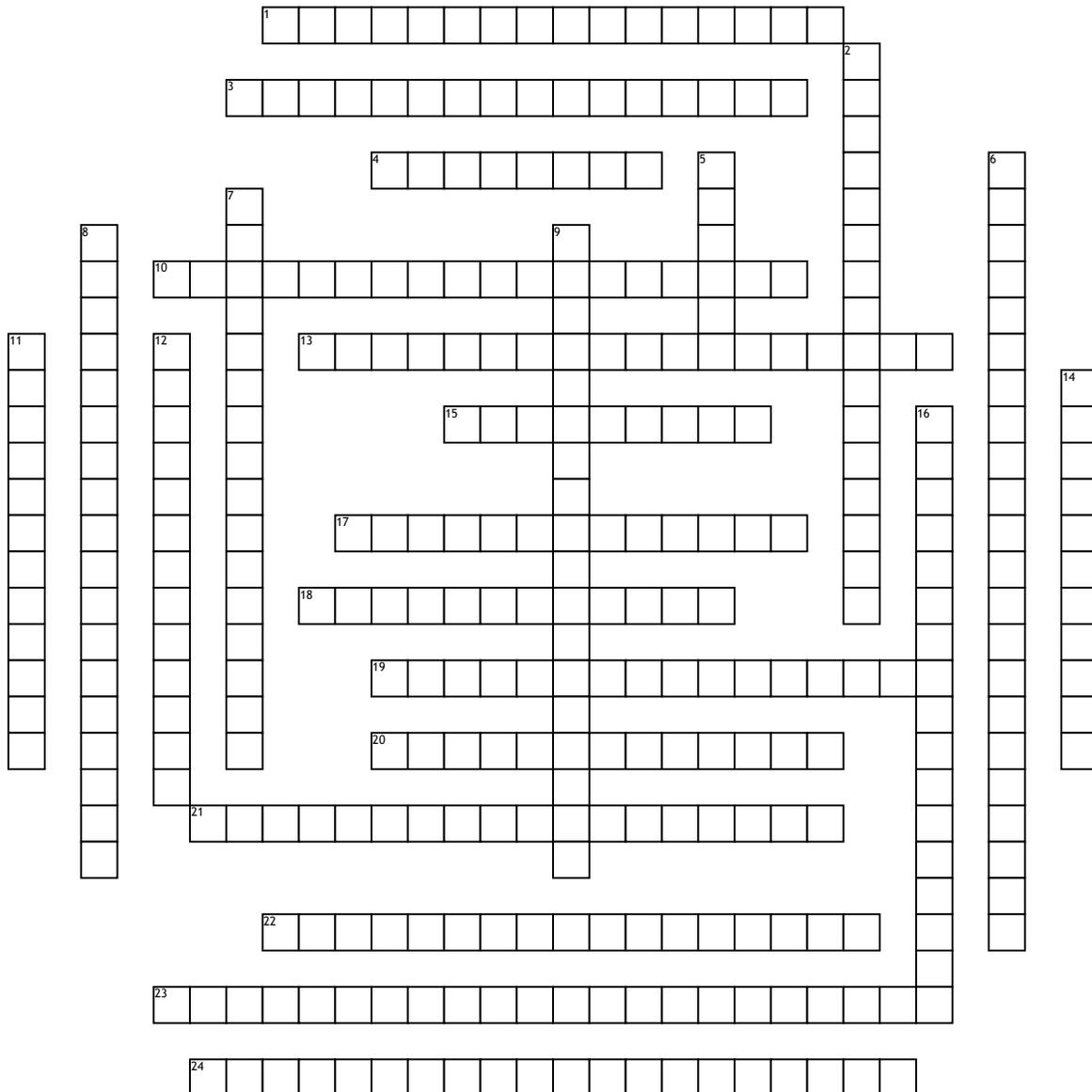


# Covalent Bond Crossword



## Across

1. Equals about 109.5 degrees in molecular geometry, 2 words
3. A molecule that contains two atoms (ex. H, O, N, Cl), 2 words
4. A neutral group of atoms joined together by covalent bonds
10. This is what happens when only one pair of electrons is shared between atoms, 3 words
13. This forms when three pairs of electrons are shared between the atoms rather than one or two pairs, 3 words
15. A type of chemical bond that results from the unequal sharing of electrons, electrons are thus pulled towards one of the atoms which results in partial charges at the ends of the bonds, these can dissolve polar bonds, 2 words
17. Dipole-dipole attraction between molecules containing a hydrogen atom bonded to a small, highly electronegative atom with at least one lone pair of electrons, strongest IMF (beats dispersion forces and dipole dipole interactions), 2 words
18. This type of bond is formed by the sharing of electrons between atoms, 2 words
19. A formula giving the number of atoms of each of the atoms present in one molecule of a specific compound, 2 words
20. A charged chemical species (ion) composed of two or more atoms covalently bonded or of a metal complex that can be considered to be acting as a single unit, 2 words

21. Result when two dipolar molecules interact with each other through space. When this occurs the partially negative portion of one of the polar molecules is attracted to the partially positive portion of the second polar molecule, 2 words

22. A formula that shows the arrangement of atoms in the molecule of a compound, 2 words

23. When one atom donates both of the electrons to be shared with an atom that needs two electrons to form a stable electron arrangement with lower potential energy, 3 words

24. A type of chemical bond where two atoms equally share a pair of electrons with each other, these can dissolve nonpolar covalent bonds, electronegativity difference of zero, 3 words

## Down

2. A.k.a. London Forces, weak forces that result from temporary shifts in the density of electrons in electron clouds - forms a temporary dipole, found in all particles, a type of IMF (intermolecular forces), 2 words

5. Another name for a polar bond

6. The energy required to break a covalent bond, 3 words

7. Weakest of the IMFs, 4 words

8. This forms when two pairs of electrons are shared between the atoms rather than just one pair, 3 words

9. Two forms of a molecule where the chemical connectivity is the same but the electrons are distributed differently around the structure, 2 words

11. A.k.a. "Lone Pair," Refers to a pair of valence electrons that are not shared with another atom, 2 words

12. A.k.a. dipole, an asymmetric molecule with non-uniform positive and negative charges, has a partial positive charge in one part of the molecule and complementary negative charge in another part, 2 words

14. A model used in chemistry to predict the geometry of individual molecules from the number of electron pairs surrounding their central atoms (Valence Shell Electron Pair Repulsion), 2 words

16. Compound made of molecules, 2 words