Section 2

Climate Regions

Wind and Water

- If Europe is North of the US, why is their climate milder?
- Answer-
 - the North Atlantic Current takes water from the Gulf of Mexico to Europe
 - Prevailing winds (aka westerlies)- major influence
- Warm winds from Africa = warm southern Europe
- Cold winds from Asia= lower temps in eastern Euro
- Coastal waters keep land cool in summer and warm in winter

- Marine West Coast
 - Northwestern and central Europe
 - Mild temperatures from North Atlantic Current
 - Long growing seasons, even Iceland
 - Summers are shorter and longer in the north
 - The further inland, the bigger difference between temps
 - Abundant precipitation
 - Autumn and early winter (some areas stay dry bc of rain shadow)
 - Thriving forests- deciduous trees (loose leaves in fall), coniferous (evergreens) in cooler areas

- Humid Continental
 - Eastern Europe and some northern Europe
 - Cool dry winds from Arctic and Asia- cool summers, long winters
 - Ex: Minsk-July high- 70, January high- 22
 - Dry winds = less rain and snow
 - Some low areas are marshy- water doesn't evaporate in cool temps much
 - Mixed forests- far north only evergreen

Mediterranean

- Hot and dry summers- life slows down- relaxing
- Mild and wet winters- 3-4 inches of rain per month
- Pyrenees and Alps block cold northern winds
 - Also create some rain shadows- especially in Spain
- Southern France- cool dry wind (called mistral) in winter and spring- no mountains to block
- Hot, dry winds from Africa
 - Called siroccos in Italy- bring humidity from Mediterranean
- Forests are rare- mostly shrubs, olive trees, grasses

- Subarctic and Tundra
 - Subarctic- Norway, Sweden, Finland- evergreens
 - Tundra- northern parts of N, S, F and in Iceland
 - Treeless plains near North Pole
 - Summer high- 40, winter high- -25
 - Low shrubs and mosses
 - Spring and summer- 20 hours of daylight, only 4 in winter and fall
 - Effects people's demeanor

- Highland
 - Alps and Carpathians- cool to cold
 - Temps and precip. Vary greatly- depend on 3 factors
 - 1. wind direction
 - 2. orientation to the sun
 - 3. altitude
 - Sturdy trees grow up to the timberline

- Other Climate Zones
 - Steppe- southern Ukraine
 - Dry, treeless grasslands
 - Not dry enough to be a desert, not wet enough for forests
 - Humid subtropical
 - Small section just north of Adriatic Sea
 - Hot, wet summer; mild, wet winters

- Climate Change
 - Average temperatures rising for several decades
 - Glaciers are steadily eroding
 - 2003 Europe- worst heat wave since middle ages
 - Is it a natural cycle? Is it global warming bc of greenhouse gases?
 - People worry about the effects
 - Kyoto Treaty- international agreement that limits greenhouse gas emissions