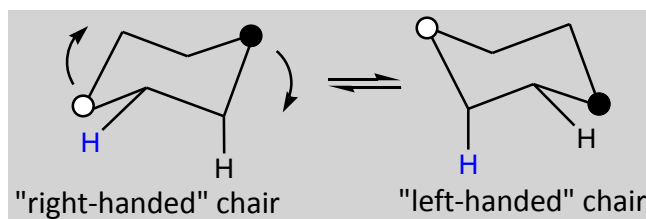
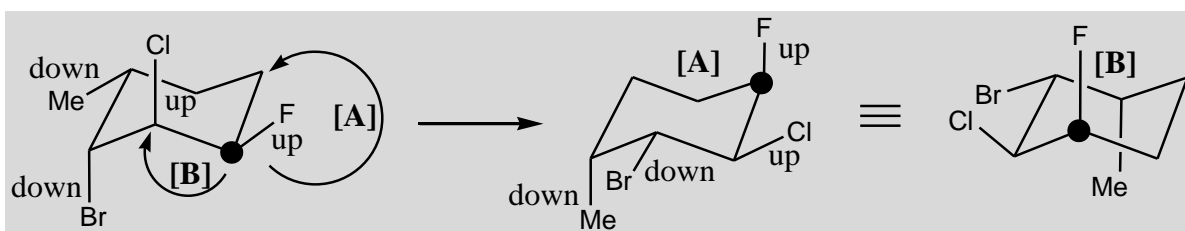


A conformational ring flip interconverts all axial groups to equatorial positions and all equatorial groups becomes axial; the two chairs are referred to here as “right- and left-handed” chairs. Two of the ring atoms are marked with dots to show the movement of carbon atoms in this equilibrium process:



Even with practice, most people draw one chair better than the other. Therefore, to illustrate a ring flip, drawing both the right- and left-handed chairs is not necessary provided that a systematic procedure is followed. A convenient method to drawing a ring flip is to mentally rotate the carbon atoms of the ring in a clockwise **[A]** or anticlockwise **[B]** direction. Keeping in mind that axial and equatorial positions are interconverted during the process, groups that are up (Cl and F) stay up, and groups that are down (Br and Me) stay down. This is shown using the “right-handed chair”:



Choose the correct structure (A, B or C) for each question, then go back to check answers.

#1		ring flip			
#2		ring flip			
#3		ring flip			
#4		ring flip			