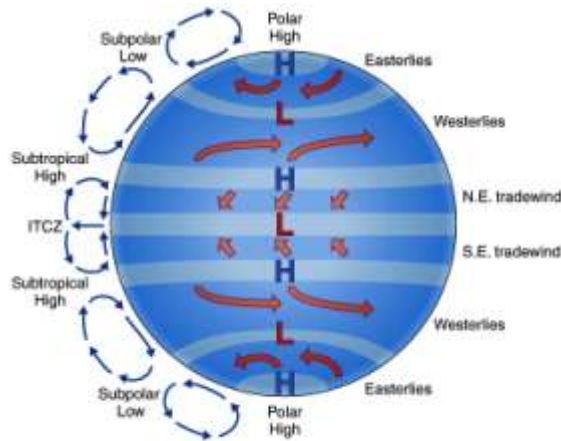


Meteorology Test 7  
Answers

1. Tropopause
2. Warm; 12 miles
3. Cold; 5 miles
4. In the stratosphere, an inversion makes the air extremely stable- therefore inhibiting vertical motion.
5. Ozone; Ozone absorbs ultraviolet radiation from the sun, gaining energy and becoming warmer.
6. Temperature
7. Sensible heat is heat that we can sense, feel, or measure as temperature. Latent heat is stored in the molecular structure of liquid and solid water.
8. Absorbs
9. Releases
10. Coalescence; 2
11. The adiabatic lapse rate is the rate at which a dry, rising air parcel expands and cools. It is 5.4 degrees Fahrenheit per 1000ft, or 10 degrees Celsius per 1000 meters.
12. Subsidence
13. An air mass is defined as a large body of air exhibiting relatively uniform properties of heat, moisture, and stability.
14. cA, cP, cT, mT, mP
15. mT
16. cP or cA
17. mP
18. mT
19. cT and mT



20. (a) The upper cell is the polar cell, the cell between the subpolar low and subtropical high is called the Ferrel cell, the the cells at the equator are called the Hadley cells.
21. Horse Latitudes: This region of subsiding dry air and high pressure results in weak winds. Tradition states that sailors gave the region of the subtropical high the name "horse latitudes" because ships relying on wind power stalled; fearful of running out of food and water, sailors threw their horses and cattle overboard to save on provisions.
22. Gaspard Coriolis