**Intro to R, S Enantiomers** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_

Self-Directed Distance Assignment for a **LAB GRADE**. *You have until Sunday at 10 PM to complete this and upload to your Unit 5 Google Folder. See my directions about uploading documents on the Distance Plan document on my blog.*

(\*be sure to write down any questions you have! We will have a virtual session on Monday)

1. Review this video: <https://www.youtube.com/watch?v=yZ8JDDnyxC4&index=1&list=PLaySzQJTCO1nsM3ItT8irQ650tYgjHk6i>
2. Next, watch the following: <https://www.youtube.com/watch?v=WW6oAqVNBR8&index=2&list=PLaySzQJTCO1nsM3ItT8irQ650tYgjHk6i>

<https://www.youtube.com/watch?v=Z10oC7BF4ig>

1. Go to Ch 15 (Chirality) in your book. Read Sections 15.1 and 15.2. \**Refer to ‘How To…’ on p. 424 and 425 as needed*
2. **Define the following terms and/or answer questions**. **BE CLEAR AND BE NEAT**:
3. Enantiomer-
4. Chiral-
5. Achiral-
6. Stereocenter-
7. Racemic mixture-
8. Review exp 15.1. Do Problem 15.1. *\*ALWAYS KEEP ANY ‘H’ GROUPS BEHIND THE PLANE!*

A-

B-

1. R,S system-
2. Explain how priority is assigned to substituents (be VERY CLEAR!), after reading p. 427
3. Review Example 15.2. Do problem 15.2

b.

1. Read the bottom third of p. 428. Where should the lowest priority group be (3 dimensionally)?
2. How is this analogous to a steering column?
3. If reading the groups 1,2,3 in a clockwise direction, the molecule is designated \_\_\_\_\_\_\_.
4. If reading the groups 1,2,3 in a counterclockwise direction, the molecule is designated \_\_\_\_\_\_\_.

**Additional Questions:**

1. Draw the flow chart from p. 421 (you must know this!).

**Other Book Problems/Questions:**

1. Go over Example 15.1 and do problem 15.1:
2. See Exp 15.2 and do Prob 15.2 (a & b):
3. See Exp 15.3 and do Prob 15.3

**Problems from end of chapter:**

1. 15.7 (a-i)
2. 15.9
3. 15.13
4. 15.17