ES 11 Relative Humidity and Dew Point WS

1. Explain how relative humidity is calculated.p500
2. Explain why evaporation is a cooling process. P499
3. What causes water to evaporate more rapidly when the temperature is warmer?p499
4. How does air temperature affect how much water vapor the air can hold?
5. When is air saturated? (p500)
6. Using figure 27.2 on page 500, how much water vapor can air at 10C hold?
7. Using chart on page 501, What is the relative humidity if the dry bulb reading is 18 C and the wet bulb reads 8C?
8. Calculate relative humidity of the air containing 10g/m3 of water vapor when it’’s maximum capacity is 12g/m3. Show your work.
9. What are two parts of a psychrometer?
10. How is dew point related to condensation?
11. Why does a person’s eye glasses fog up when they come indoors on a cold day?
12. Where did the liquid water that appears on the outside of a cold glass on a hot day come from?