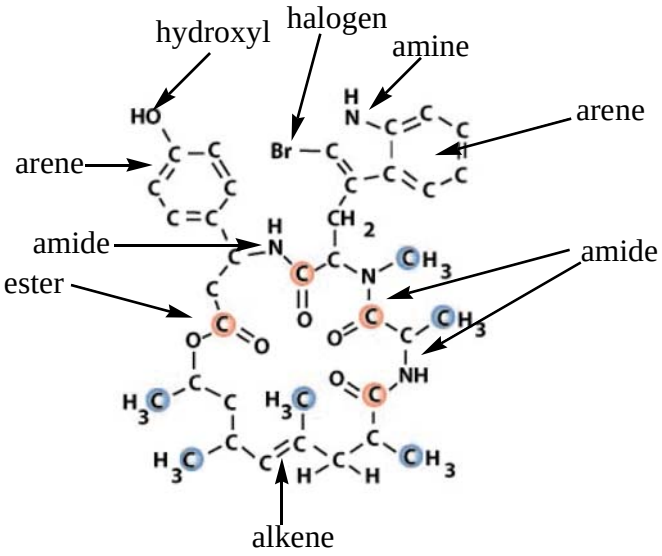
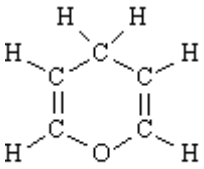
# CH1010 Tutorial 2 Answers

1. Identify the **functional groups** in the following molecule.
The molecule is Jasplakinolide obtained from a bright orange rubbery sponge (*Jaspis Johnstoni*).

ANS:

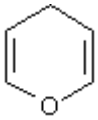



2. Convert the following structure into a **line-angle drawing**.

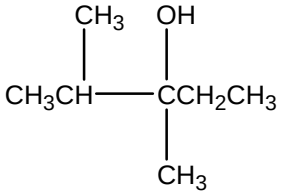


pyran

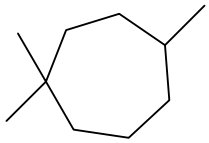
ANS:



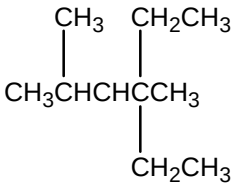
3. Provide **IUPAC names** for the compounds below:



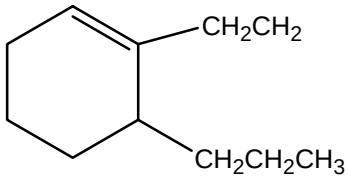
2,3-dimethyl-3-pentanol



1,1,4-trimethylcycoheptane



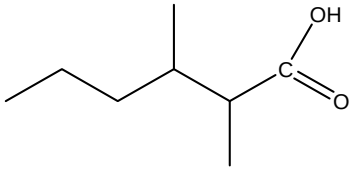

4-ethyl-2,4-dimethylhexane



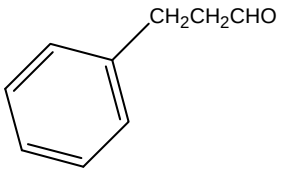

2-ethyl-3-propylcyclohexene

4. Draw **line-angle structures** corresponding to the following IUPAC names:

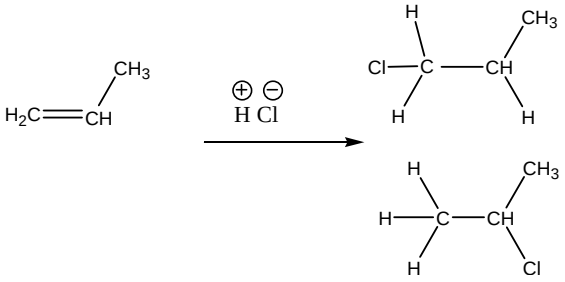
2,3-dimethylhexanoic acid




3-phenylpropanaol




6. The **hydrochlorination** of 1-propene gives a mixture of products as illustrated.
   - Predict the major product and provide a **detailed mechanism** using mechanistic arrows.




An addition reaction where the hydrogen ends up on the C of the C=C with the most H's attached to it, Markovnikov's rule.