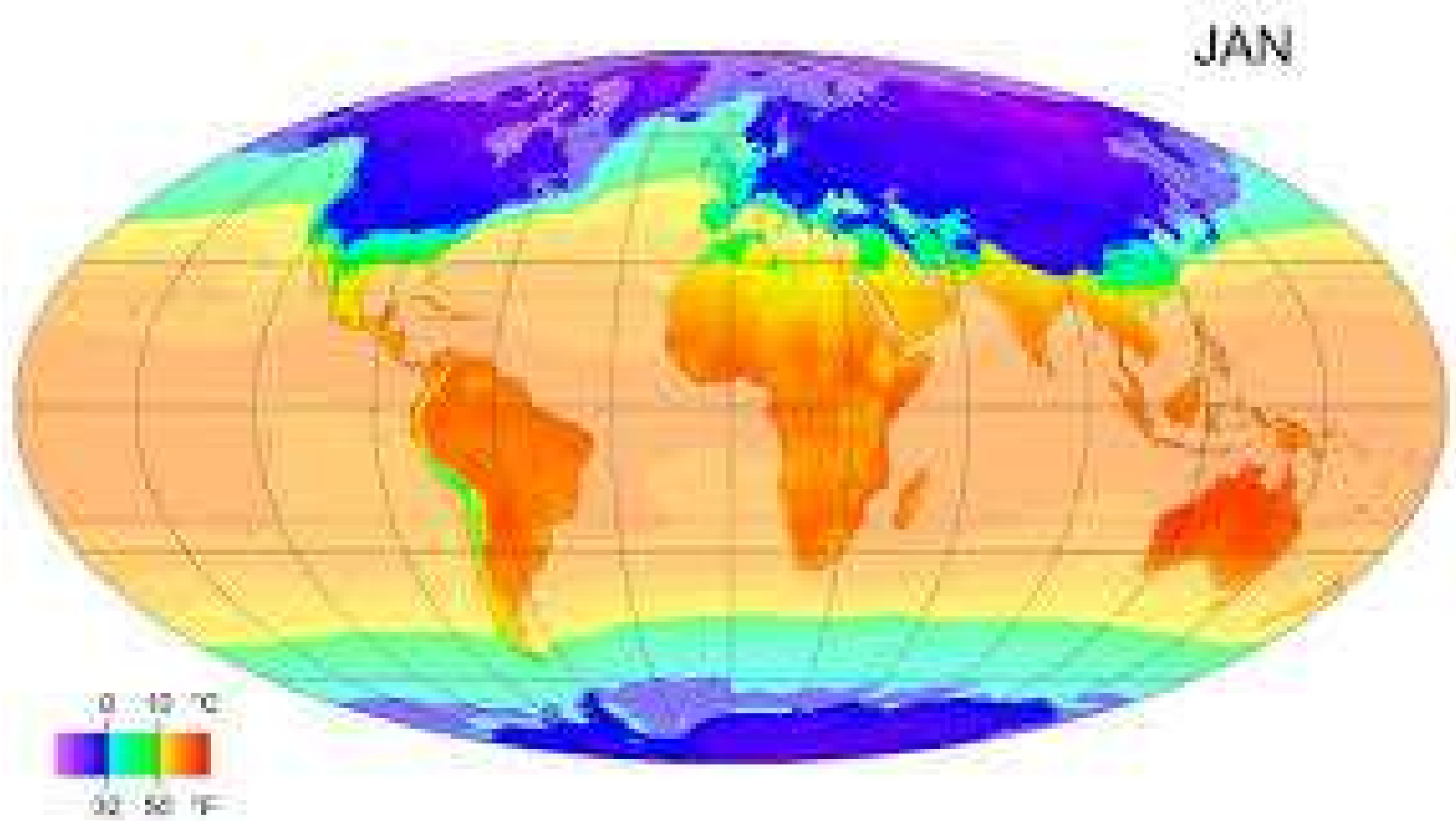
Chapter 3: Physical Geography
Climate and Vegetation

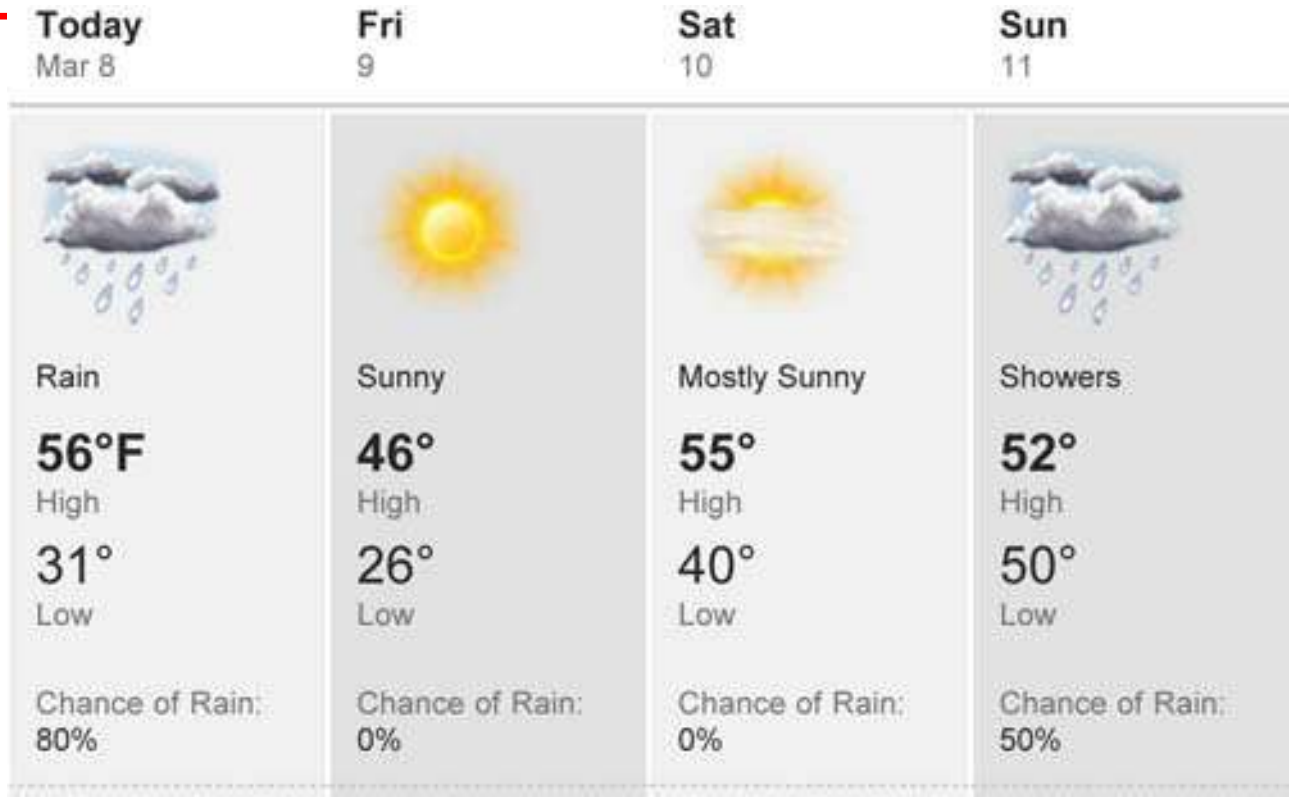


Seasons (Question #1)

- Why do seasons change throughout the year and why are seasons different depending on where you are on Earth? Use the chart on page 49 in your textbook.

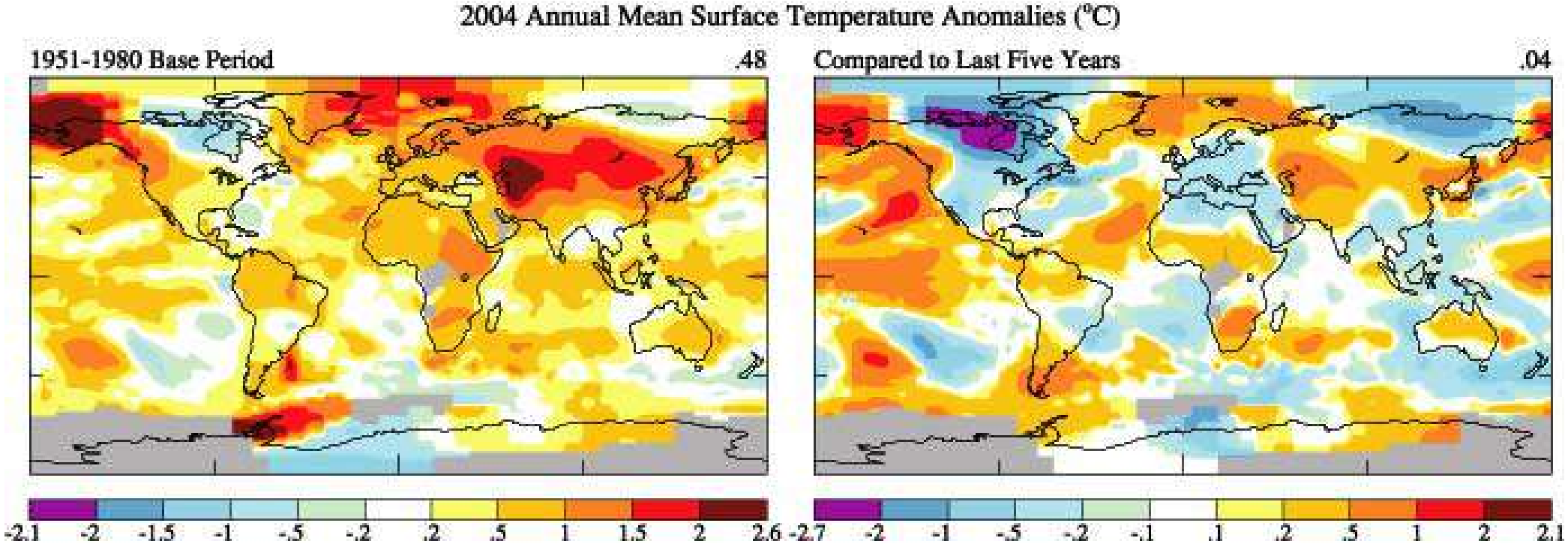
Weather

- **Weather is the condition of the atmosphere at a particular location and time.**



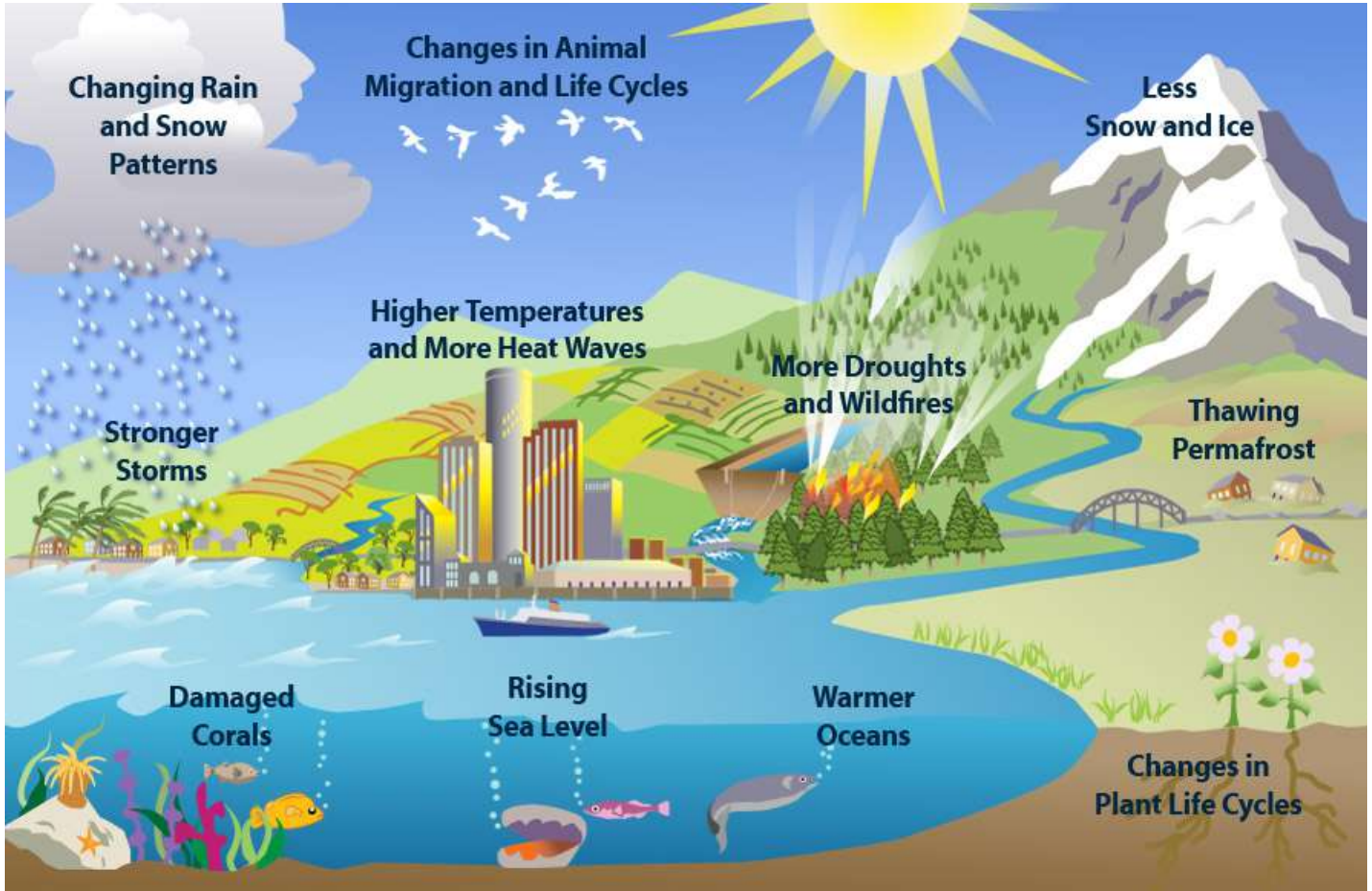
Climate

- Climate is the term for weather conditions at a particular location over a long period of time.



What causes weather?

- Water Vapor
- Cloud cover
- Landforms and bodies of water
- Elevation
- Air movement



What’s the difference between weather and climate? Discuss with a partner.

Weather Extremes

- Hurricanes – storms that form over warm, tropical ocean waters. Also known as typhoons in Asia.

- **Tornado – is a powerful funnel-shaped column of spiraling air.**

- **Blizzard – a heavy snowstorm with winds of more than 35 miles per hour and reduced visibility.**

Droughts and Floods

- Drought – a long period of time without rain or with very minimal rainfall.

- Flood – when water spreads over land not normally covered with water.

How do these extreme weather patterns impact the lives of people living in that particular region?

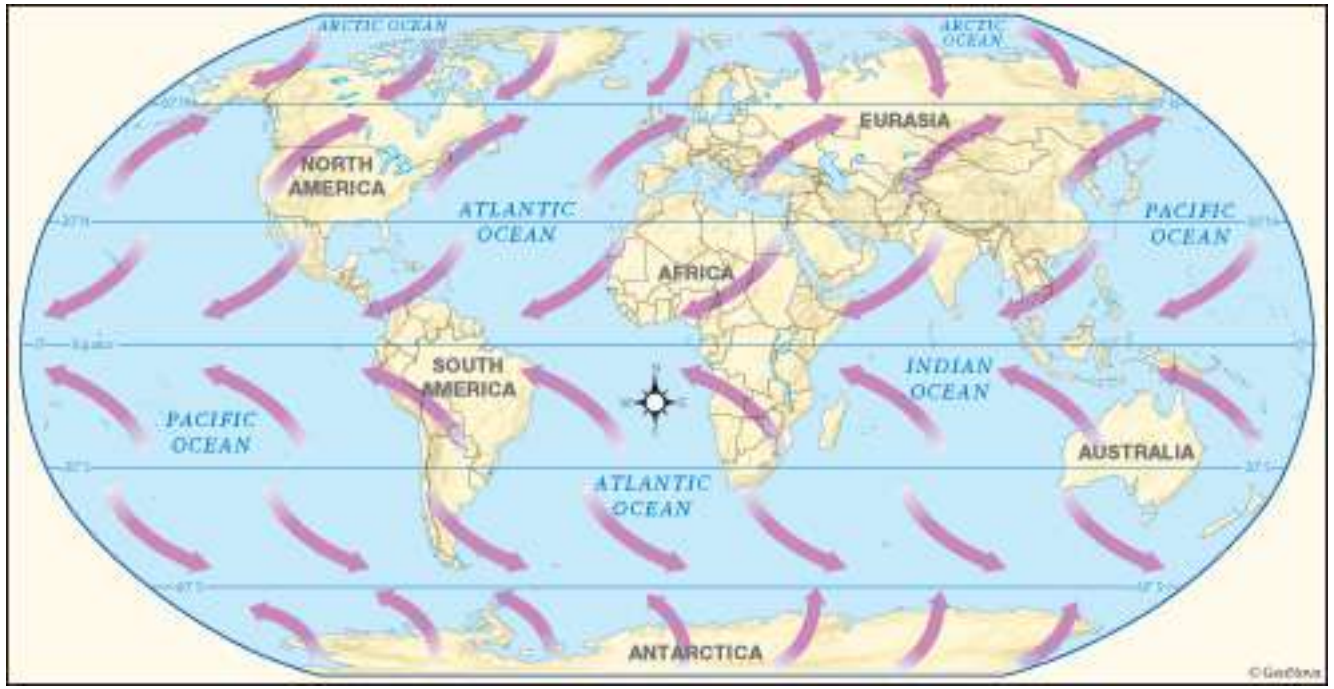
Factors Affecting Climate

- Four major factors influence the climate of a region:

1. Wind and ocean currents
2. Latitude
3. Elevation
4. Topography

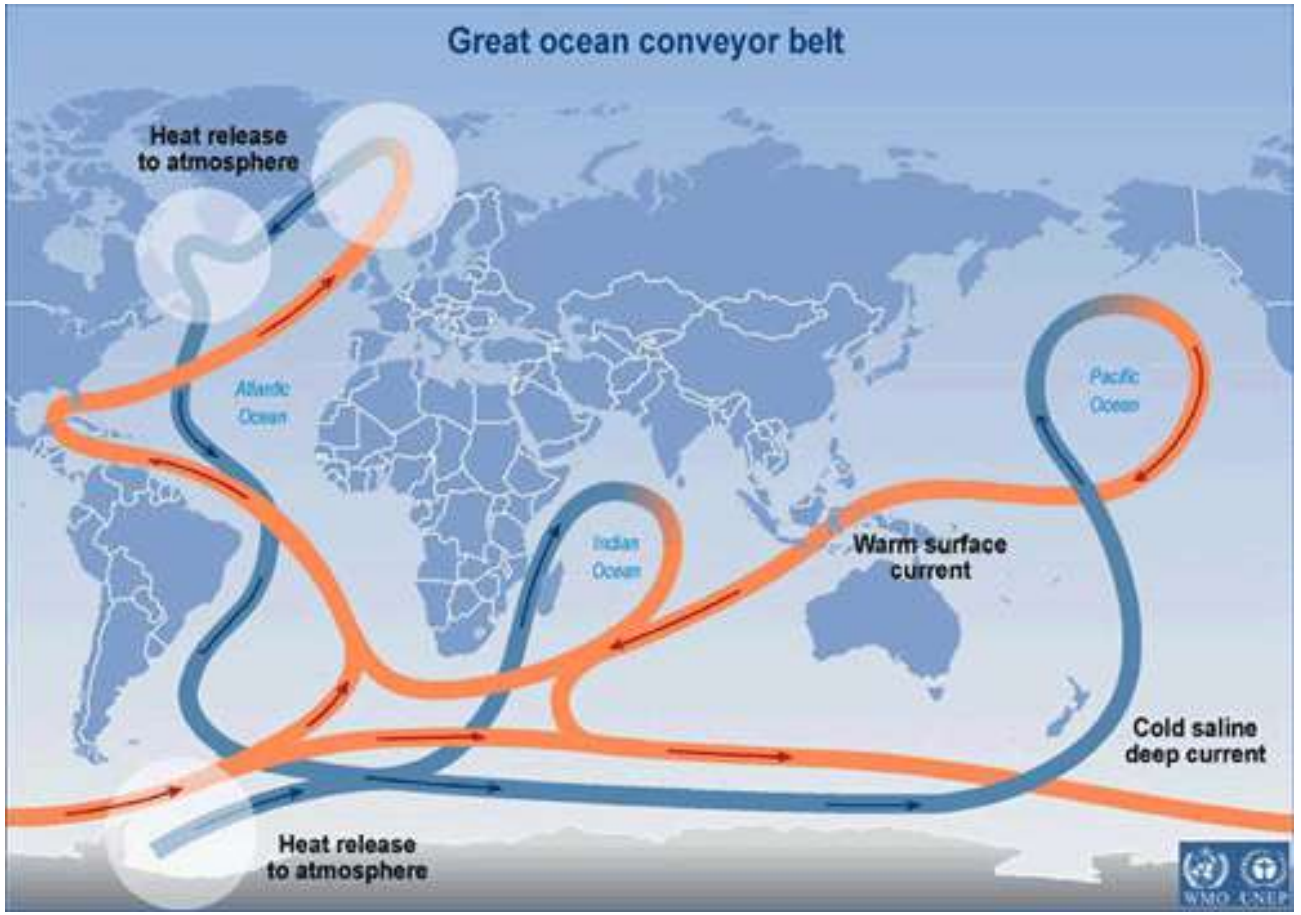
Wind Currents

- Wind and ocean currents help distribute the sun's heat from one part of the world to another through convection, the transfer of heat in the atmosphere by upward motion of the air.



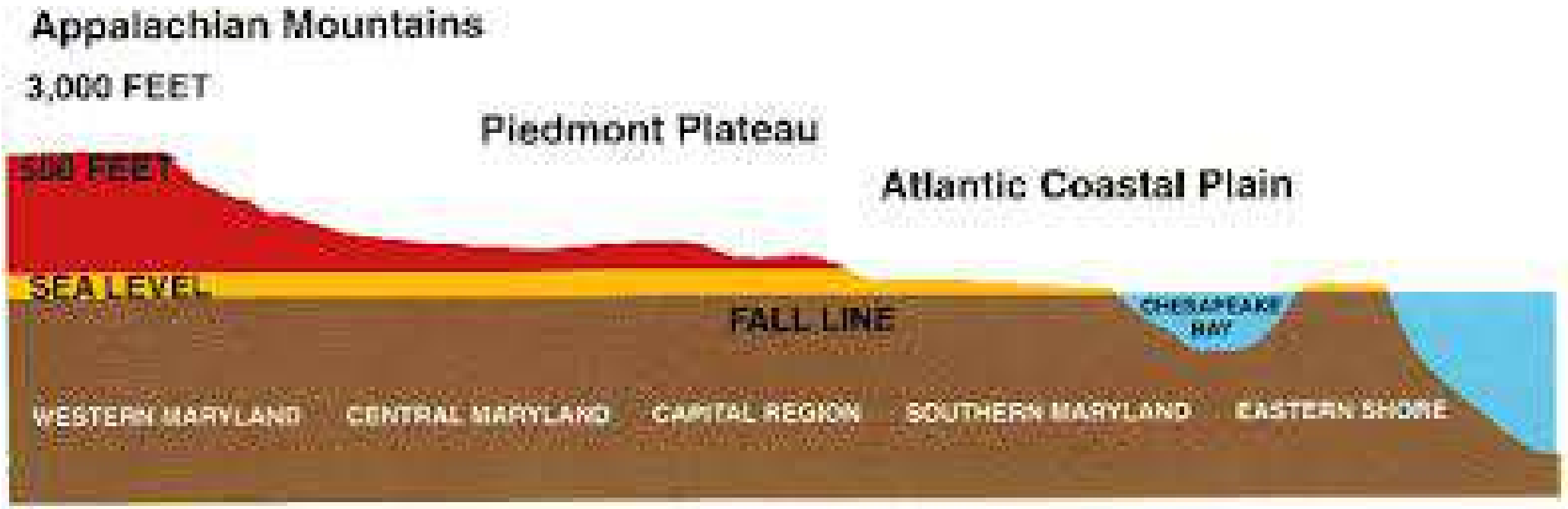
Ocean currents

- Ocean currents are like rivers flowing in the ocean. Moving in large circular systems, warm waters flow away from the equator toward the poles, and cold water flows back toward the equator.



Elevation

- **Elevation – distance about sea level. As altitude increases, the air temperature drops about 3.5 degrees Fahrenheit for every 1,000 feet.**



Topography – description of landforms in the region.