Unit 7 NAME

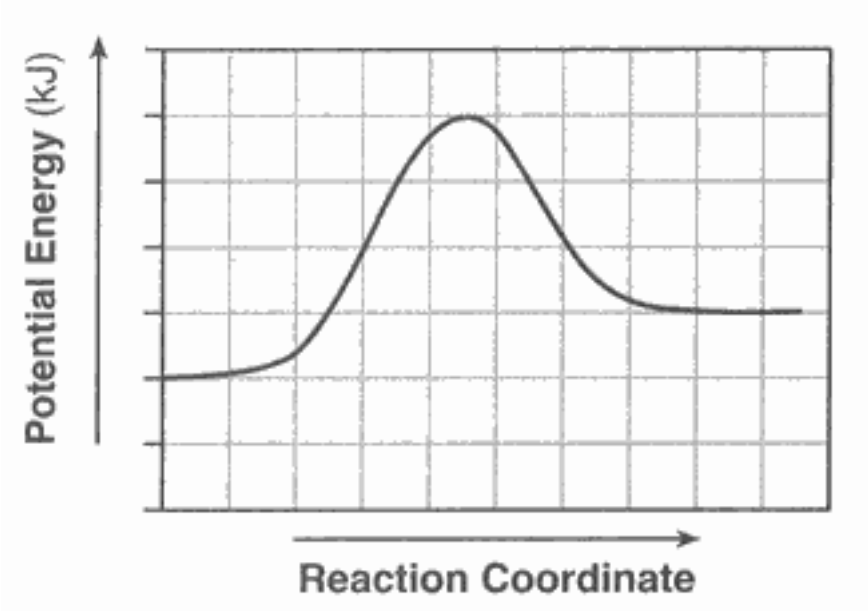
Class Work 3/4/14

7.5 Heat of Reaction

SPARK

Draw the energy diagram to the right in your notes and label the

1. reactants,
2. products,
3. activated complex,
4. activation energy,
5. heat of formation

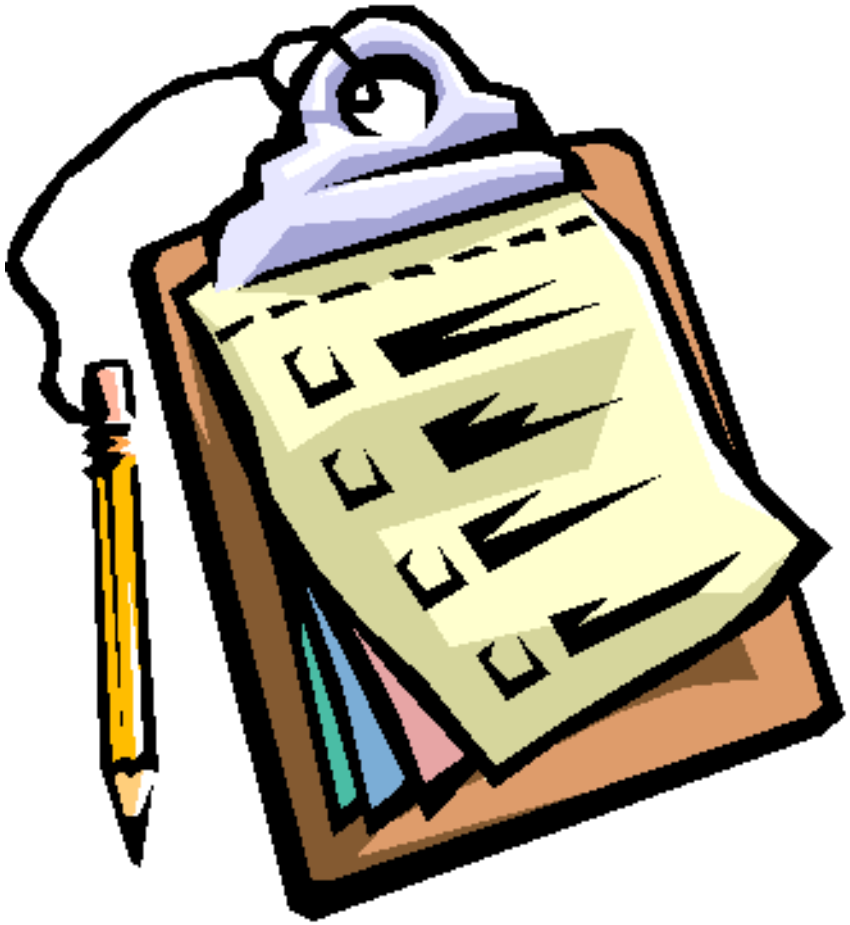


Objective

SWBAT identify and calculate the heat of reaction and activation energy on a potential energy diagram.

Agenda:

- SPARK/Objective
- Notes
- Activity
- Practice
- Homework



Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Review 7.3 HW

- Document Camera

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

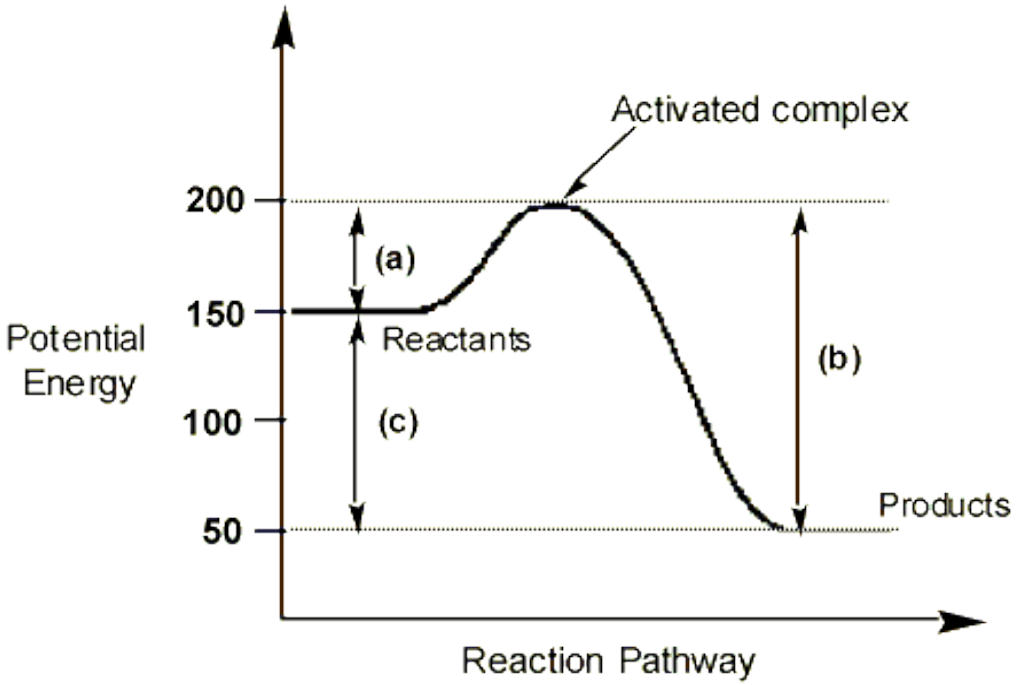
Quiz

- You have ten minutes to complete your quiz!
- When you are finished with your quiz, check your answers to 7.4 with your neighbor!

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Reminder

- H = heat (potential energy)
- $\Delta H = H_{products} - H_{reactants}$



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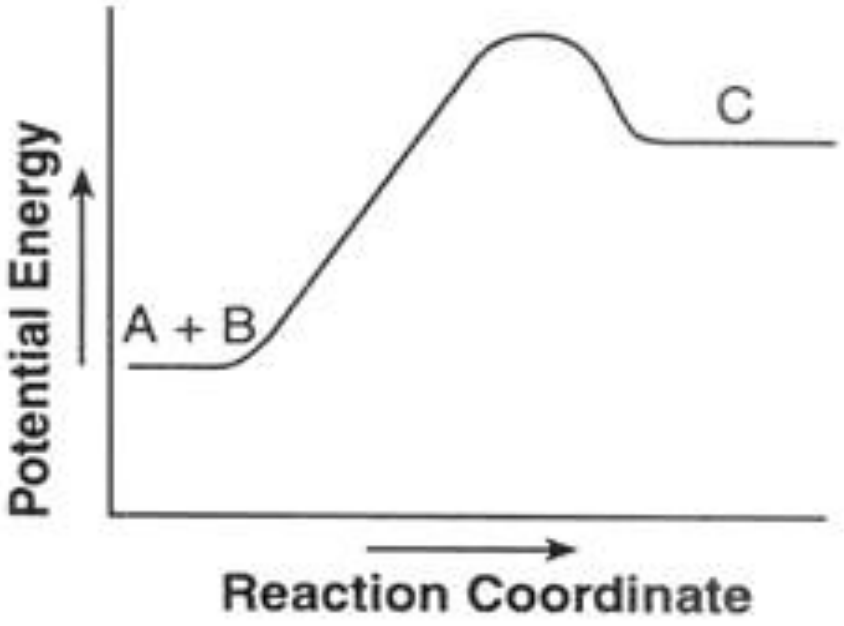

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Practice

- **Practice: State whether enthalpy increases or decreases.**

Reaction/ Process	Increase or decrease in enthalpy?
Exothermic reaction	
Melting of ice	
Freezing of water	
Evaporation of water	

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Notes- Enthalpy

- We can find the enthalpy of a reaction using Table I

Answer in a complete sentence:

- If ΔH is positive, is the reaction endothermic or exothermic AND which side of the reaction is the heat?

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Notes- Enthalpy

- We can find the enthalpy of a reaction using Table I

Answer in a complete sentence:

- If ΔH is positive, is the reaction endothermic or exothermic AND which side of the reaction is the heat?
- Find one example of an exothermic reaction on Table I. Explain how you know it is EXOthermic!

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Practice #1 – 8 minutes

- Use Table I to help you complete the first 6 questions on your 7.5 WS

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Notes

- Use document camera to model enthalpy problems

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

Exit Ticket

- Complete your 7.5 Exit Ticket

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.

HOMEWORK

Finish your worksheet

Complete Unit 7 Flash Cards!

Complete any missing work!

Objective: SWBAT identify the heat of reaction and activation energy on a potential energy diagram.