Mechanism Summary for AS AQA Chemistry



Nucleophilic Substitution of halogenoalkanes with cyanide ions. $H_3C \xrightarrow{+} C \xrightarrow{-} Br \xrightarrow{+} H_3C \xrightarrow{-} C \xrightarrow{-} CN + :Br \xrightarrow{-} NC$



Elimination of halogenoalkanes with ethanolic hydroxide ions









Free Radical Substitution of alkanes with bromine

STEP ONE Initiation

Essential condition: UV light

 $Br_2 \rightarrow 2Br$

STEP TWO Propagation

 $CH_3CH_3 + Br' \rightarrow HBr + CH_3CH_2'$

 CH_3CH_2 + $Br_2 \rightarrow CH_3CH_2Br$ + Br

STEP THREE Termination

 CH_3CH_2 + Br \rightarrow CH_3CH_2Br CH_3CH_2 + CH_3CH_2 \rightarrow $CH_3CH_2CH_2CH_3$





AS Reactions- Summary

