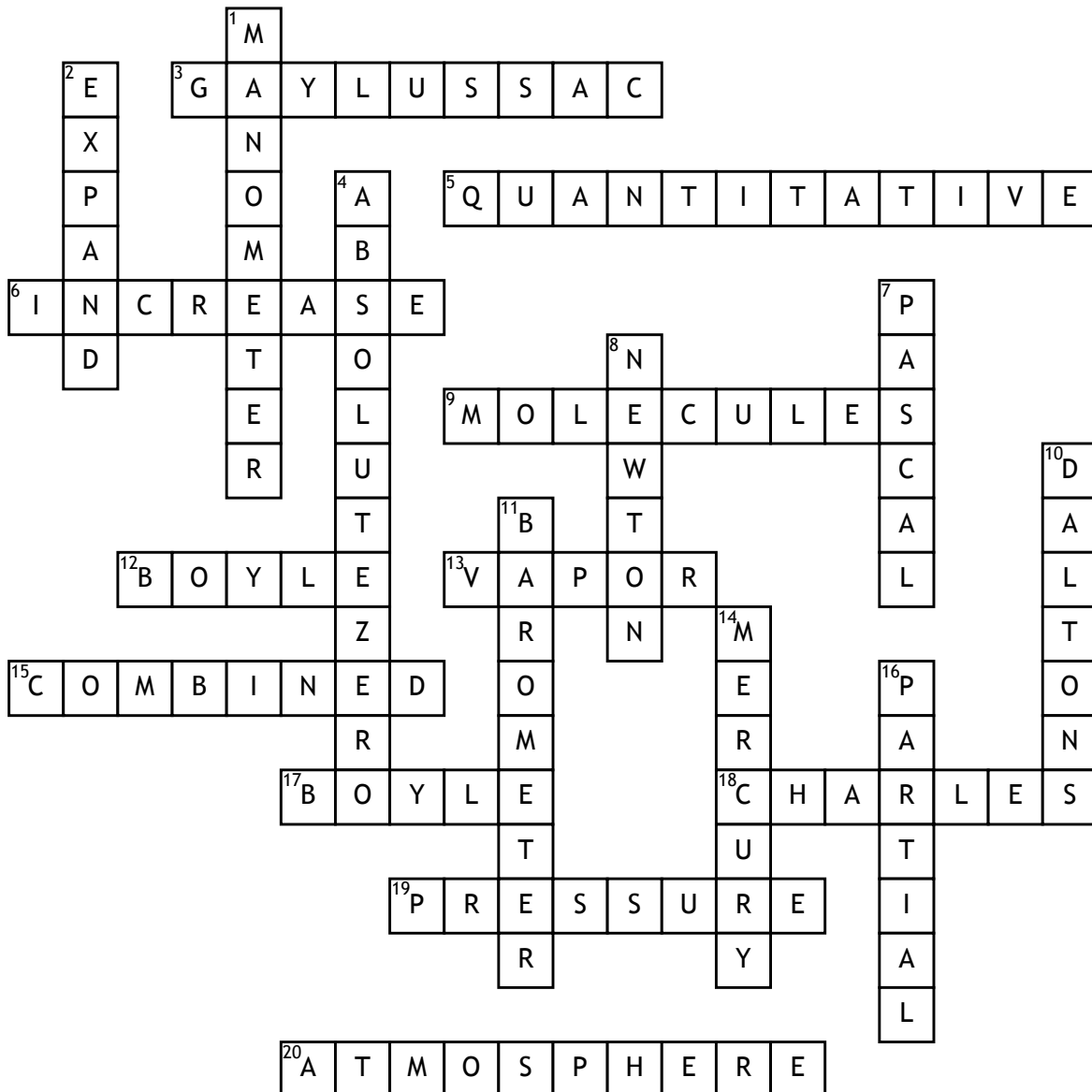


Gases and Gas Laws



Across

3. Who's law states that the pressure of a fixed mass of gas at constant volume varies directly with the Kelvin temperature?

5. the relationship between volume and temperature is....

6. According to Gay-Lussac, an increase in temperature will cause an _____ in pressure.

9. The pressure exerted by a gas depends on volume, temperature, and the amount of _____.

12. 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 _____ pressure

15. The _____ gas law expresses the relationship between pressure, volume, and temperature of a fixed amount of gas.

17. What law is being expressed in $PV=k$?

18. What law states that the volume of a fixed mass of gas at a constant pressure varies directly with the Kelvin temperature?

19. The force per unit area on a surface

20. 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?

4. The temperature -273.15°C is referred to as

7. the pressure exerted by a force of one newton acting on an area of one square meter

8. 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

11. device used to measure atmospheric pressure

14. the common unit of pressure is millimeters of _____.

16. the pressure of each gas in a mixture is called the _____ pressure