

EARTH SYSTEM SCIENCE 5: Homework #2 (due 4/26/2007)

Name _____ Student ID#: _____

- 1) On the June solstice, the area poleward of the _____ experiences 24 hours of darkness.
- 2) The solar constant is measured in what unit _____.
- 3) The earth's radiation is strongest in this portion of the spectrum, the _____.
- 4) Day and night have an equal length during a(n) _____.
- 5) The percentage of visible light reflected from an object is that object's _____.
- 6) This is the most important mode of energy transfer between the earth's surface and the atmosphere: _____.
- 7) If the earth did not have greenhouse gases, its temperature would be _____ than it is now.
- 8) The most important atmospheric agent for nonselective scattering is/are _____.
- 9) The apparent deflection of objects moving in the air that is caused by the rotation of the earth is called the _____.
- 10) This is the pressure that would result if a given observation point were at sea level: _____.
- 11) The Coriolis effect is proportional to this characteristic of an object, its _____.
- 12) Friction is a significant factor on air motion within the elevation contained by the _____.
- 13) Northern Hemisphere winds rotate clockwise around these: _____.
- 14) Isobar spacing on a weather map gives an indication of the _____.
- 15) An increase in wind speed is caused by an increase in this force, the _____.

ANSWERS

- 1) Antarctic Circle or 66.5 South
- 2) Watt per square meter (W/m²)
- 3) Thermal infrared or infrared
- 4) Equinox
- 5) Albedo
- 6) Latent heat or radiation
- 7) Colder
- 8) Cloud or water droplet
- 9) Coriolis effect
- 10) Sea level pressure or 1000 mb (hPa)
- 11) Speed or latitude
- 12) Planetary boundary layer
- 13) Anti-cyclone or high pressure system
- 14) Pressure gradient
- 15) Pressure gradient force