## Quiz 9

1. Draw the least stable conformation of pentane using a Newman projection of the view along the  $C_2$ - $C_3$  bond.

2. Using the table of strain energies below, arrange the conformations of 2-methylbutane in order of increasing stability (1=least stable, 3=most stable). What is the difference in energy between the most stable and the least stable conformation?

Strain energies:

H-H eclipsing = 1 kcal/mol

 $CH_3$ -H eclipsing = 1.3 kcal/mol

 $CH_3$ - $CH_3$  eclipsing = 3.0 kcal/mol

 $CH_3$ - $CH_3$  gauche = 0.9 kcal/mol