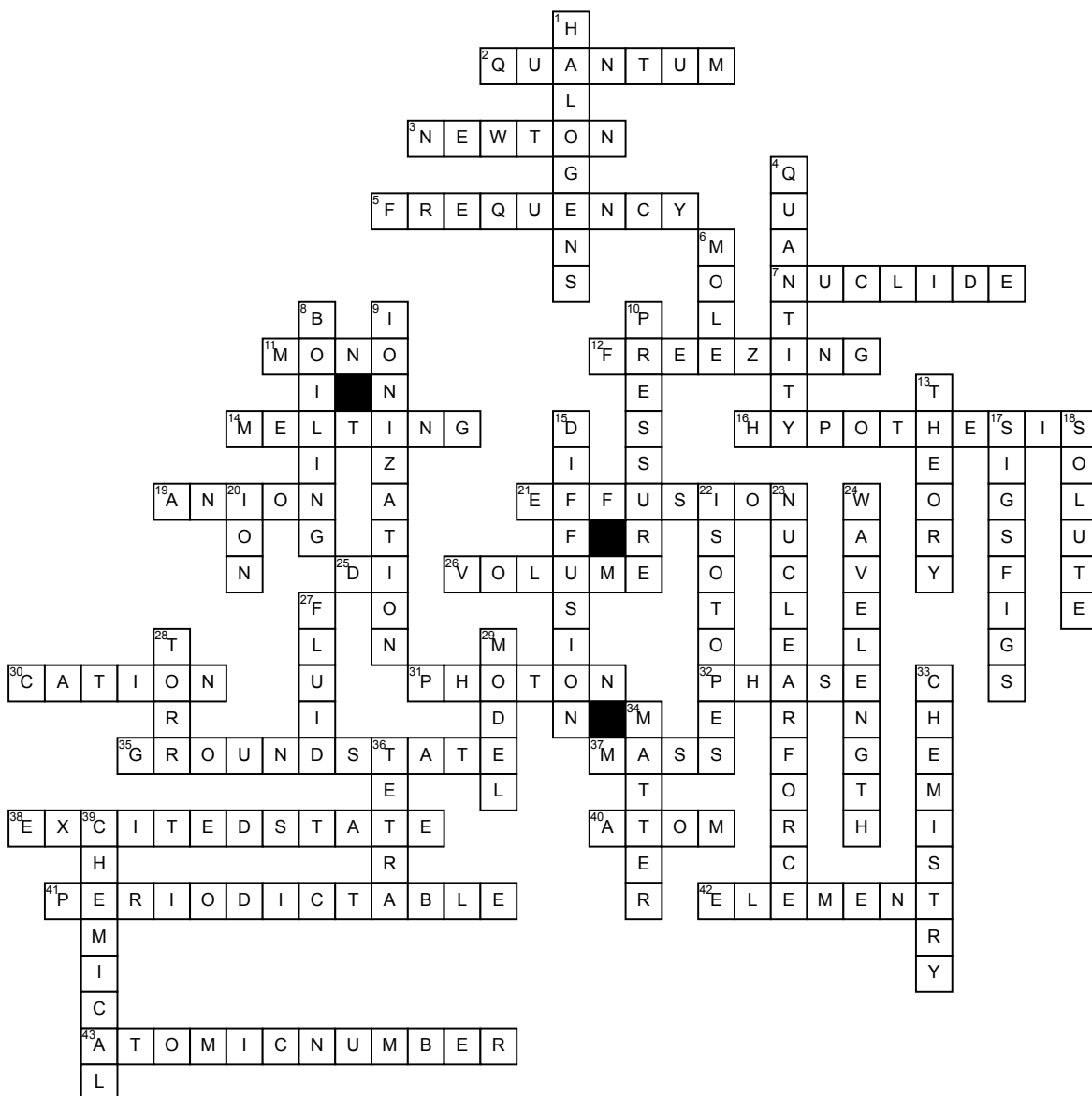


Name: \_\_\_\_\_

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

# Chemistry Crossword



## Across

2. the minimum quantity of energy that can be lost or gained by an atom  
 3. the SI unit of force  
 5. defined as the number of waves that pass a given point in a specific time, usually one second  
 7. a general term for any isotope of any element  
 11. 1  
 12. the physical change from a liquid to a solid by the removal of heat  
 14. the physical change of a solid to a liquid by the addition of heat  
 16. testable statement  
 19. a negative ion  
 21. a process by which gas particles pass through a tiny opening  
 25. 2  
 26. the amount of space occupied by an object  
 30. a positive ion  
 31. a particle of electromagnetic radiation having zero mass and carrying a quantum of energy  
 32. any part of a system that has uniform composition and properties  
 35. the lowest energy state of an atom  
 37. a measure of the amount of matter

38. a state in which an atom has a higher potential energy than has in its ground state  
 40. the smallest unit of an element that maintains the properties of that element  
 41. an arrangement of the elements in order of their atomic numbers so that elements with similar properties fall in the same column, group  
 42. a pure substance made of only one kind of atom  
 43. an element is the number of protons in the nucleus of each atom of that element  
**Down**  
 1. the elements of Group 17  
 4. something that has magnitude, size, and amount  
 6. the amount of a substance that contains as many particles as there are atoms in exactly 12 g of carbon-12  
 8. the conversion of liquid to vapor  
 9. the formation of ions from solute molecules by the action of the solvent  
 10. the force per unit area on a surface  
 13. a broad generalization that explains a body of facts or phenomena  
 15. spontaneous mixing of the particles of two substances caused by their random motion  
 17. a measurement consist of all the digits known with certainty plus one final digit  
 18. the substance dissolved in a solution

20. an atom or group of bonded atoms that has a positive or negative charge  
 22. atoms of the same element that have different masses  
 23. a short range force that holds the nuclear particles together  
 24. the distance between corresponding points on adjacent waves  
 27. a substance that can flow and therefore take shape of its container  
 28. a unit of pressure based on an absolute scale  
 29. science is more than a physical object: it is often an explanation of how phenomena occur and how data or events are related  
 33. The study of the composition, structure, and properties of matter and the changes it undergoes  
 34. anything that has mass and takes up space  
 36. 4  
 39. any substance that has a definite composition