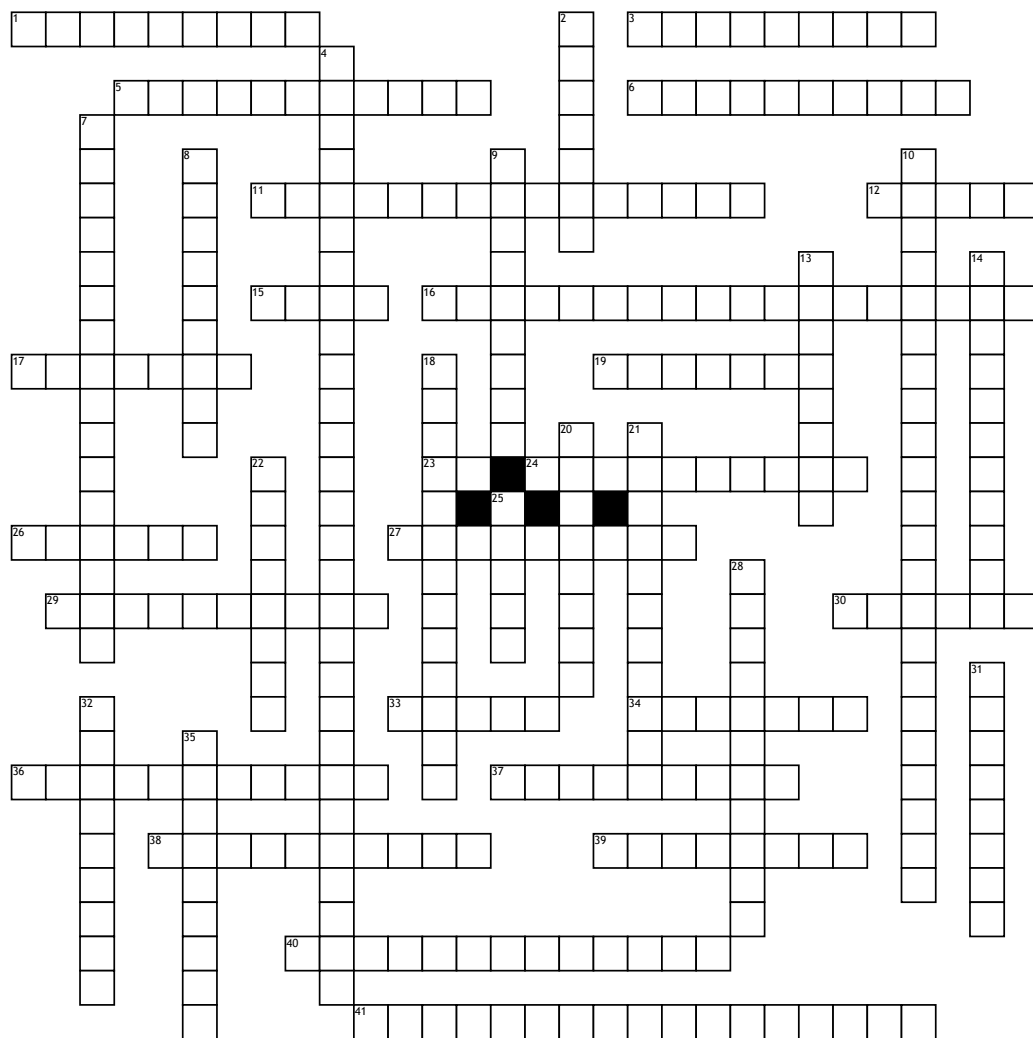


# Chemistry Vocabulary Practice



## Across

1. reaction in which two or more substances react to form a single product
3. starting substances in a chemical reaction
5. simplest ratio of atoms in an ionic compound
6. common unit for measuring air pressure
11. one mole of any substance contains \_\_\_\_\_ of particles
12. bond that forms when an electron pair is shared in the space between two atoms
15. SI base unit for amount of a substance
16. percent by mass of each element in a compound
17. electrons in an atom's outermost energy level
19. a compound with a specific number of water molecules bound to its atoms
23. bond formed when parallel orbitals overlap to share electrons
24. scientist who demonstrated that air exerts pressure and invented the barometer to measure it
26. atom that has lost electrons to become positively charged
27. condition in which more than one valid Lewis structure can be drawn for a molecule or ion

29. ion with more than one atom
30. a substance dissolved in a solvent
33. negatively charged atom
34. a solution with water as the solvent
36. electrons in metallic bonds that are not "attached" to any atom
37. states that the pressure and volume of a gas are inversely proportional when temperature is constant
38. a reaction in which oxygen combines with a substance to release energy in the form of heat and light
39. substances formed during a chemical reaction
40. reaction in which a single compound breaks down into two or more elements or compounds
41. reaction in which the atoms of one element replace the atoms of another in a compound

## Down

2. the most plentiful substance in a solution
4. states that the total pressure of a mixture of gases is equal to the sum of the partial pressures of the individual gases
7. process by which atoms of substances are rearranged to form different substances

8. formula with the smallest whole-number ratio of the elements in a compound
9. mass of one mole of any substance
10. describes the behavior of gases in terms of particles in motion
13. particle formed when atoms bond covalently
14. number written in front of a reactant or product used to balance a chemical equation
18. chemical equation that shows all particles as they exist in a solution
20. bond that results from the sharing of valence electrons
21. a solid formed during a chemical reaction in solution
22. equation that shows only the particles that participate in a reaction in solution
25. bond that forms as a result of the attraction between oppositely charged ions
28. measure of the average kinetic energy of the particles in a sample of matter
31. force per unit area
32. formula that tells the actual number of atoms of each element in a molecule or formula unit of a substance
35. instrument used to measure atmospheric pressure

## Word Bank

hydrate	pressure	boyleslaw	chemical reaction	solvent
percent composition	kinetic molecular theory	barometer	molecular	Avogadros number
net ionic	covalent	delocalized	valence	complete ionic
combustion	pi	atmosphere	cation	molecule
precipitate	reactants	temperature	empirical	molar mass
daltons law of partial pressures	Torriceili	formula unit	resonance	coefficient
synthesis	ionic	products	solute	polyatomic
aqueous	sigma	anion	single replacement	decomposition
mole				