

1. Write the structural formulas for each of the following. For those with common names, rename them by IUPAC

- 2,3-Dichloropentane
- tert*-Butyl iodide
- 3-Ethylpentane
- 2,3,4-Trimethyldecane
- 4-Isopropylnonane
- neo*-Pentyl chloride
- iso*-Butyl alcohol
- 1,1-Dimethylcyclopropane
- cis*-1,2-Dimethylcyclobutane
- trans*-1-ethyl-3-methylcyclohexane
- iso*-hexyl chloride

2. Write the structures of two chair conformations of 1-*tert*-butyl-1-methylcyclohexane. Which conformation would you predict as the most stable?

3. Consider each pair of structural formulas and state whether they are the same or different compounds then name each.

