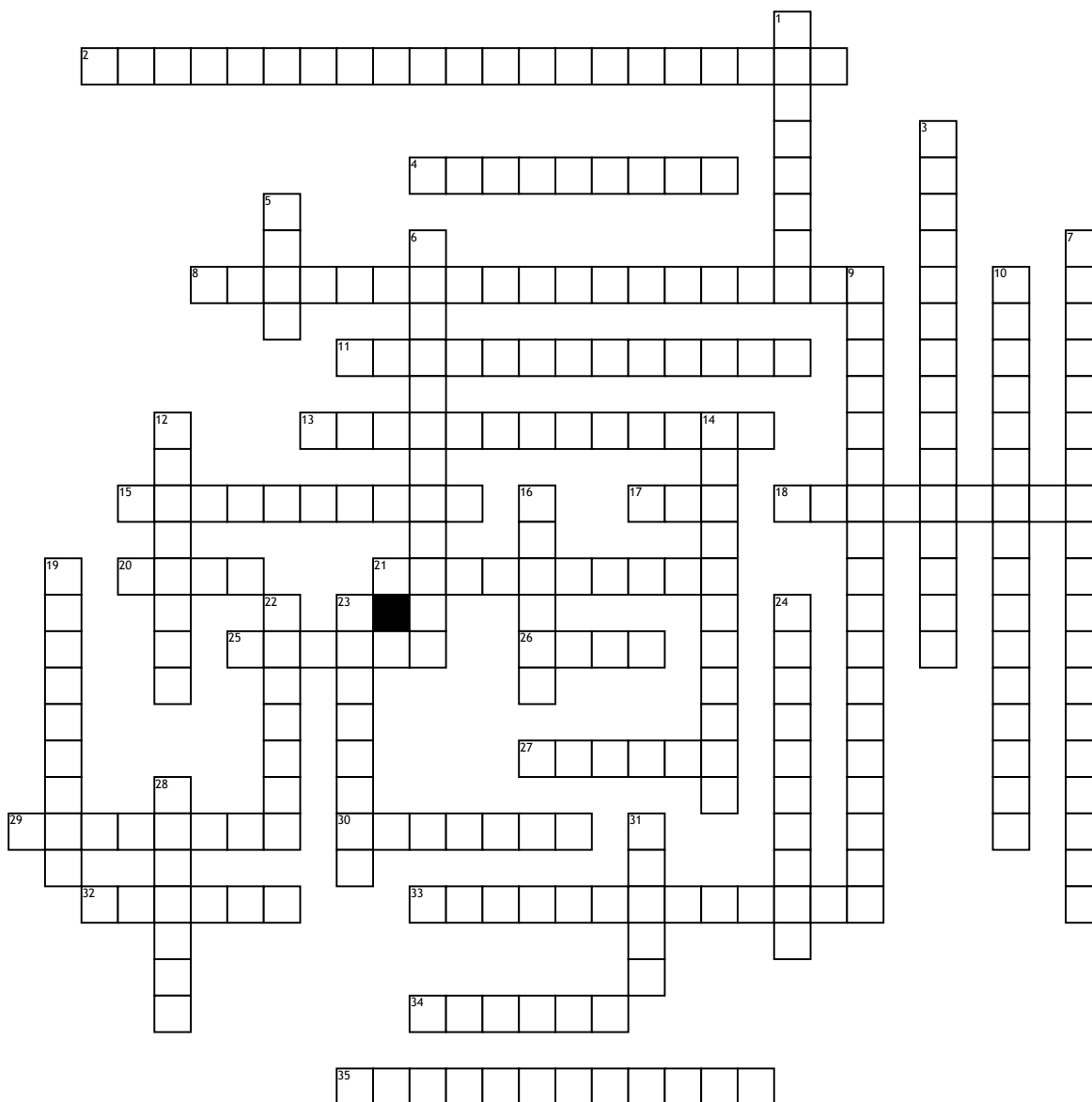


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Chemistry



## Across

2. Refers to an outer main energy level occupied, in most cases, by eight electrons  
 4. The mass of one mole of a pure substance  
 8. The emission of electrons from a metal when light shines on the metal  
 11. Mathematically the wave properties of electrons and other very small particles  
 13. The arrangement of the elements in order of their atomic numbers so that elements with similar properties fall in the same column, or group  
 15. The group 18 elements are called the  
 17. An atom or group of bonded atoms that has a positive or negative charge  
 18. Properties that rely on the amount of matter present  
 20. The amount of a substance that contains as many particles as there are atoms in exactly 12 g of carbon-12  
 21. The distance between corresponding points on adjacent waves

25. A good conductor of heat and electricity  
 26. Measure of the amount of matter in an  
 27. Created by equal but opposite charges that are separated by a short distance  
 29. Refers to the closeness of measurements to the correct or expected value of the quantity measured  
 30. A general term for a specific isotope  
 32. A measure of the gravitational pull on matter  
 33. Double and triple bonds  
 34. A particle of electromagnetic radiation having zero mass and carrying a quantum of energy  
 35. The ability of a substance to be hammered or beaten into thin sheets

## Down

1. A neutral group of atoms that are held together by covalent bonds  
 3.  $6.022 \times 10^{23}$   
 5. Smallest unit of an element  
 6. Group 1 elements

7. Group 2 elements  
 9. The d-block elements are metals with typical metallic properties  
 10. Logical approach for solving problems  
 12. Atoms of the same element that have different masses  
 14. The 14 elements with atomic numbers from 58 to 71  
 16. The amount of space occupied by an object  
 19. Defined as the number of waves that pass a given point in a specific time  
 22. The ratio of mass to volume or mass divided by volume  
 23. The group 17 elements  
 24. A single covalent bond  
 28. A three-dimensional region around the nucleus that indicates the probable location of an electron  
 31. Definite volume and shape