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## Matter and Energy



## Across

3. The amount of matter a substance contains
4. A mixture in which particles of one or more substances (the solute) are distributed uniformly throughout another substance (the solvent) 10. matter that has no definite shape or volume; expands to fill its container 11. matter that has a fixed shape and a fixed volume
5. a change in which only the appearance or form of matter changes and not its chemical properties 14. A composition of two or more substances that are not chemically combined with each other and are capable of being separated.
6. The amount of space a substance takes up
7. The ratio of mass to volume of an object; how tightly packed a substances particles are
8. any combination of substances that does not have uniform composition and properties; a mixture of physically distinct substances with different properties
9. any combination of substances that has uniform composition and properties; a mixture that is uniform throughout

## Down

1. The gaseous state of a substance that is normally liquid or solid at room temperature
2. a change in matter in which the arrangement of atoms are changed and an entirely new substance is formed
3. matter that has definite volume but no definite shape; takes the shape of its container
4. process for separating two liquids based on the boiling points of both liquids
5. Any material that has mass and takes up space
6. process of separating a mixture of a solid and a liquid
7. A substance consisting of atoms or ions of two or more different elements in definite proportions joined by chemical bonds; cannot be physical separated
8. A substance that cannot be broken down into simpler substances by chemical means
