

Thermochemistry

University of Pittsburgh's Single Jeopardy Game Board - Netscape

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General Chemistry [Return to Game Selection Page](#)

Single Jeopardy: Thermochemistry

Calculations	Calorimetry	Concepts & Units	Define Convert	ΔH	Pot-pourri
50	50	50	50	50	50

Calculations

50	ΔH° for $2C_{(s)} + O_{2(g)} \longrightarrow 2CO_{2(g)}$	
100	ΔH° for $CO_{2(g)} \longrightarrow C_{(s)} + O_{2(g)}$	
150	ΔH° for $3C_{(s)} + 2O_{3(g)} \longrightarrow 3CO_{2(g)}$	
200	ΔH° for $3O_{2(g)} \longrightarrow 2O_{3(g)}$	
250	ΔH° for $2Na_{(s)} + Cl_{2(g)} \longrightarrow 2NaCl_{(s)}$	

Calorimetry

50	styrofoam cup	
100	heat transfer between these should approach zero	
150	sign of ΔH if T goes down	
200	correction term units	
250	Heat capacity for 10g H_2O in Joule	

Concepts and Units

50	q at constant P	
100	q at constant V	
150	isothermal	
200	First Law of Thermodynamics	
250	independent of path	

Definitions and Conversions

50	a calorie	
100	Joule per calorie	
150	specific heat	
200	specific heat times mass	
250	$\frac{1 \text{ kg}\cdot\text{m}^2}{\text{sec}^2}$	

Delta h

50	process for which this is negative	
100	$\Delta H_{\text{F}}^{\circ} = 0$	
150	ΔH° for $\text{C}_{(\text{s})} + \text{O}_{2(\text{g})} \longrightarrow \text{CO}_{2(\text{g})}$	
200	$\text{A} \longrightarrow \text{B} \quad \Delta H = -10$ $\text{B} \longrightarrow \text{C} \quad \Delta H = -20$ <hr/> $\text{A} \longrightarrow \text{C} \quad \Delta H = ?$	
250	$\text{A} + \text{B} \longrightarrow \text{C}$ $2\text{C} \longrightarrow 2\text{A} + 2\text{B}$	

Potpourri

50	specific heat of water	
100	25°C and 1 atm	
150	Energy + $\text{H}_{2(\text{g})} \longrightarrow 2\text{H}_{(\text{g})}$	
200	$P\Delta V$	
250	$\Delta H_{\text{R}}^{\circ}$ from $\Delta H_{\text{F}}^{\circ}$	