

EXAMINATION

1. The following information is given for the reaction of ethane with chlorine:

$\text{C}_2\text{H}_6 + \text{Cl}_2 \rightarrow \text{C}_2\text{H}_5\text{Cl} + \text{HCl}$

2. The following information is given for the reaction of ethane with chlorine:

$\text{C}_2\text{H}_6 + \text{Cl}_2 \rightarrow \text{C}_2\text{H}_5\text{Cl} + \text{HCl}$

3. The following information is given for the reaction of ethane with chlorine:

$\text{C}_2\text{H}_6 + \text{Cl}_2 \rightarrow \text{C}_2\text{H}_5\text{Cl} + \text{HCl}$

Bond enthalpies (kJ mol ⁻¹)		Bond enthalpies (kJ mol ⁻¹)	
C-H	C-Cl	H-Cl	Cl-Cl
412	338	431	242
376	338	431	242
412	338	431	242
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Calculate the enthalpy change for the reaction.

LINGSTON



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