

# Thermochemistry Webquest

KEY

Part 1 - Vocabulary		Click on the first letter of the word you are looking for the definition of. <a href="https://goo.gl/o93Uk7">https://goo.gl/o93Uk7</a>
1	Kinetic Energy	energy due to motion
2	Potential Energy	energy due to position or composition
3	Endothermic	Rxn where energy (heat) flows <sup>into the</sup> system
4	Exothermic	Rxn where energy (heat) flows out of system
5	Activation Energy	threshold energy to overcome to do a Rxn
6	Heat of Reaction	Change in enthalpy under <sup>constant</sup> pressure
7	Enthalpy	@ constant P, enthalpy equals heat energy
8	Entropy	measure of the disorder of a system
9	Specific Heat	energy needed to raise 1g by 1 degree

Part 2 - Watch a Video		Watch the Video at the link below. Then answer the following questions. <a href="http://goo.gl/LHZTPO">http://goo.gl/LHZTPO</a>
1	What does it mean to have thermoenergy?	energy due to heat
2	What temperature would something need to be, in order to not have thermoenergy.	"absolute zero" 0 Kelvin
3	What is the difference between potential and kinetic energy?	potential - due to position / composition kinetic - movement energy
4	What is thermodynamics?	branch of science that studies heat, energy, work
5	What is the equation for change of energy to a system?	$\Delta E = Q + W$ heat    work
6	What is the difference between an exothermic and endothermic reaction?	exo - energy flowing out of
7	Do you think the $\Delta E$ for an exothermic reaction would be positive or negative?	negative because it is releasing heat

Part 3 - Specific Heat		Use the following link to answer the questions below: <a href="https://goo.gl/IEBrz2">https://goo.gl/IEBrz2</a>	
1	Write the formula that can be used to calculate the heat energy being absorbed or released in a system	$Q = m C \Delta T$	
2	Describe each part of the equation: heat gained or lost = Mass x Change in Temperature x Specific Heat	Mass mass of the object <u>grams</u>	Change in Temp Final - <sup>°C</sup> initial <u>J/g°C</u>
3	Using the Table link at the bottom of the equation box, what solid substance has the highest specific heat?	WATER!	

UNITS