

CHE 171
Fall, 2005
Bonus Assignment (Chapter 4/Quiz 3)

The two chair conformations for *cis*-1-bromo-4-chlorocyclohexane are shown below. The two conformations interconvert through a ring-flip. Draw these two structures **50 times** on this sheet. This may seem like busy-work, but drawing cyclohexane chairs with all of the bonds at the appropriate angles is sometimes challenging—after you draw 100 of them or so, it gets easy. Also, pay attention to the substituents here—in conformation (a), Cl is equatorial and up, and in conformation (b), after the ring flip, Cl is axial and up. Similarly, in conformation (a) Br is axial and up, and in conformation (b), after the ring flip, Br is equatorial and up. Practice makes perfect. Hand this in on Monday for one (1) additional bonus point on the quiz.

