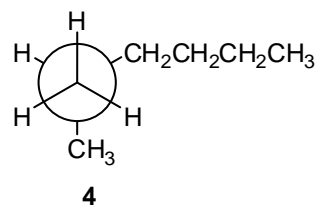
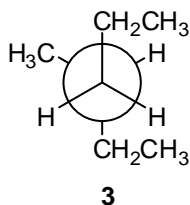
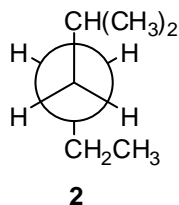
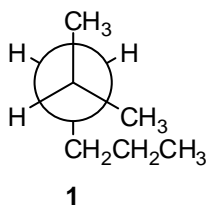


Power Point Study– 05-3 Alkane Conformational Analysis/ Name:

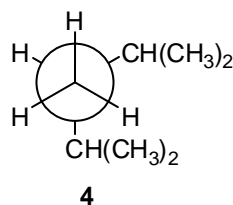
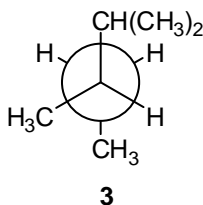
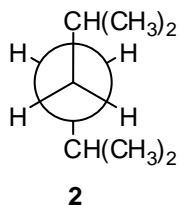
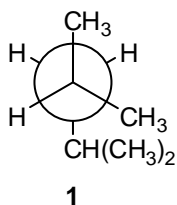
1) Which of the following has the highest ring strain?

Cyclohexane, cyclopentane, cyclobutane.

2) Identify the Newman projection that is different from the others.



3) Which of the following Newman projections is for 2,4-dimethylpentane?



4) Draw the eclipsed and anti Newman projections of $\text{CH}_2\text{ClCH}_2\text{Cl}$.

5) Draw all (six) rotations of 1-chloropropane ($\text{CH}_2\text{ClCH}_2\text{CH}_3$) in a Newman projection. Label the most and least stable conformer.

6) Write the structure of methylcyclohexane showing both the chair conformations in which the methyl group is axial and equatorial.

7) Draw the two conformers of (*cis*)-1-*t*-butyl-3-methylcyclohexane. Indicate which one is more stable.