Gay-Lussac's Law

- Pressure and temperature are directly related at constant volume and moles

- $$\frac{P_1}{T_1} = \frac{P_2}{T_2}$$ @ constant V, n

Gay-Lussac's Law and Kinetic Theory

- If the volume of the container stays the same…
- and the molecules are moving faster on average…
- the molecules must be colliding with the walls of the container more often and with more force.

Combined Gas Law

- A combination of Boyle's, Charles's, and Gay-Lussac's Laws, where nothing need be held constant

$$\frac{P_1 V_1}{T_1} = \frac{P_2 V_2}{T_2}$$