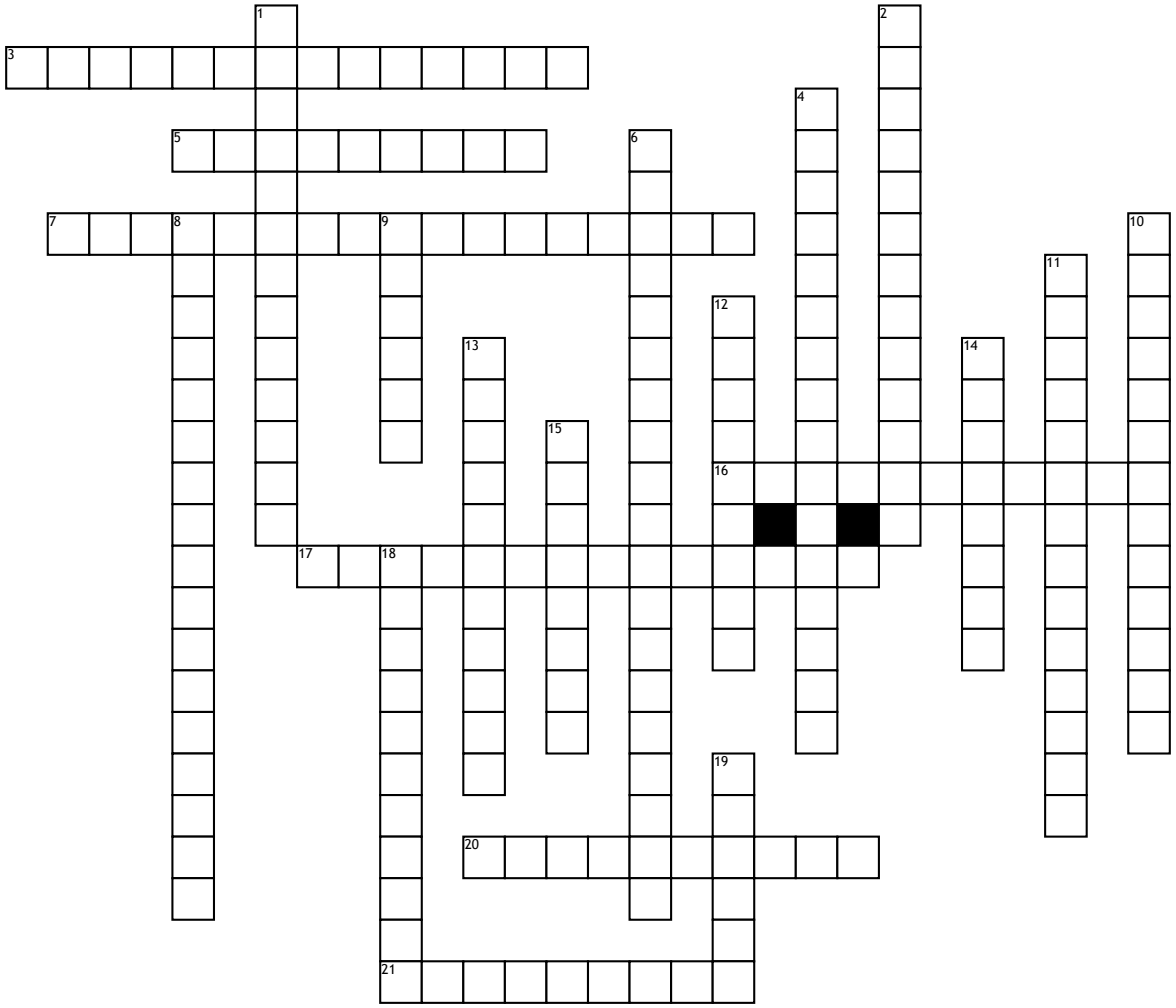
Chemistry crossword



Across

3. Formed by one s type orbital and three p type orbitals.

5. The conformation in which electrons of two atoms/groups attached adjacent atoms repel to the maximum possible extent and have a dihedral angle of 60 degrees

7. Having the equal energy levels.

16. A property which enhances the stability of a molecule due to the delocalization of electrons present in the π-π orbitals

17. When one hydrogen atom is bonded to one oxygen atom . These groups readily form hydrogen bonds and also contribute to making molecules soluble in water, however they are not highly reactive

20. This bond has two double bonds which consist of one sigma bond and two pi bonds

21. Functional group and are formed by the condensation reaction between an carboxylic acid and alcohol.

Down

1. Where sharing of electrons between pairs of atoms occur through a chemical bond

2. Quantum states of the individual electrons in the electron cloud around a single atom

4. Chemical compounds which are made up of conjugated planar ring systems that are with delocalized pi electron clouds in the position of individual alternating double and single bonds

6. a type of molecular orbital that weakens the chemical bond between two atoms. The nuclear repulsions are greater which makes the energy of molecule to increase.

8. The measure of how strongly atoms in a covalent bond attract a bonding pair of electrons

9. This functional group can be described as the 'Sulphur' equivalent of alcohols wherein the Sulphur replaces the oxygen in the 'OH' group

10. Functional group composed of a carbon atom double-bonded to an oxygen atom and bonded to two R groups

11. The chemical reaction between a fat/ oil and an alkali which produces soap

12. Strongest type of covalent chemical bond

13. Electron rich species that has the ability to donate a pair of electrons to form a new covalent bond

14. The conformation in which atoms/groups attached to adjacent atoms on a plane are in close proximity and have a dihedral angle of 0 degrees

15. When very large molecules are made due to many smaller molecules joining together, end to end

18. Attraction between the positive end of a polar molecule and the negative end of another polar molecule

19. A bond formed by the overlapping of p orbitals on close by atoms