



#### ACROSS

- 1 A \_\_\_\_\_ is an organic compound in which nitrogen and carbon are connected through a triple bond with a positive charge on nitrogen and a negative charge on carbon.
- 4 \_\_\_\_\_ refers to a functional group in organic chemistry which has the general formula RNO. These compounds can be prepared by the reduction of nitro compounds or by the oxidation of hydroxylamines.
- 7 A \_\_\_\_\_ is an unsaturated compound derived by the reaction of an aldehyde or ketone with a secondary amine followed by loss of a water molecule.
- 8 Reductive \_\_\_\_\_ is a chemical reaction which involves the conversion of an aldehyde or ketone to an amine.
- 9 \_\_\_\_\_s are organic compounds and a type of functional group that contain nitrogen as the key atom, structurally resembling ammonia, but one or more hydrogen atoms is replaced by alkyl and aryl groups.
- 10 \_\_\_\_\_-de-oxo-bisubstitution is acid catalyzed nucleophilic addition reaction of carbonyl compounds with amines to form imines.

#### DOWN

- 2 \_\_\_\_\_ is the simplest aromatic amine, consisting of a phenyl group with a single amine substituent.
- 3 A \_\_\_\_\_ is a functional group or type of chemical compound that has a hydroxyl group and an amine attached to the same carbon atom. These are intermediates in alkyylimino-de-oxo-bisubstitution.
- 5 \_\_\_\_\_ salts are a group of organic compounds in which an alkyl or aryl portion is bound to a functional group with two nitrogens, triple bonded, forming a cation.
- 6 Quaternary \_\_\_\_\_ cations, also known as quats, are positively charged polyatomic ions in which a nitrogen atom is bound to four alkyl groups.