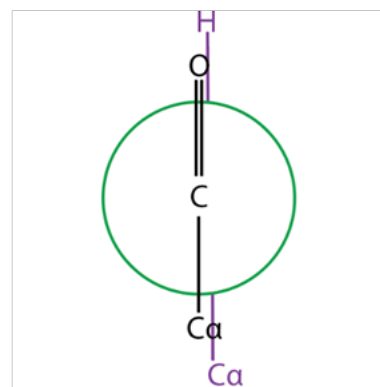
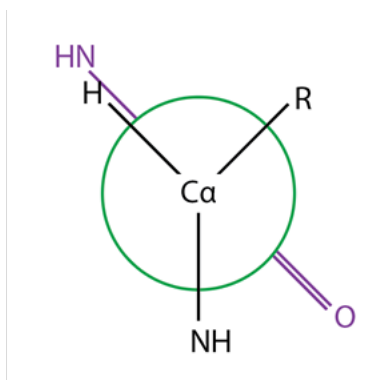
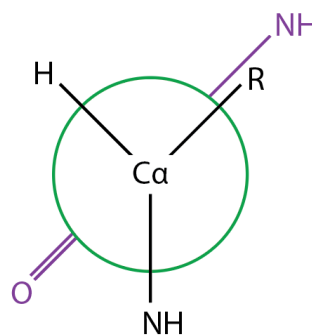
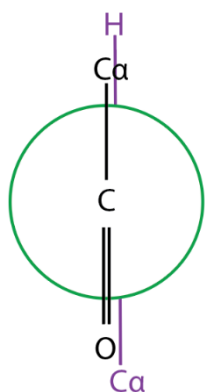
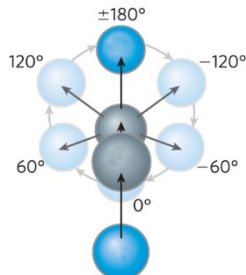


Worksheet #7: Dihedral Angles

1. Based on the reference Newman projection, determine the type of dihedral angle and the numerical value of the dihedral angle



Type of dihedral angle (Ψ , Φ , ω): _____

Angle Measurement (Degrees): _____

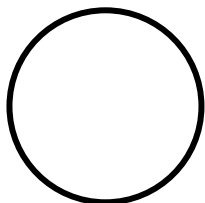
Type of dihedral angle (Ψ , Φ , ω): _____

Angle Measurement (Degrees): _____

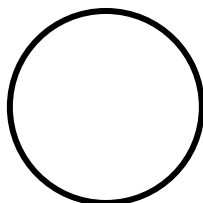
Name: _____ Student ID: _____
CHEM 161 PAL Fall 2026

2. Given the angle measurement below draw the corresponding Newman projection.

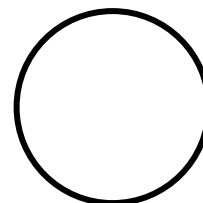
$$\Psi = +60^\circ$$



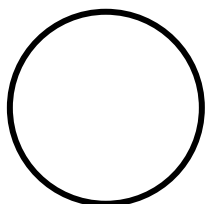
$$\Phi = -120^\circ$$



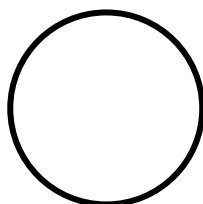
$$\Psi = +120^\circ$$



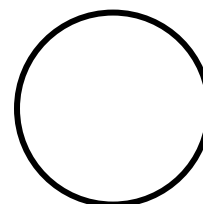
$$\Phi = -60^\circ$$



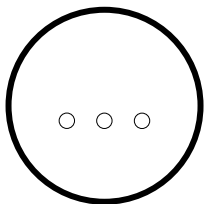
$$\Psi = -60^\circ$$



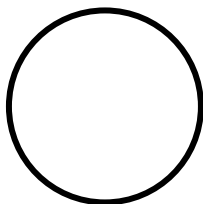
$$\Phi = +60^\circ$$



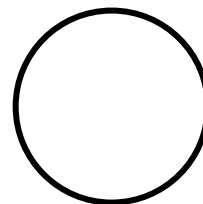
$$\Psi = -120^\circ$$



$$\Phi = +120^\circ$$



$$\Psi = +180^\circ$$



$$\Phi = +180^\circ$$

