

Isomerism and aromaticity

What is meant by Stereoisomerism?

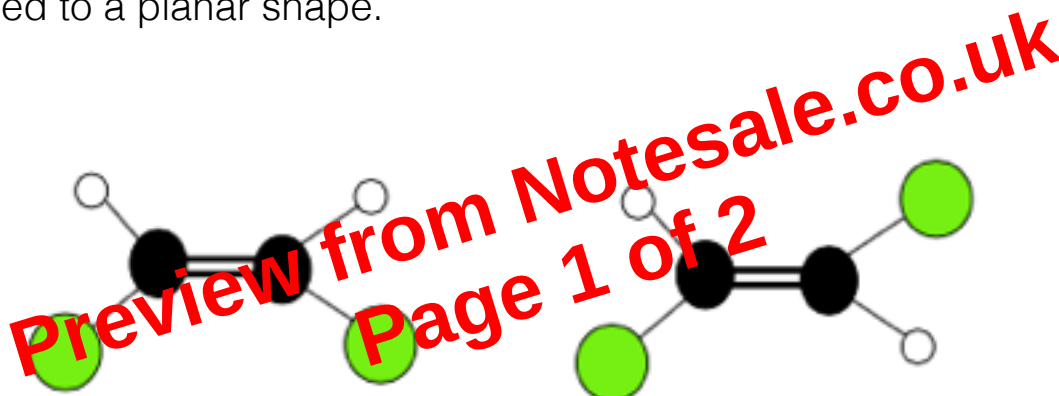
Compounds with the same structural formula but whose atoms take up different positions in space

When can E/Z Isomerism occur?

When there is a double bond that restricts rotation and each 'end' of the double bond has two different 'groups' attached to it

Why can E/Z isomerism occur?

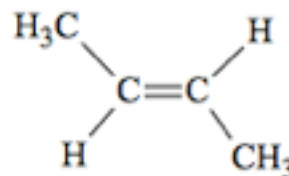
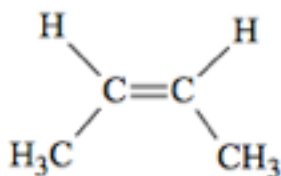
There can be no rotation about a C=C double bond, so the molecule is confined to a planar shape.



(Z) - but-2-ene

and

(E) - but-2-ene.



Z- isomers

high priority groups are on the same side of the double bond

E- isomers

high priority groups are on opposite sides of the double bond