

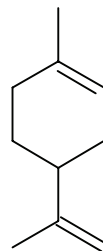
Name: \_\_\_\_\_ Block: \_\_\_\_\_

## Chapter 15 – Chirality

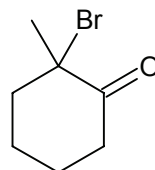
(you need to be comfortable with writing mirror images)

1. Please identify (with an \*) the chiral centers in the following molecules. You may have to draw them first.

Cyclopent-3-en-1-ol



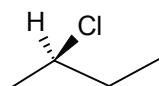
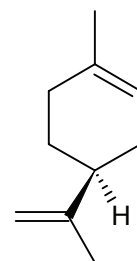
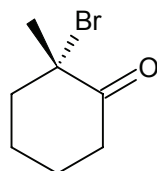
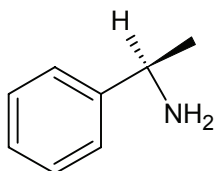
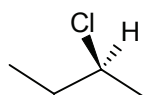
Cyclopent-2-en-1-ol



2methyl-1-butanol

dichloromethane

2. Please label the following as either the R or S enantiomer.



3. Please show how hydrobromination of 2-butene (*cis* or *trans*) yields a racemic mixture of R and S isomers. You will need to think about what is formed on the first step of this mechanism. (Use back)