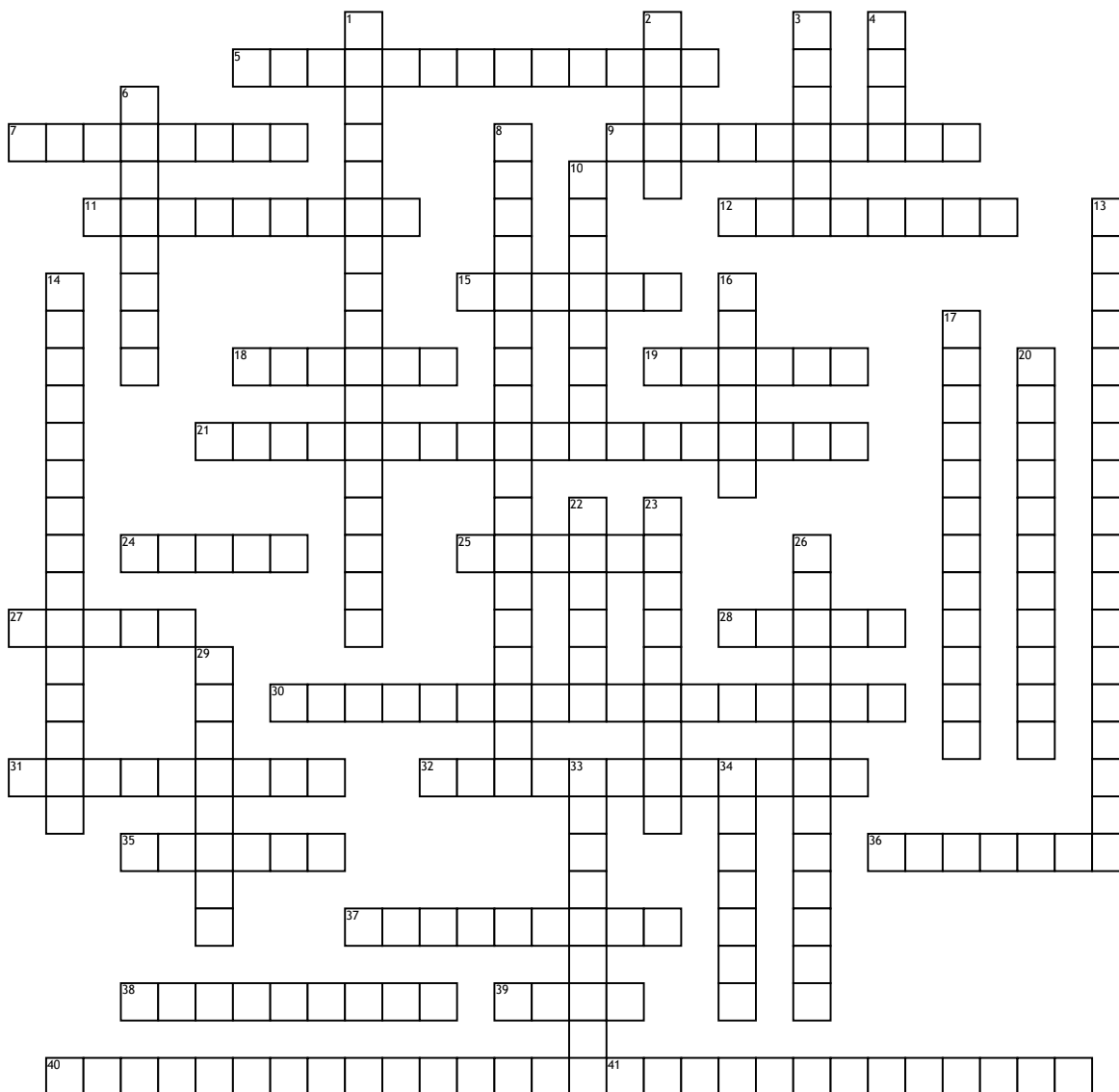


Name: _____

Chemistry - Bonding



Across

5. A molecule with charged poles
 7. Covalent bonds are _____ than ionic bonds
 9. Electrostatic forces that hold ions together are _____
 11. Ionic size _____ from left to right on the periodic table
 12. _____ dot structures show the atoms valence electrons as dots
 15. The _____ metals tend to form +1 cations
 18. An electrostatic spray gun is used to create a _____ on paint to better adhere to a car
 19. Hydrochloric acid contains one _____ bond
 21. When one atom supplies both bonding electrons
 24. Theory to predict the shape of a molecule
 25. An ion with a positive charge
 27. An ion with a negative charge
 28. Gases that do not react
 30. Bond type can be predicted by looking at the _____ of each atom

31. If chlorine gains one electron it meets the _____

32. A pair of electrons that are not involved in bonding
 35. Covalently bonded compound tend to have _____ melting points than ionic compounds
 36. Electrons in the highest occupied energy
 37. The electronegativity of elements _____ from left to right on the periodic table
 38. ability to be hammered to a shape
 39. Ionic compounds are _____ conductors of electricity when in their solid state
 40. The transition metals can have a _____ configuration when forming ions
 41. Tightly bound group of atoms that has a charge and behaves as a unit

Down

1. Gold atoms have a _____ arrangement
 2. Mixture of two or more elements, at least one of which is a metal
 3. Carbon dioxide contains two _____ bonds

4. Atoms _____ electrons to form an anion
 6. Water molecules attraction to each other
 8. _____ occur polar molecules are attracted to one another
 10. _____ bonding consists of cations in a sea of electrons
 13. When two valid electron dot structures are possible
 14. All molecules experience _____
 16. Two halogens will form a _____ covalent bond
 17. Diamond is an example of a _____
 20. The lowest whole number ratio of ions in an ionic bond
 22. Methane contains four _____ bonds
 23. Atomic size _____ down a group on the periodic table
 26. sp³ is an example of _____
 29. _____ bonds with three hydrogen to form ammonia
 33. Water molecules attraction to other substances
 34. The number of _____ define an element