

### In Class Structure Solving Problem

Find your name within one of the groups. If your group has an even number next to the first person's name, download the "even" set of spectra. If the number is odd, download the "odd" set of spectra.

The molecule for the "odd" set has a molecular formula of  $C_6H_{14}N_2$ . It is chiral. When calculating the IHD, remember that nitrogen is trivalent, not divalent. So your reference compound must take this into consideration (it should have extra hydrogens.) Consult pg 184 of your textbook (How to calculate IHD).

The molecule for the "even" set has a molecular formula of  $C_5H_8O$ . It is achiral.

You will work on solving the structure of your group's molecule in during class (9/8) using the spectral data. I will be available to answer questions and guide you through the process. These are difficult! Don't get frustrated. As a group, you are much more likely to solve the problem than any individual would.

(1) Alex Burum Danielle Forstner Jeffrey Rock Ellen Sauter Ben Treichel	(2) Andrew Bryan Erin Ge Doug Schroeder Sunny Sonnabend Luis Valle	(3) Kristen Burson Bryce Gode Bonginkosi Sibiyi Michael Stangler Krista Cruse	(4) Kyle Carlson Nissa Hannemann Jill Verchota Zach Alwine Bridget Hoesley
(5) Holly Cooper Steve Howard Zach Walgenbach Michael Butterworth Lauren Hom	(6) Dan Freeman Scott Kyser Alex Burleigh Nate Erickson Fue Vang	(7) Maari Hanson Krystal Long Chris Ditlevson Jennifer Krantz Alyssa Brooks	(8) Ben Levy Brittany Murphy Eric Kraska Raychal Zupancich Brian Castle
(9) Steph Lewis Kathryn Pesch Nick Malm Rachael Chaska Matthew Hoke	(10) Chris Lund Matthew Royer Eric Nelson Micah Deitz Timothy Lamanna	(11) Emily Pelton Stephanie Soiseth Rachel Roberg Douglas Durand Jenna Paulsen	(12) Amy Waldner Kelly Rozenboom Danielle Burras Sarah Erickson Rachel Poppy
(13) Leah Swanson David Wold Ryan Casper Aaron Insley Marcus Perry	(14) Brianna Vaa Conner Ziegler Mackenzie Consoer Brent McConahey Aaron Roessler	(15) Morgan Wells Nate Bower Rachel Elvebak Kristen Oldenburg	(16) Trevor Wittwer Arie DeGrio Jenna Kesty Eric Anderson
(17) David Wray Sarah Duncan Chris Leonard Kari Maffit	(18) Emily Barnard Justin Hahn Matija Novakovic Chad Olson		