



Chem!stry

Name: ()

Class:

Date: / /

Uncovering Misconceptions and Misunderstandings for Exothermic and Endothermic Reactions

Indicate whether you agree or disagree with each of the following statements by placing ticks

and crosses in the appropriate boxes:

Statement:	Exothermic:		Endothermic:	
ΔH is positive.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
The energy required to break bonds is greater than the energy released when bonds are formed.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Combustion is an example of this type of reaction.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
The addition of a catalyst affects the overall energy change (ΔH) of the reaction.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
This type of reaction is always slow.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
The energy required to break bonds is less than the energy released when bonds are formed.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Energy is absorbed from the surroundings.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
The products are lower in energy compared to the reactants.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Energy is required to break chemical bonds.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
The reactants are lower in energy compared to the products.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
The temperature of the surroundings increases.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Activation energy must be provided for the reaction to take place.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Photosynthesis is an example of this type of reaction.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Energy is released when chemical bonds are formed.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
ΔH is negative.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
The temperature of the surroundings decreases.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Energy is usually given off in the form of heat and light.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
This type of reaction is always fast.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Heating this reaction will increase its rate.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>
Energy is given off to the surroundings.	True <input type="checkbox"/>	False <input type="checkbox"/>	True <input type="checkbox"/>	False <input type="checkbox"/>

- Scan the QR Code below for the answers to this assignment.



http://www.chemist.sg/energy_changes/misconceptions_ans.pdf