$\qquad$

## Gas Laws

| T C | O | M | P | R | E | S | I | B | I | L | I | T | Y |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| ${ }^{2}$ M | O | L | A | R | V | O | L | U | M | E |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



## Across

1. D
2. the volume occupied by one mole of ideal gas at STP. Its value is: 22.414 L mol ${ }^{-1}$.
3. Z
4. $N$
5. Z
6. S
7. E
8. Boyle's law states that at constant temperature for a fixed mass, the absolute pressure and the volume of a gas are inversely proportional.
9. The lowest temperature that is theoretically possible.
10. When we put Boyle's law, Charles' law, and Gay-Lussac's law together, we come up with the
11. thermal expansion of gasses and the relationship between temperature, volume, and pressure.
12. A physical law describing the relationship of the measurable properties of an ideal gas
13. Z

Down
3. S
5. S
6. states that, "equal volumes of all gases, at the same temperature and pressure, have the same number of molecules"
8. S
10. S
11. H
12. A
14. a physical constant which is featured in many fundamental equations in the physical sciences, such as the ideal gas law and the Nernst equation
15. S
17. S
18. Charles's law is an experimental gas law that describes how gases tend to expand when heated.
21. Molar

