The Physical Setting: Earth Science

Worksheet: Weather Instruments

- 1. What is the approximate dewpoint temperature if the dry bulb temperature is 10 ° C and the wet-bulb temperature is 8 °C? [Refer to the Earth Science Reference Tables.]
 - . a. 1℃
 - b. -13 ℃
 - c. 6 ℃
 - d. 3 ℃
- 2. What is the dewpoint temperature when the air temperature is 18 °C and the wet-bulb temperature is 13 °C.
 - a. 9°C
 - b. 6 ℃
 - с. 25 °С
 - d. 13 ℃
- 3. A temperature of 80° Fahrenheit would be approximately equal to how many degrees on the Celsius scale?
 - a. 27
 - b. 299
 - c. 178
 - d. 34

The two thermometers below show the dry-bulb and wet bulb temperatures of the air.



- 4. According to the dewpoint temperature chart in the Earth Science Reference Tables, what is the approximate dewpoint temperature of the air?
 - a. 6 °C
 - b. 11 ℃
 - c. 4 °C
 - d. -25 °C

- 5. According to the Earth Science Reference Tables, when the dry-bulb temperature reading is 10 °C and the wet-bulb temperature is 2.0 °C, the dewpoint temperature of the air is approximately?
 - a. -8.0 °C
 - b. 10.0 °C
 - c. 2.0 ℃
 - d. -14.0 °C
- 6. An air pressure of 29.65 inches of mercury is equal to how many millibars?
 - a. 1001.0 mb
 - b. 1004.0 mb
 - c. 999.0 mb
 - d. 984.0 mb
- 7. An air pressure of 1023 millibars is equal to how many inches of mercury?
 - a. 30.10
 - b. 30.19
 - c. 30.21
 - d. 30.15
- 8. A temperature of 73° Fahrenheit is approximately equal to a temperature of
 - a. 23 ℃
 - b. 162 ℃
 - c. 26 ℃
 - d. 17 °C

Questions 9 and 10 refer to the following diagram below shows a weather station.



- 9. The barometric pressure is
 - a. 913.0 mb
 - b. 130.0 mb
 - c. 10.28 mb
 - d. 1013.0 mb
- 10. The weather forecast for the next 6 hours at this station most likely would be
 - a. sunny, cold, probable rain
 - b. overcast, cold, probable snow
 - c. overcast, hot, poor visibility
 - d. overcast, hot, unlimited visibility