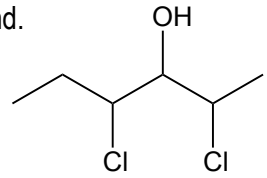
CONCEPT: NAMING ALCOHOLS

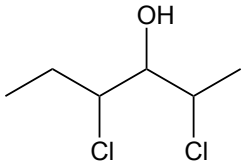
- **Recall:** Alcohols possess a _____ (OH) group connected to an sp^3 hybridized carbon.
- Set of rules for naming alcohols are similar to alkanes + *modifier* ending.
  - □ **Modifier**: Change to the _____ because of the presence of a functional group.
    - Modify the ending from -____ to -____.

EXAMPLE: Name the following alcohol compound.



STEP 1: Find the _____ carbon chain (parent chain) and assign name according to the prefixes and _____.

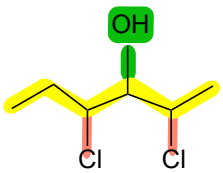
- □ Parent chain should include the _____ group and have _____ number of carbons.
- □ If a tie between longest chains, choose chain with more substituents.



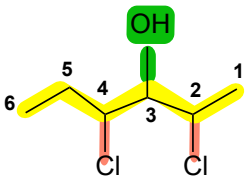
STEP 2: Assign name to all the substituents.

STEP 3: Start numbering the chain from the end closest to the _____ group.

- □ If a tie, then number from end closest to the next substituent.
- □ If still a tie, number in _____ order.
- □ Assign numerical location to the carbon with the _____ group.

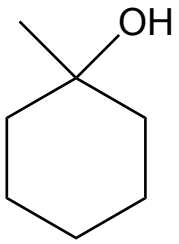


STEP 4 to 6: Repeat steps from previous naming topics.

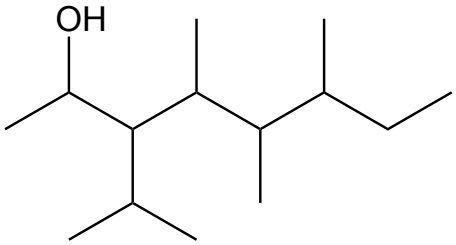


CONCEPT: NAMING ALCOHOLS

PRACTICE: Provide the systematic name for the following alcohol.

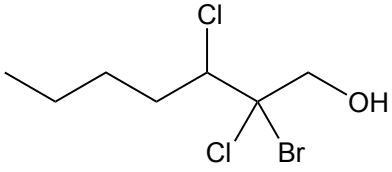


PRACTICE: Provide the formal name for the following alcohol.

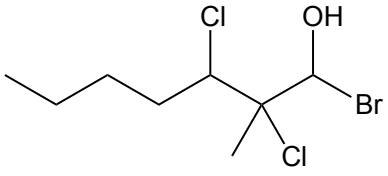


PRACTICE: Which structure represents 2-bromo-2,3-dichloro-1-heptanol?

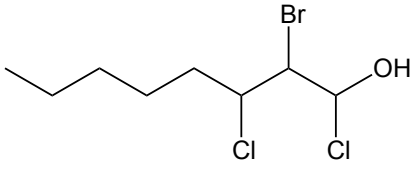
a)



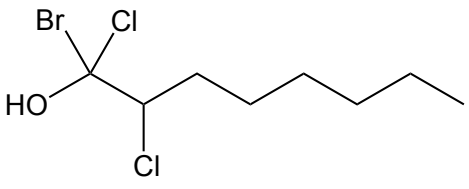
b)



c)

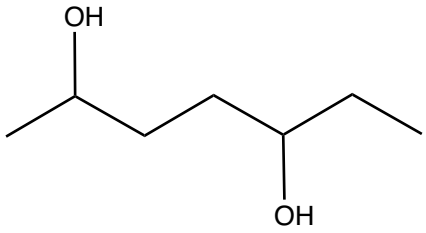


d)

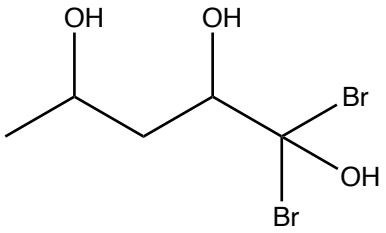


CONCEPT: NAMING ALCOHOLS

PRACTICE: Name the following dialcohol.



PRACTICE: Provide IUPAC name for the following trialcohol.

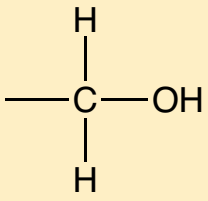
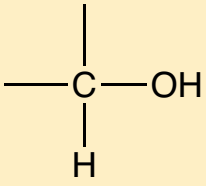
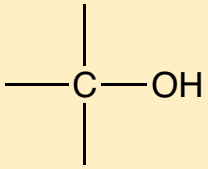


CONCEPT: NAMING ALCOHOLS

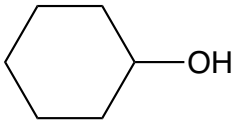
Alcohol Classification

- Alcohols are classified based on how many _____ groups are attached to the _____ bearing C atom.
  - □ Classifications: primary (___), secondary (___) or tertiary (___).

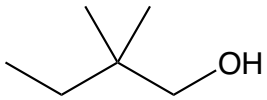
Alcohol Classification

___ Alcohol	___ Alcohol	___ Alcohol
		

EXAMPLE: Classify the following alcohols.



_____



_____

PRACTICE: Label each alcohol as primary, secondary, or tertiary.