

Enantiomers	Stereoisomers that bear a mirror-image relationship
Diastereomers	Stereoisomers that are NOT mirror images
Stereogenic or Chirality Carbon (or other atom)	A carbon (or other atom) that is connected to 4 different atoms or group of atoms
Chiral	Any object or molecule with a non-superimposable mirror image
Achiral	Any object or molecule with a superimposable mirror image

<p>Polarimeter</p>	<p>An instrument that utilizes a plane of polarized light to detect chiral molecules</p>
<p>Optically Active</p>	<p>A compound or solution of a compound that rotates a plane of polarized light in a polarimeter</p>
<p>Optically Inactive</p>	<p>A compound or solution of a compound that does NOT rotate a plane of polarized light in a polarimeter</p>
<p>Specific Rotation</p>	<p>The (“corrected”) degree of rotation of a plane of polarized light in a polarimeter by an optically active compound or solution of compound</p> $[\alpha]_D^{20} = \frac{\text{observed rotation}}{\text{path length X concentration}}$
<p>Racemic Mixture</p>	<p>A 50/50 mixture of enantiomers (optically inactive)</p>

Meso Compound	A molecule with stereogenic carbons that has a plane of symmetry It is therefore achiral and optically inactive
Resolution of Enantiomers	Separation of Enantiomers (e.g., separating R enantiomer from the S enantiomer)
Aracemic Mixture	A mixture of enantiomers OTHER than a 50/50 mixture
Scalemic Mixture	A mixture of enantiomers OTHER than a 50/50 mixture