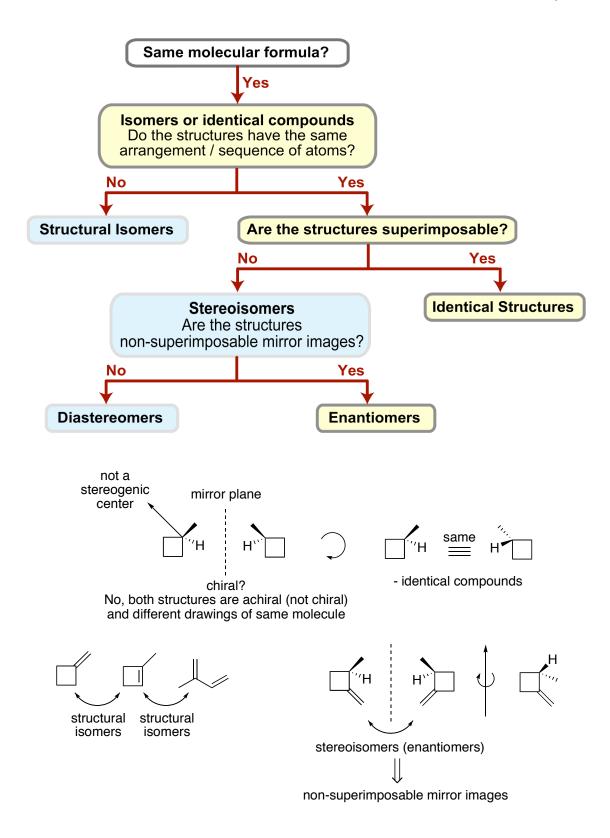
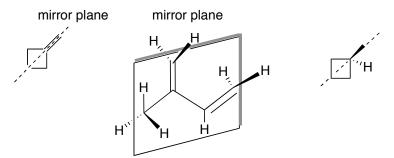
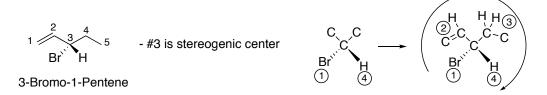
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- If you have a mirror plane of symmetry within molecule → Achiral

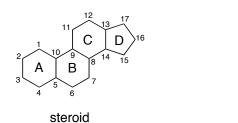


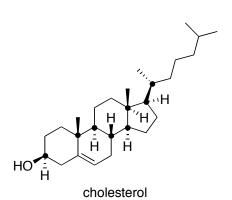
## R + S Nomenclature



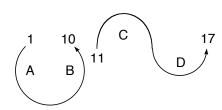
- clockwise, but H is pointing towards you. So "S" - configuration.

## Cholesterol









- stereogenic centres (8)
  - 256 stereoisomers possible or 28
  - 1 isomer is cholesterol
  - 1 is enantiomer of cholesterol
  - 254 are diastereomers.

- To draw enantiomer – invert every stereogenic center.

- To draw diastereomer, invert 1 or more but <u>not all</u> stereogenic centers.

estradiol - primary female sex hormone

testosterone - primary male sex hormone

- look at C-17 of estradiol, Assign R/S

- Meso compound has stereogenic centres but is achiral (plane of symmetry within)