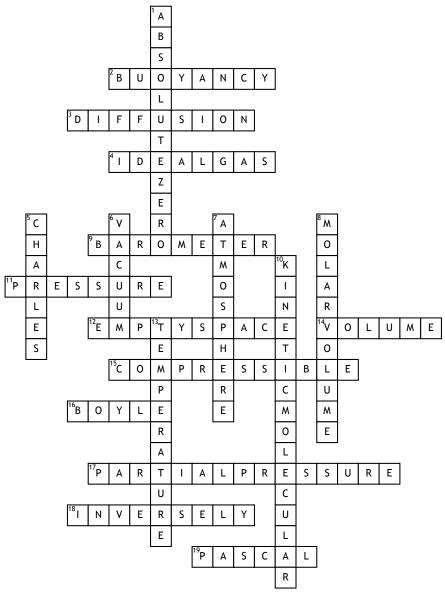
## Gas Laws



## **Across**

- **2.** the ability or tendency to float in water or air or some other fluid
- 3. the process in which molecules move from a higher concentration to a lower concentration
- **4.** a gas whose pressure P, volume V, and temperature T are related by the ideal gas law PV = nRT,
- **9.** an instument used to messure atmospheric pressure
- 11. something is compressed and particles move around bouncing off the sides of the container (trying to escape and expand)
- **12.** variable definition the space not filled by an atom
- **14.** the quantity of three-dimensional space occupied by a liquid, solid, or gas

- **15.** to be able to be compressed into a solid mass or smaller space
- **16.** an experimental gas law which describes how the pressure of a gas tends to decrease as the volume of a gas increases
- **17.** the hypothetical pressure of that gas if it alone occupied the volume of the mixture at the same temperature
- 18. related by inverse variation
- 19. the SI derived unit of pressure used to quantify internal pressure, stress, Young's modulus and ultimate tensile strength

## Down

1. the lowest temperature that is theoretically possible, at which the motion of particles that constitutes heat would be minimal

- **5.** a law stating that the volume of an ideal gas at constant pressure is directly proportional to the absolute temperature **6.** a volume that encloses little or no
- **6.** a volume that encloses little or no matter
- **7.** a combination of gases that surround a planet, room, etc
- **8.** the volume occupied by one mole of a substance at a given temperature and pressure. It is equal to the molar mass (M) divided by the mass density
- 10. used to explain the behavior of gases and is based upon the following postulates: Gases are composed of a many particles that behave like hard spherical objects in a state of constant, random motion
- **13.** indicates the direction in which energy flows when two objects are in thermal contact