**Ch 15- Chirality Intro #2: 2020** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_\_\_\_

COVID (Distance Learning)

Use your book (Ch 15) and the Chirality PPt on my blog to help with completing these questions.

1. Review concepts we did the week before spring break (Book: Sections 15.1 and 15.2). Includes watching these videos (review again, if needed):

<https://www.youtube.com/watch?v=yZ8JDDnyxC4&index=1&list=PLaySzQJTCO1nsM3ItT8irQ650tYgjHk6i>

<https://www.youtube.com/watch?v=WW6oAqVNBR8&index=2&list=PLaySzQJTCO1nsM3ItT8irQ650tYgjHk6i>

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

1. Open the following website: <http://sites.saintmarys.edu/~pbays/Programs/Stereochemistry/Configurations3D.htm>
   1. Before proceeding with the problems, refer to p. 427 for assigning group “ranking”. Which group has the lowest priority? \_\_\_\_\_\_\_
   2. Where should the lowest priority group always be (before determining R or S)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Answer questions for (at least) the **first 5** problems directly on the site & determine if your answers are correct. **ALSO**, **put the answers to each problem below**:
      1. Problem #1
         1. What is the Priority at Position**a**?
         2. What is the Priority at Position**b**?
         3. What is the Priority at Position**c**?
         4. What is the Priority at Position**d**?
         5. What is the absolute configuration, R or S?

Select a new problem and continue.

* + 1. Problem #2
       1. What is the Priority at Position**a**?
       2. What is the Priority at Position**b**?
       3. What is the Priority at Position**c**?
       4. What is the Priority at Position**d**?
       5. What is the absolute configuration, R or S?
    2. Problem #3
       1. What is the Priority at Position**a**?
       2. What is the Priority at Position**b**?
       3. What is the Priority at Position**c**?
       4. What is the Priority at Position**d**?
       5. What is the absolute configuration, R or S?
    3. Problem #4
       1. What is the Priority at Position**a**?
       2. What is the Priority at Position**b**?
       3. What is the Priority at Position**c**?
       4. What is the Priority at Position**d**?
       5. What is the absolute configuration, R or S?
    4. Problem #5
       1. What is the Priority at Position**a**?
       2. What is the Priority at Position**b**?
       3. What is the Priority at Position**c**?
       4. What is the Priority at Position**d**?
       5. What is the absolute configuration, R or S?

1. Open the following website: <http://sites.saintmarys.edu/~pbays/Programs/Stereochemistry/3D.htm> . Notice you can rotate the molecule to view 3D. Practice rotating molecule 1.
2. **Answer the following before you proceed with the online assignment**:
   1. Answer questions for (at least) the **first 5** problems directly on the site & determine if your answers are correct. **ALSO**, **put the answers to each problem in the spaces below**:
      1. Problem #1
         1. What is the absolute configuration of A?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the absolute configuration of B?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the relationship between A and B?

Choices: Identical \_\_\_ Enantiomers \_\_\_

* + - 1. The 3-D image is the same as:

A \_\_\_ B \_\_\_ Both \_\_\_\_ Neither \_\_\_\_

Next, select “New Problem” and answer questions, below.

* + 1. Problem #2
       1. What is the absolute configuration of A?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the absolute configuration of B?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the relationship between A and B?

Choices: Identical \_\_\_ Enantiomers \_\_\_

* + - 1. The 3-D image is the same as:

A \_\_\_ B \_\_\_ Both \_\_\_\_ Neither \_\_\_\_

* + 1. Problem #3
       1. What is the absolute configuration of A?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the absolute configuration of B?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the relationship between A and B?

Choices: Identical \_\_\_ Enantiomers \_\_\_

* + - 1. The 3-D image is the same as:

A \_\_\_ B \_\_\_ Both \_\_\_\_ Neither \_\_\_\_

* + 1. Problem #4
       1. What is the absolute configuration of A?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the absolute configuration of B?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the relationship between A and B?

Choices: Identical \_\_\_ Enantiomers \_\_\_

* + - 1. The 3-D image is the same as:

A \_\_\_ B \_\_\_ Both \_\_\_\_ Neither \_\_\_\_

* + 1. Problem #5
       1. What is the absolute configuration of A?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the absolute configuration of B?

Choices: S \_\_ R \_\_ Achiral \_\_

* + - 1. What is the relationship between A and B?

Choices: Identical \_\_\_ Enantiomers \_\_\_

* + - 1. The 3-D image is the same as:

A \_\_\_ B \_\_\_ Both \_\_\_\_ Neither \_\_\_\_

\*\*When finished, submit the completed WS to Google Classroom