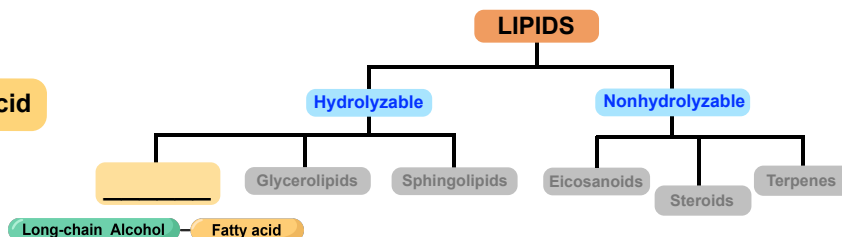
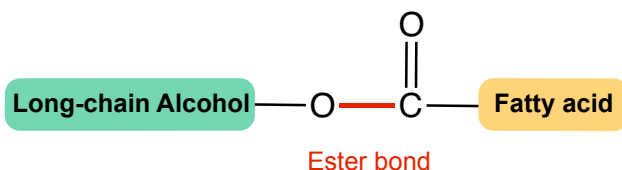


CONCEPT: WAXES

● **Waxes:** simple lipids composed of a long-chain _____ and a long-chain _____ acid.

□ Fatty acid and alcohol are attached by an _____ bond.

- Ester bond is broken when waxes are _____.



● Waxes possess water _____ properties.

□ Form _____ coatings on feathers of birds and leaves of plants.

EXAMPLE: Provide a structure of beeswax, containing myricyl alcohol ($\text{CH}_3(\text{CH}_2)_{29}\text{OH}$) and palmitic acid.

STEP 1: Draw structure of alcohol (condensed) and fatty acid. Place _____ of alcohol next to _____ group of fatty acid.

□ Instead of OH on alcohol, write _____.

□ Do _____ draw OH on fatty acid.

STEP 2: Form an _____ bond.

□ Draw a bond between O of alcohol and carbonyl C of fatty acid.

PRACTICE: Structure of component of spermaceti wax is given below. If it gets hydrolyzed, draw structures of molecules it would produce.

