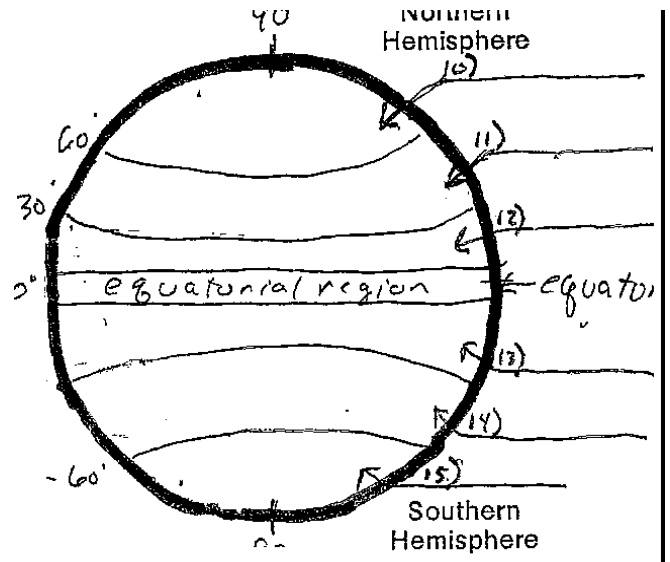


# *Ws Wind Is Air Is Wind*

*Land and water are not heated and cooled equally and, therefore, the air above them is also different. The greater the difference in temperature between the air over land and the air over water, the stronger the wind.*

- 1) Which air is usually cooler?
  - a) Air over Land
  - b) Air over Water
- 2) Explain why you selected that answer?
- 3) Cool air is heavier and pushes warmer air which starts the air moving. Which direction is the surface air generally moving in the Northern Hemisphere?
  - a) North to South
  - b) South to North
  - c) West to East
  - d) East to West
- 4) Cool air is heavier and pushes warmer air which starts the air moving. Which direction is the surface air generally moving in the Southern Hemisphere?
  - a) North to South
  - b) South to North
  - c) West to East
  - d) East to West
- 5) Do the winds in the area where you live travel only in this direction? YES NO
  - a) WHY:

*The earth's rotation curves winds to the right in the Northern Hemisphere, and to the left in the Southern Hemisphere. This shift in winds is known as the **Coriolis effect**. In addition, the winds which touch the surface of the earth are affected by the amount of land and/or ocean nearby, as well as mountains and other landforms. Air pressure and weather fronts also affect wind direction.*



Label the wind regions in both regions and the Equatorial Region.

- 6) Any wind that starts toward the equator is deflected and is turned toward the (LEFT RIGHT) in the Southern Hemisphere and the (LEFT RIGHT) in the Northern Hemisphere.
- 7) In which wind region do you live?
  - a) Polar easterlies
  - b) Prevailing westerlies
  - c) Northeast trade winds
- 8) How do you think the Trade Winds got their name?
- 9) The Equatorial Region is sometimes called the Doldrums. Why do you think this is so?