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## Gases and Gas Laws



## Across

3. Who's law states that the pressure of a fixed mass of gas at constant volume varies directly with the Kelvin temperature?
4. the relationship between volume and temperature is....
5. According to Gay-Lussac, an increase in temperature will cause an in pressure.
6. The pressure exerted by a gas depends on volume, temperature, and the amount of $\qquad$ .
7. who discovered that doubling the pressure on a sample of gas at constant temperature reduces its volume by $1 / 2$ ? 13. water vapor and other gases exert a pressure known as $\qquad$ pressure
8. The __ gas law expresses the relationship between pressure, volume, and temperature of a fixed amount of gas.
9. What law is being expressed in PV=k?
10. What law states that the volume of a fixed mass of gas at a constant pressure varies directly with the Kelvin temperature?
11. The force per unit area on a surface
12. 760 mm Hg is the definition of one of pressure.

## Down

1. a device used to measure the pressure of an enclosed gas sample 2. if pressure is constant, gases will what when heated?
2. The temperature $-273.15^{\circ} \mathrm{C}$ is referred to as
3. the pressure exerted by a force of one newton acting on an area of one square meter
4. the force that will increase the speed of a 1 kg mass by 1 m per second each second that the force is applied 10. law that states the total pressure of a gas mixture is the sum of the partial pressures of the common component gases
5. device used to measure atmospheric pressure
6. the common unit of pressure is millimeters of $\qquad$
7. the pressure of each gas in a mixture is called the $\qquad$ pressure
