



ACROSS

- 1 A _____ anion is the anion of an enol, formed by loss of a proton from the alpha carbon of a carbonyl group.
- 4 A _____ adduct is a beta-hydroxy ketone or aldehyde resulting from the addition of a ketone enolate to an aldehyde.
- 8 A _____ is a molecule with two single bonded oxygens are attached to the same carbon atom which is also bonded to an alkyl or aryl group and a hydrogen.
- 9 Keto-enol _____ refers to a chemical equilibrium between a keto form and an enol.
- 10 Nucleophilic _____ addition occurs by reaction of a nucleophile at the beta position of alpha-beta unsaturated carbonyl compounds.
- 11 In a _____ reaction two or more molecules combine to form a larger one.
- 13 The _____ reaction is an organic reaction by an aldehyde or ketone with a cyanide anion or a nitrile to form a cyanohydrin.
- 14 A _____ base is a functional group that contains a carbon-nitrogen double bond with the nitrogen atom connected to an aryl or alkyl group, but not hydrogen.
- 15 A _____ is a molecule with two single bonded oxygens attached to the same carbon atom which is also bonded to two alkyl or aryl groups.
- 16 The Wolff-_____ reduction is a chemical

reaction that fully reduces an aldehyde or ketone to an alkane.

DOWN

- 1 _____s are alkenes with a hydroxyl group affixed to one of the carbon atoms composing the double bond.
- 2 The _____ carbon in an aldehyde or ketone refers to the first carbon after the carbonyl carbon.
- 3 A _____ group is introduced into a molecule by chemical modification of a functional group in order to obtain chemoselectivity in a subsequent chemical reaction.
- 5 _____' reagent is usually ammoniacal silver nitrate, an oxidizing agent, which is itself reduced to silver metal. It is used as a test for aldehydes.
- 6 _____ is an organic reaction that involves the formation of an acetal or ketal.
- 7 The _____ reaction is an organometallic chemical reaction involving alkyl- or aryl-magnesium halides with electrophiles.
- 12 A _____ is an unsaturated chemical compound or functional group consisting of a conjugated system of an alkene and a ketone.