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## Matter



## Across

3. The phase change in which a substance changes from a gas or vapor to a liquid.
4. The pressure of a vapor in contact with its liquid or solid form.
5. The state of matter in which a material has neither a definite shape or volume.
6. States that the volume of gas is inversely proportional to its pressure if the temperature and the number of particles are constant.
7. The state of matter in which materials have definite shape and volume.
8. The reversible physical change that occurs when a substance changes from one state of matter to another.
9. The phase change in which a substance changes from a liquid into a gas.
10. When a gas changes directly into a solid without first changing to a liquid. 17. A temperature of o kelvin.
11. The state of matter in which a material has a definite volume and not definite shape.
12. Heat absorbed by a unit mass of a solid at its melting point in order to convert the solid into a liquid at the same temperature.

## Down

1. The energy an object has due to its motion.
2. The result of a force distributed over an area.
3. Heat absorbed by a unit mass of a material at its boiling point in order to convert the material into a gas at the same temperature.
4. The phase change in which a substance changes from a solid to a gas or vapor without changing to a liquid first.
5. States that the volume of a gas is directly proportional to its temperature in kelvins if the pressure and number of particles of the gas are constant.
6. The system releases energy to it's surroundings.
7. The system absorbs energy from it's surroundings.
8. The process that changes a substance from a liquid to a gas at temperatures below the substance's boiling points.
