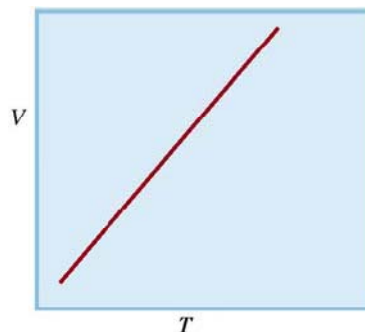|	
Charles' Law $$\frac{V}{T} = k$$ $$\frac{V_1}{T_1} = \frac{V_2}{T_2}$$ *Volume of a gas is directly proportional to its temperature.*[1]	

Calculate the new volume of a gas at 25°C and 2.5 L that is warmed to 50.°C.

$$\frac{2.5\ \text{L}}{(273+25)\text{K}} = \frac{V_2}{(273+50.)\text{K}}$$

$$\frac{2.5\ \text{L}}{298\ \text{K}} = \frac{V_2}{323\ \text{K}}$$

$$\frac{2.5\ \text{L} \times 323\ \text{K}}{298\ \text{K}} = V_2$$

$$2.7\ \text{L} = V_2$$

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[1] All gases liquefy before reaching a temperature of absolute zero. The experimental data can only be extrapolated to predict absolute zero. In addition, at temperatures close to absolute zero, quantum effects come into play and classical rules no longer apply.