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# Section 1.1 Vocabulary 



## Across

3. formed when two or more different types of elements combine in a specific ratio
4. a combination of subatomic particles: protons ( + ), neutrons (neutral), and electrons (-) 12. a substance composed of atoms all with the same atomic number; cannot be split chemically into smaller substances
5. a formula expressed by numeric subscripts and an element's symbol
6. positively charged whole numbers that give information about how many moles of a substance are involved in a reaction
7. (M)is a physical property defined as the mass of a given substance (chemical element or chemical compound) divided by the amount of substance. The base SI unit for molar mass is $\mathrm{kg} / \mathrm{mol}$
8. forms when two or more atoms of any type of element share a bond
9. is the relationship between the coefficients of reactants and products
10. a new substance formed when reactants are chemically changed
11. a formula expressed by numeric subscripts and an element's symbol
12. the substance dissolved in a liquid

## Down

1. changing the shape of an object
2. the ability of a body to regain its original shape after deformation
3. anything that takes up space and has mass; can exist in the form of solids, liquids, or gases
4. bonds that occur through either sharing of electrons or donation between atoms
5. a process that involves rearrangement of the molecular or ionic structure of a substance, as opposed to a change in physical form or a nuclear reaction
6. a homogeneous mixture that results from a solute dissolving in a solvent
7. the substances that take part in a chemical reaction
8. the amount of stress a material can withstand before undergoing a significant change to its cross sectional area; not measured but obtained using experimental measures
9. the abundance of a constituent divided by the total volume of a mixture
10. the use of mathematics to quantify what occurs in a chemical reaction
11. a counting unit (mol) to quantify the number of atoms, particles, or molecules in a given mass
12. a property of fluids that measures the resistance offered by the fluid to shear stress 20. the ability of a material to undergo plastic deformation before fracture; mathematically, defined as a percentage
13. number of moles of solute per liters of solvent
