

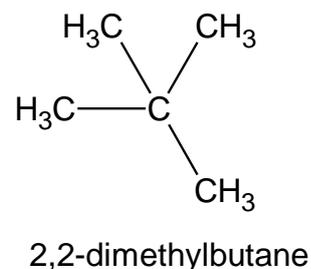
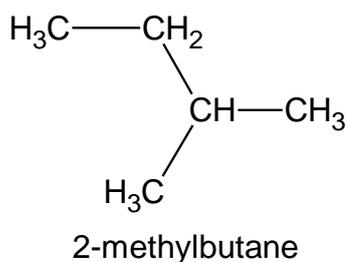
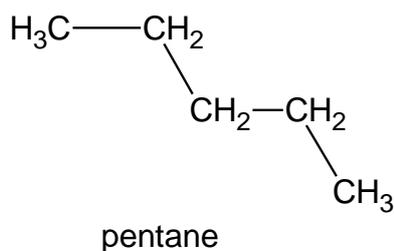
Answer on Question #43834 - Chemistry - Inorganic Chemistry

Question:

what are five ways in which pentane, 2-methylbutane, and 2,2-dimethylpropane are similar?

Answer:

These three compounds given have the following formulas:



Five ways, in which they are similar, are:

- 1) firstly, they all belong to the same class of organic compounds – **alkanes** (saturated compounds with general formula $\text{C}_n\text{H}_{2n+2}$);
- 2) secondly, they contain the same number of carbon atoms – **five**;
- 3) moreover, all of them have the same **brutto-formula**: C_5H_{12} ;
- 4) in addition to this, these all compounds are **acyclic** (doesn't contain cycle fragments);
- 5) to conclude, they give the same compounds in the **reaction with O_2** :

