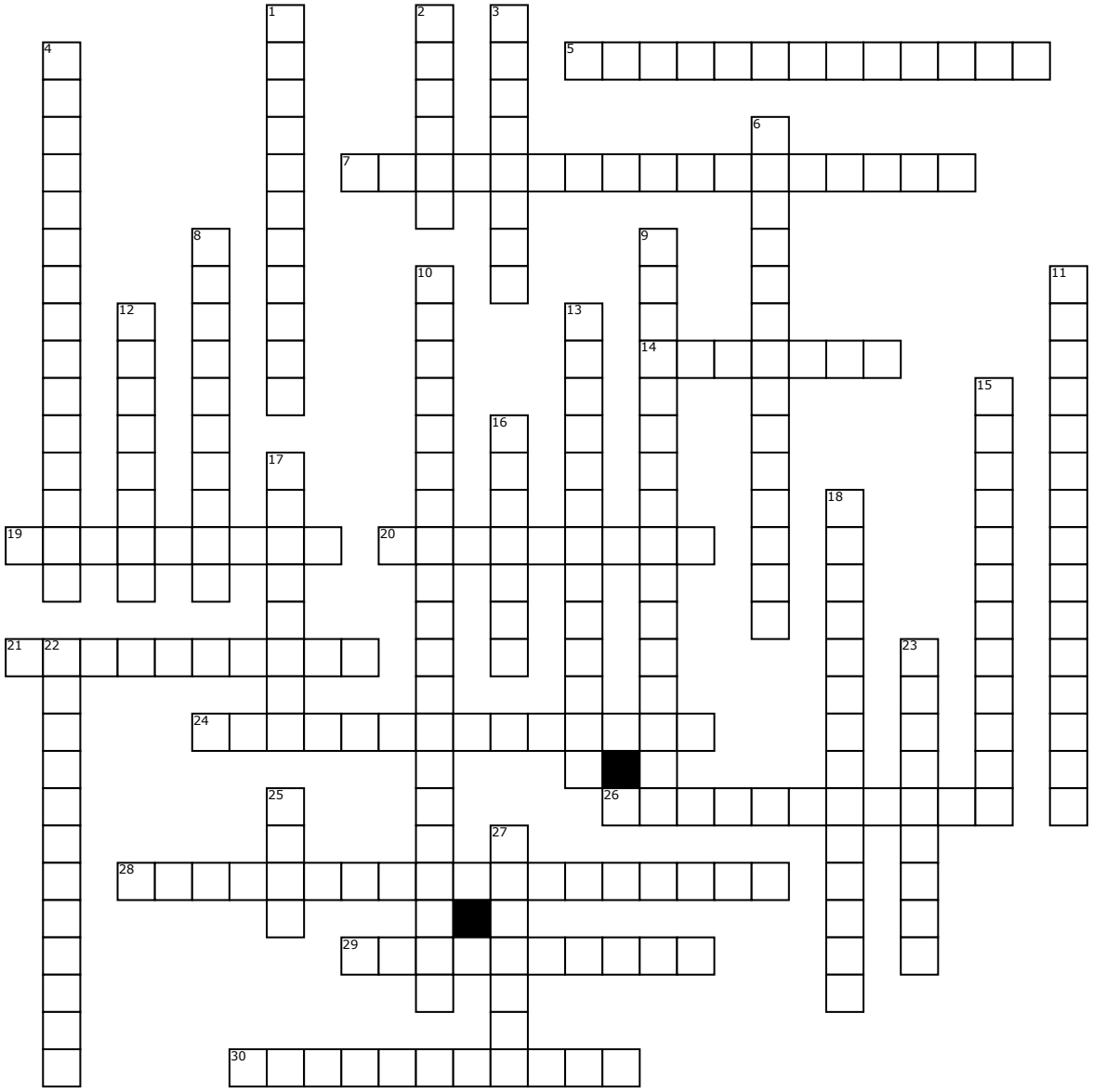
CHEMISTRY 101



Across

5. It is also known as the Amontons' law or the pressure law

7. Physicist researched on the kinetic-molecular theory of gases in 1859.

14. Gases are made up of very tiny particles. This explains why gases have low _____.

19. As the absolute temperature increases, the average kinetic energy of the gas particles _____ and vice versa.

20. It states that the volume of a given mass of a gas is inversely proportional to its pressure provided the temperature remains constant.

21. Physicist researched on the kinetic-molecular theory of gases in 1848.

24. He correctly hypothesized that equal volumes of gases, at the same temperature and pressure, contain equal numbers of molecules.

26. It is the measure of hotness and coldness of a given mass.

28. He submitted a paper on the kinetic theory to the Royal Society of London, but his paper was rejected by the society.

29. It states that, for a given mass of an ideal gas at constant pressure, the volume is directly proportional to its absolute temperature, assuming in a closed system.

30. It shows the relationship between the pressure, volume, and temperature for a fixed mass (quantity) of gas

Down

1. He studied the relationship between volume and pressure of a gas at constant temperature.

2. It is the space occupied by matter in three dimensional units.

3. It is a very specific sort of gas behavior that is the rate of a gas escaping a container through a small pore.

4. Physicist researched on the kinetic-molecular theory of gases in 1870.

6. He found Charles' Law in 1787

8. Also known as the law of volumes

9. This attractive force between molecules was discovered by Johannes Diderik van der Waals and is called _____.

10. He found Gay-Lussac's Law in 1809

11. A swiss mathematician and physicist who was the first to use kinetics to explain the gas behavior known today as Boyle's Law

12. It is a force exerted by the substance per unit area on another substance.

13. It states that, for a given mass and constant volume of an ideal gas, the pressure exerted on the sides of its container is directly proportional to its absolute temperature.

15. The sizes of the molecules are very small compared to the distance between them, thus making them _____.

16. The laws governing the behavior of gases are termed collectively as the _____.

17. The collision of molecules with the walls exerts _____ on the container

18. Physicist researched on the kinetic-molecular theory of gases in 1857.

22. This states that the volume occupied by an ideal gas is directly proportional to the number of molecules of the gas present in the container.

23. It is the spreading out of molecules away from a concentrated region due to the random motions of the gas particles.

25. Gas Pressure is measured in _____ with a barometer

27. It has been around to assist scientists in finding volumes, amount, pressures and temperature when coming to matters of gas.