

Absolute Zero HW

Temperature Conversion Practice

*Convert the following temperatures as directed.

1. $10.0^{\circ}\text{C} = \underline{\hspace{1cm}}$ Kelvin
2. $323\text{ K} = \underline{\hspace{1cm}}$ $^{\circ}\text{C}$
3. $367\text{ K} = \underline{\hspace{1cm}}$ $^{\circ}\text{C}$
4. $200\text{ }^{\circ}\text{C} = \underline{\hspace{1cm}}$ K
5. $283\text{ }^{\circ}\text{C} = \underline{\hspace{1cm}}$ K

Charles' Law Practice Problems

****Remember...all temperatures must be converted to Kelvin!!!**

1. Calculate the decrease in temperature when 2.00 L of a gas at 20.0°C is compressed to 1.00 L.
2. A sample of air occupies 600.0 mL at 20.0°C . What is the volume of the air at 60.0°C ?
3. A gas occupies 900.0 mL at a temperature of 27.0°C . What is the volume of the gas at 132.0°C ?
4. You measure 300.0 mL of a gas at 17.0°C . What is its volume at 10.0°C ?
5. At 27.00°C a gas has a volume of 6.00 L. What will the volume be at 150.0°C ?