

Take-Home Reference Table Quiz

1. What are the only two substances listed on the reference tables that require less than 0.10 calories of energy to heat them up by 1°C?

1a.)

1b.)

2. If a one gram sample of water vapor condenses to a liquid and then freezes to a solid, how much total energy will have been released?

2.)

3. If the air temperature is 24°C and a student measures the wet-bulb depression to be 10°C, what is the relative humidity of the air?

3.)

4. If the dry-bulb temperature is 10°C and the relative humidity is 54%, what is the dew point temperature?

4.)

5. If a sample of water is 200°F and cools down until freezing, how many degrees celsius did it change?

5.)

6. Draw a station model that shows the following information:

Temperature: 76°F

Dew point: 57°F

Visibility: 2 miles

Precipitation: Fog

Wind speed: 35 knots

Wind direction: Northeast

Barometric pressure: 1012.4 mb

Cloud cover: overcast

6.)

7. What is the abbreviation for a maritime polar air mass?

7.)

8. Draw the symbol for an occluded front.

8.)

9. What is the air temperature at the three pauses?

9a.) tropopause:

9b.) stratopause:

9c.) mesopause:

10. What do we call the winds that blow between the equator and 30°N latitude?

10.)