

## Quiz -Gas Laws

Match Law with formula.

1. Avogadro's Law
2. Boyle's Law
3. Charles' Law
4. Dalton's Law
5. Ideal Gas Law

- a.  $\frac{V_1}{T_1} = \frac{V_2}{T_2}$
- b.  $P_T = P_1 + P_2 + P_3 \dots$
- c.  $P_1V_1 = P_2V_2$
- d.  $PV = nRT$
- e.  $\frac{V_1}{n_1} = \frac{V_2}{n_2}$



Match Variable with unit.

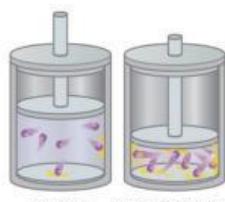
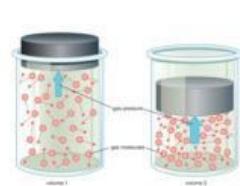
6. n
7. P
8. R
9. T
10. V

- a. K
- b. L
- c. mol
- d. atm
- e.  $\frac{\text{L} \cdot \text{atm}}{\text{K} \cdot \text{mol}}$

Match law with explanation.

11. Avogadro's Law
12. Boyle's Law
13. Charles' Law
14. Dalton's Law
15. Ideal Gas Law

- a. All the individual pressures of gases in a system combine in sum to equal the total pressure.
- b. More moles of a gas increase the volume of a gas.
- c. When temperature is increased the particles move faster and apart increasing its' volume.
- d. Gases are assumed to have no size, no gain or loss of energy, no attractive/repulsive forces.
- 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?