



ACROSS

- 3** Nucleophilic _____ is a fundamental class of reaction in which an electron rich nucleophile selectively attacks the positive charge of an atom bound to the leaving group which subsequently departs.
- 5** A _____ is a reagent attracted to electrons that participates in a chemical reaction by accepting an electron pair in order to bond to a nucleophile.
- 9** _____ is chemical bond cleavage of a neutral molecule generating a cation and an anion in which the two electrons that make up the bond are assigned to the same fragment.
- 10** A nucleophilic aromatic _____ is a reaction in organic chemistry in which the nucleophile displaces a leaving group, such as a halide, on an aromatic ring.
- 11** The _____ reaction is an organometallic chemical reaction involving alkyl- or aryl-magnesium halides with electrophiles.
- 12** A nucleophilic _____ reaction is a reaction where a pi bond is removed by creating two new covalent bonds by the addition of a nucleophile.

DOWN

- 1** In a _____ reaction, a functional group in a particular chemical compound is replaced by another group.
- 2** A _____ is a reagent that forms a chemical bond to its reaction partner, the electrophile, by donating both bonding electrons.
- 4** A _____ addition reaction is an addition reaction where, in a chemical compound, a pi bond is removed by the creation of two new covalent bonds.
- 6** A _____ pair is a valence electron pair without bonding or sharing with other atoms.
- 7** _____ is a special type of nucleophilic substitution where the nucleophile is a solvent molecule.
- 8** A _____ group is an atom or group of atoms that detaches from a chemical substance.