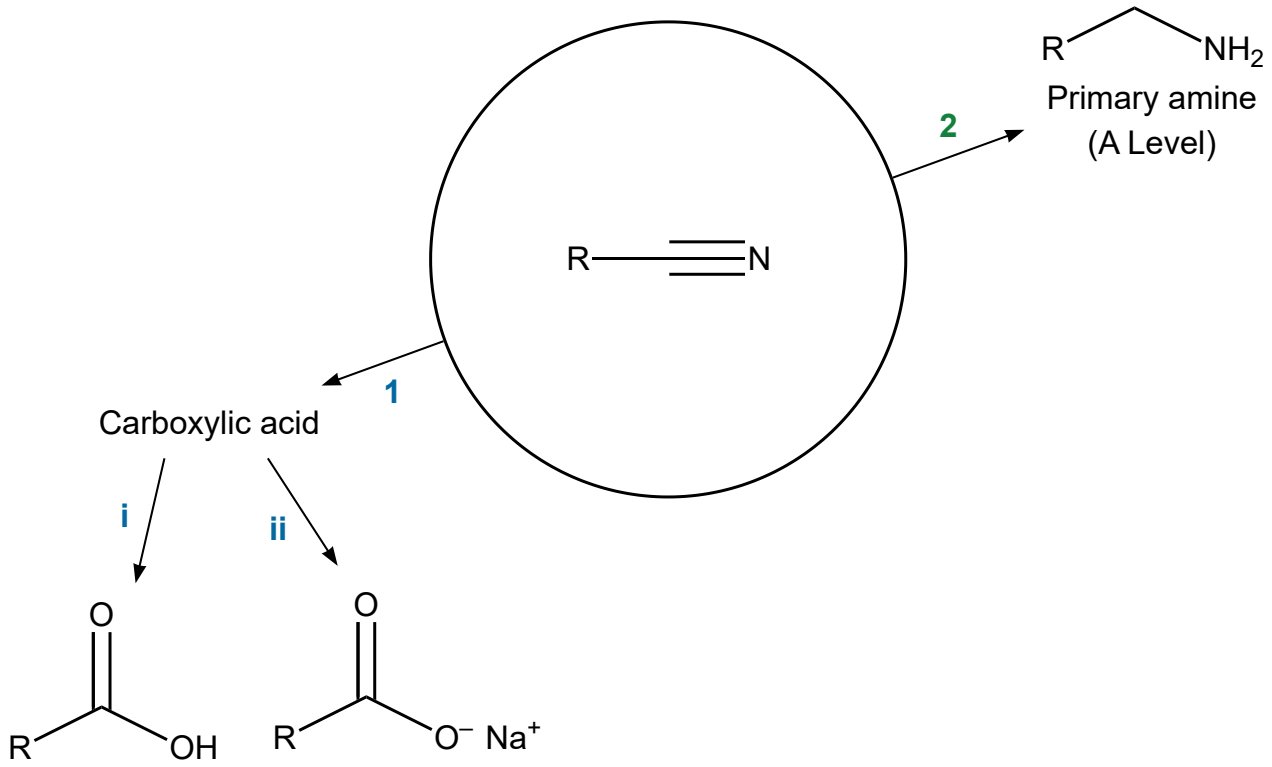
Nitriles Map

Cambridge International AS & A Level Chemistry · Topic 19 Nitrogen compounds



1 hydrolysis: dilute acid, or dilute alkali then acidify, heat

i dilute acid, e.g. HCl(aq), heat under reflux → carboxylic acid

ii dilute alkali, NaOH(aq), heat under reflux → carboxylate salt

2 reduction: [H]; $LiAlH_4$, or H_2 with Ni, $LiAlH_4$ in dry ether; H_2/Ni heat

Nitriles come from halogenoalkanes + KCN in ethanol; hydroxynitriles from aldehydes and ketones + HCN/KCN.

hydrolysis reduction

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