Isomer Types

Isomers: Compounds that have the same molecular formula, but different arrangment of atoms in space

(Assume the compounds being compared are not identical.)

Do the compounds have same molecular formula? NO Not isomers YES Isomers Do the compounds have the same atom-to-atom connection? NO YES Stereoisomers Constitutional (Structural) Is the isomerism at a double bond? NO YES Cis/Trans (Geometric) Optical Are the compounds nonsuperimposable mirror images (chiral)? NO YES **Enantiomers** Diastereomers