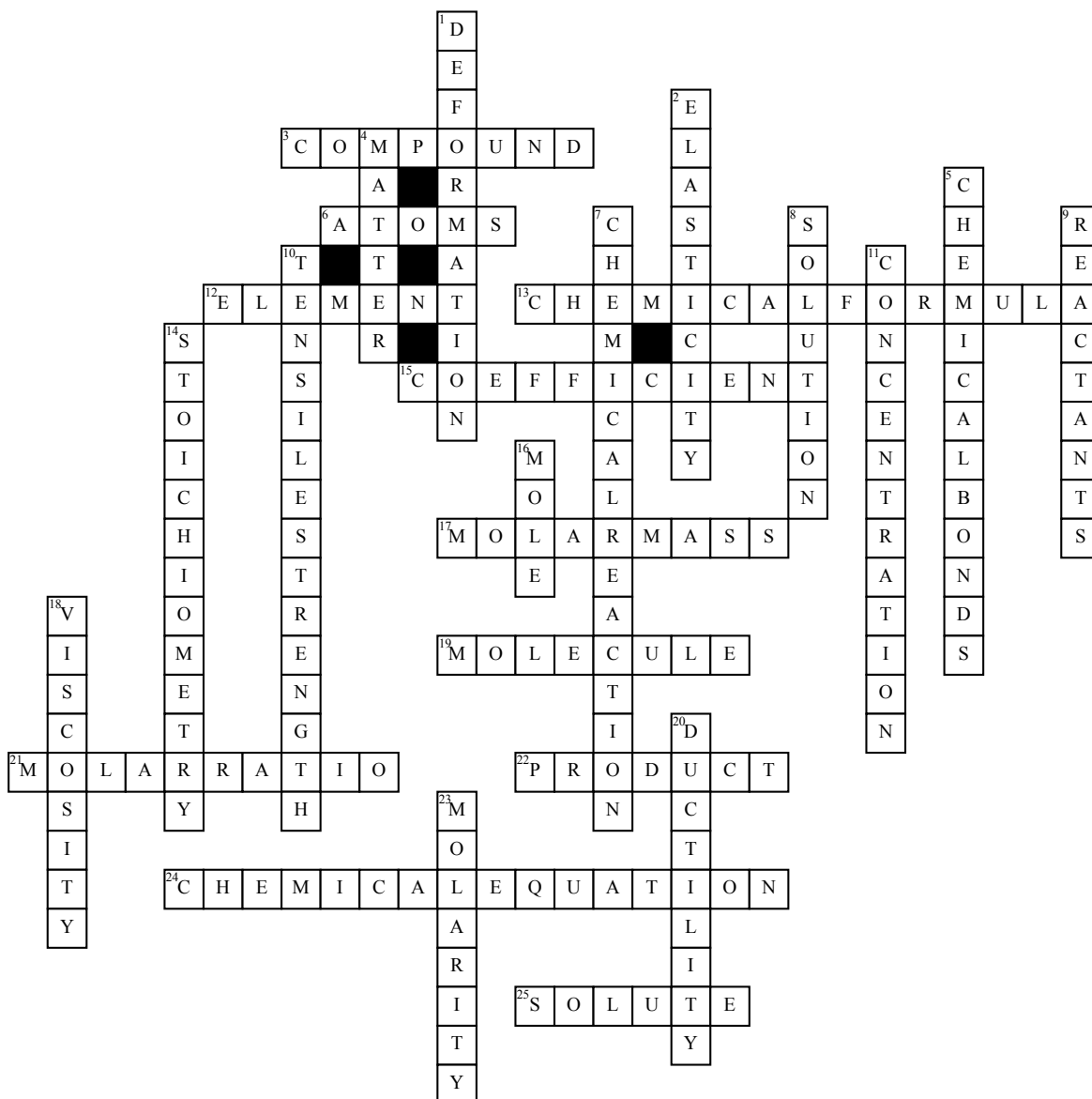


# Section 1.1 Vocabulary



## Across

3. formed when two or more different types of elements combine in a specific ratio

6. 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

13. a formula expressed by numeric subscripts and an element's symbol

15. positively charged whole numbers that give information about how many moles of a substance are involved in a reaction

17. (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 kg/mol

19. forms when two or more atoms of any type of element share a bond

21. is the relationship between the coefficients of reactants and products

22. a new substance formed when reactants are chemically changed

24. a formula expressed by numeric subscripts and an element's symbol

25. 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

4. anything that takes up space and has mass; can exist in the form of solids, liquids, or gases

5. bonds that occur through either sharing of electrons or donation between atoms

7. 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

8. a homogeneous mixture that results from a solute dissolving in a solvent

9. the substances that take part in a chemical reaction

10. 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

11. the abundance of a constituent divided by the total volume of a mixture

14. the use of mathematics to quantify what occurs in a chemical reaction

16. a counting unit (mol) to quantify the number of atoms, particles, or molecules in a given mass

18. 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

23. number of moles of solute per liters of solvent