Reaction Mechanism $H_2(g) + I_2(g) \rightarrow 2HI(g)$ rate = k $[H_2] [I_2]$ reaction faster in light $: \underbrace{I} : \underbrace{I} : \xrightarrow{h\nu} : \underbrace{I} : + \cdot \underbrace{I} :$

free radical unpaired electron