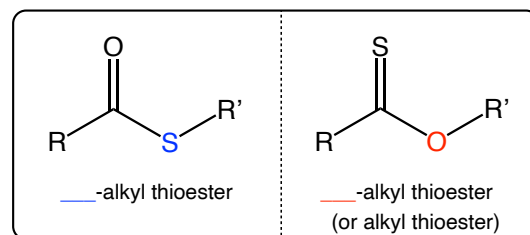


CONCEPT: INTRO TO THIOESTERS

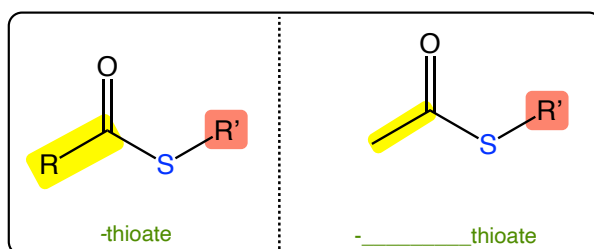
- Thioesters are sulfur analogs of _____.
- Two types: **S**-alkyl thioester (common) and **O**-alkyl thioester.
 - S-alkyl thioesters are also known as _____.



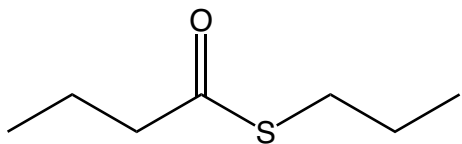
IUPAC Naming

- Similar to ester nomenclature.
- The carbon chain with the _____ group is named as an alkane with _____ modifier.
 - If parent chain is a cycloalkane, use -_____thioate modifier.
- Alkyl group attached to S is named as a _____ with _____ prefix.

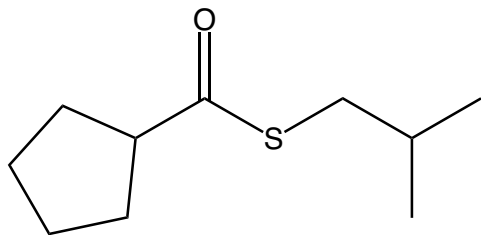
S-substituent parent-modifier



EXAMPLE: Provide systematic name for following thioester.



PRACTICE: Provide IUPAC name for following molecule.



CONCEPT: INTRO TO THIOESTERS

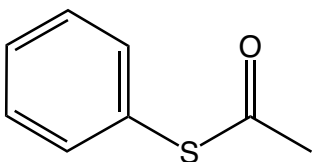
Common Naming

- The carbon chain with the _____ group is named using common name prefixes.
 - With _____ prefix and _____ suffix.
- Alkyl group attached to _____ is named as a substituent (same as in IUPAC).

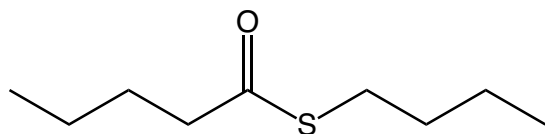
S-substituent thio-prefix-ate

Common Name Prefixes	
# of Cs	Prefix
1	Form-
2	Acet-
3	Propion-
4	Butyr-
5	Valer-

EXAMPLE: Provide a common name for following thioester.



PRACTICE: Provide common name of following thioester.



PRACTICE: Draw a structure for pentyl benzothioate.