

Let me count the Ways

In this activity, you will build your own structural isomers.

Materials

Model kit

Different coloured pencils

blank paper

Methods

1. Obtain a model kit. The black balls represent carbon atoms and the white balls represent hydrogen atoms. The short grey sticks represent single bonds and the longer sticks represent part of a double bond.
2. Join 5 carbon atoms in a straight line.
3. Add the appropriate number of hydrogen atoms needed to form a saturated alkane.
4. Draw a picture of your model using coloured pencils. Name it. Include a legend of the colours you used.
5. Rearrange your molecule to form 2 different structural isomers that are different than your straight chain molecule.
6. Draw a picture of each isomer and name each one.
7. Now build a 5 carbon structure with 1 double bond. Add the appropriate number of Hydrogens.
8. Draw a picture of your structure and name it.
9. Rearrange your molecule to form 2 different structural isomers that are different than your straight chain molecule.
10. Draw a picture of each isomer and name each one.