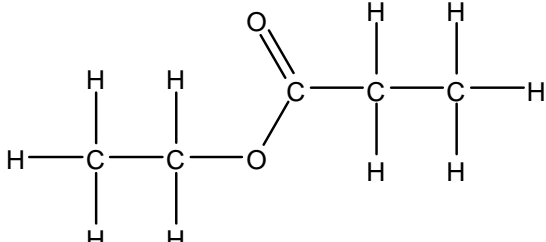
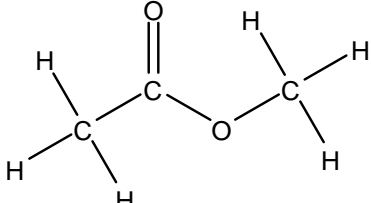
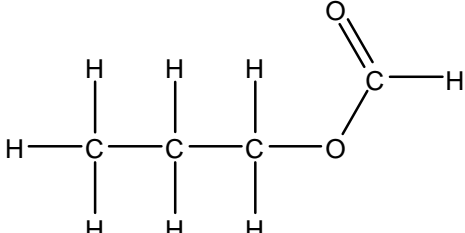
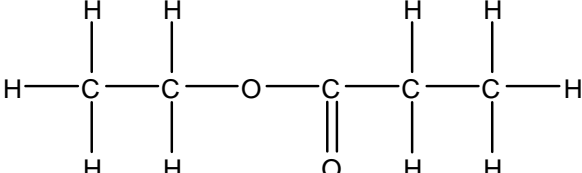


Question One- Complete the table

Name	Structure
Ethyl propanoate	
Methyl ethanoate	
Propyl methanoate	
Ethyl propanoate	

Question Two

For each of the Esters above, identify carboxylic acid and alcohol that are required to produce the Ester

- 1) ethanol and propanoic acid
- 2) methanol and ethanoic acid
- 3) propan-1-ol and methanoic acid
- 4) ethanol and propanoic acid

Question Three

Discuss the hydrolysis reaction of propyl methanoate under acidic condition and basic condition

Under acidic condition, propyl methanoate hydrolysis forming propan-1-ol and methanoic acid

Since there is excess H_3O^+ ions present in the environment, therefore the methanoic acid will remain in its acid form. On the other hand, under basic condition, propyl methanoate hydrolysis forming propan-1-ol and methanoate ion. This is due to the excess OH^- ions present in the environment which deprotonate the acid hydrogen in the methanoic acid, thus methanoate ion is formed

