

## Quiz -Gas Laws

Match Law with formula.

- |                   |  |
|-------------------|--|
| 1. Avogadro's Law | a. $\frac{V_1}{T_1} = \frac{V_2}{T_2}$ |
| 2. Boyle's Law    | b. $PT = P_1 + P_2 + P_3 \dots$        |
| 3. Charles' Law   | c. $P_1V_1 = P_2V_2$                   |
| 4. Dalton's Law   | d. $PV = nRT$                          |
| 5. Ideal Gas Law  | e. $\frac{V_1}{n_1} = \frac{V_2}{n_2}$ |

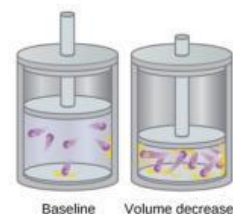
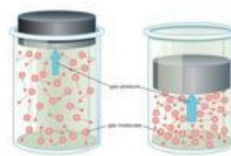


Match Variable with unit.

- |       |                                      |
|-------|--------------------------------------|
| 6. n  | a. K                                 |
| 7. P  | b. L                                 |
| 8. R  | c. mol                               |
| 9. T  | d. atm                               |
| 10. V | e. $\frac{L \cdot atm}{K \cdot mol}$ |

Match law with explanation.

- |                    |  |
|--------------------|--|
| 11. Avogadro's Law | a. All the individual pressures of gases in a system combine in sum to equal the total pressure. |
| 12. Boyle's Law    | b. More moles of a gas increase the volume of a gas.   |
| 13. Charles' Law   | c. When temperature is increased the particles move faster and apart increasing its' volume.     |
| 14. Dalton's Law   | d. Gases are assumed to have no size, no gain or loss of energy, no attractive/repulsive forces. |
| 15. Ideal Gas Law  | e. When volume on a gas is increased the pressure is increased                                   |



16. Which Gas Law?

17. Which Gas Law?

18. Which Gas Law?

19. Which Gas Law?

20. Which Gas Law?

21. Solve problem, enter answer to the hundredths and choose correct units.

A gas with a volume of 12.71 L is at a pressure of 3.45 atm.

If the volume of the gas is increased to 45.65 L what is the new pressure?