

Unit 7

NAME

Class Work

3/4/14

## 7.7 Review Day 1

### SPARK

Compare and contrast endo and exothermic reaction.

## Objective

SWBAT review all concepts in Unit 7

# Agenda:

- SPARK/Objective
- Notes
- Practice
- Homework



Objective: SWBAT review all concepts for Unit 7

# Review of HW

- 7.6 on document camera

Objective: SWBAT review all concepts from Unit 7

# Endo/Exothermic

- Let's practice ENDOTHERMIC and EXOTHERMIC! Grab a clipboard!
- You each will receive two pieces of paper. One says endothermic and one says exothermic.
- A series of equations, potential energy diagrams and enthalpy values will show on the screen. You will place the appropriate word on the clipboard and hold it up!

Objective: SWBAT review all concepts from Unit 7

Endo/Exothermic

READY

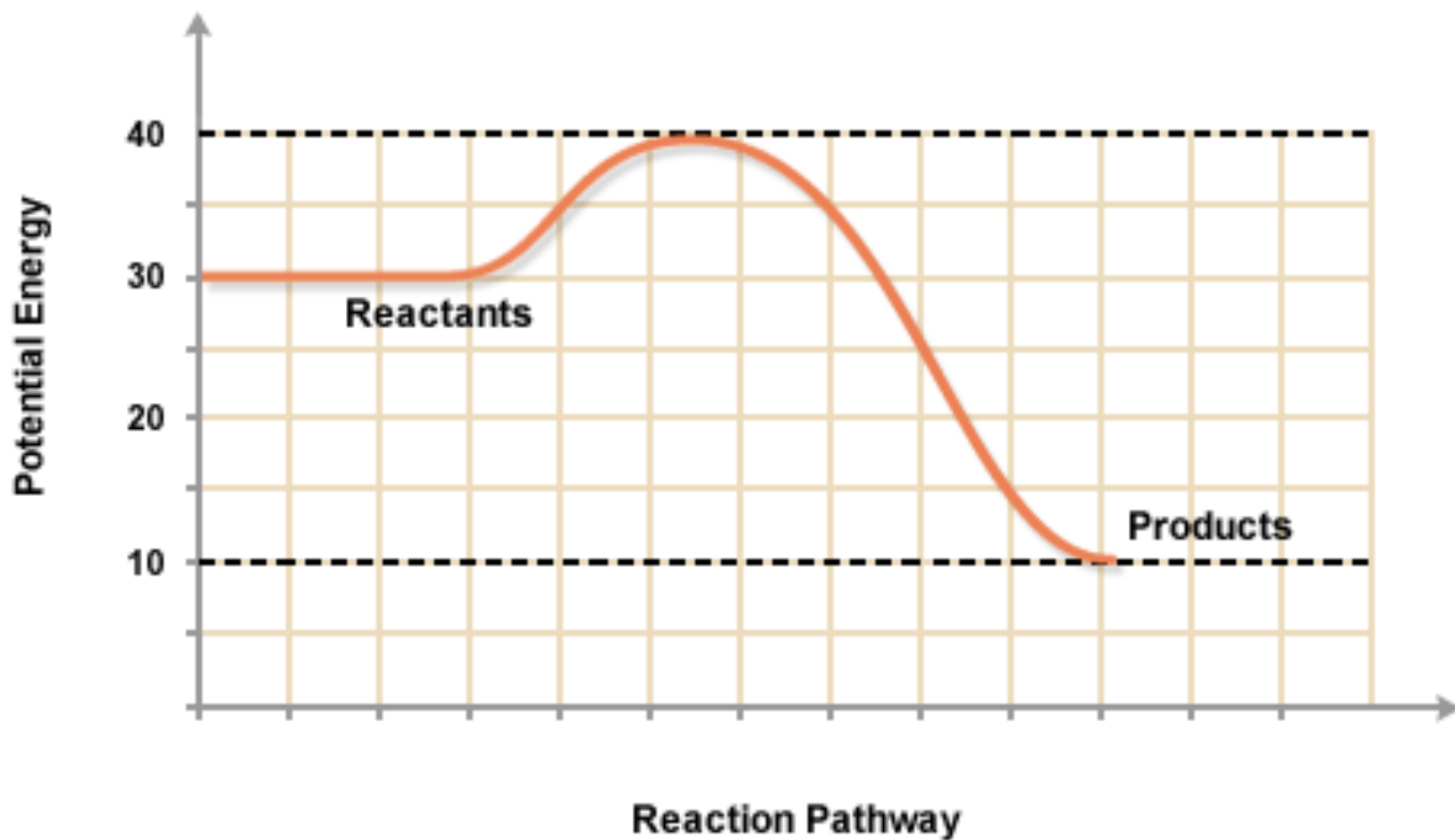
SET

GO!

Objective: SWBAT review all concepts from Unit 7

$$\Delta H = -566 \text{ kJ}$$

Objective: SWBAT review all concepts from Unit 7

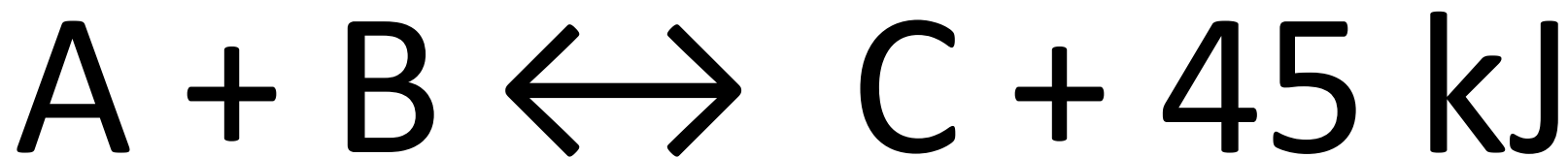


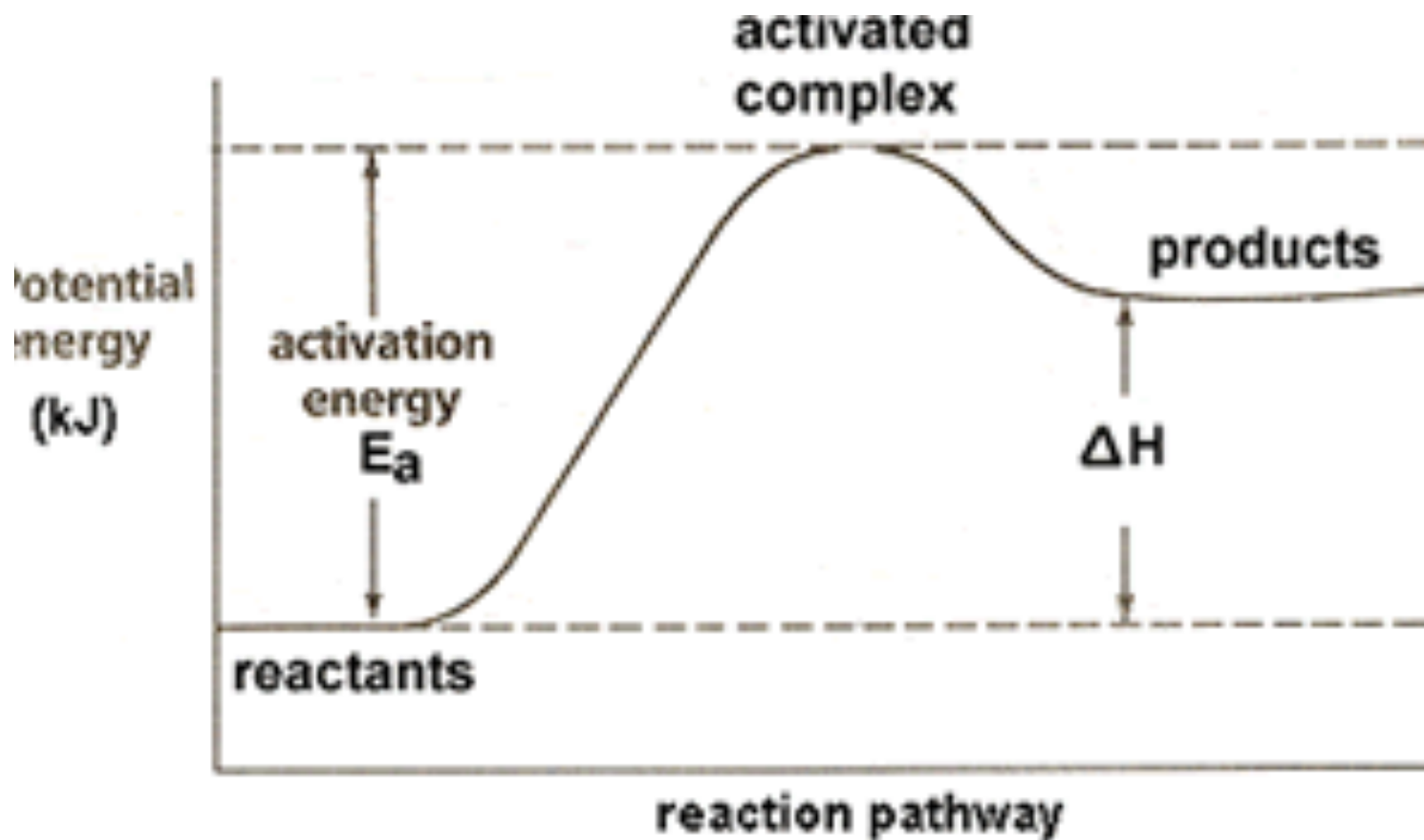
Objective: SWBAT review all concepts from Unit 7

Heat of reaction=  
+182.6 kJ

Objective: SWBAT review all concepts from Unit 7







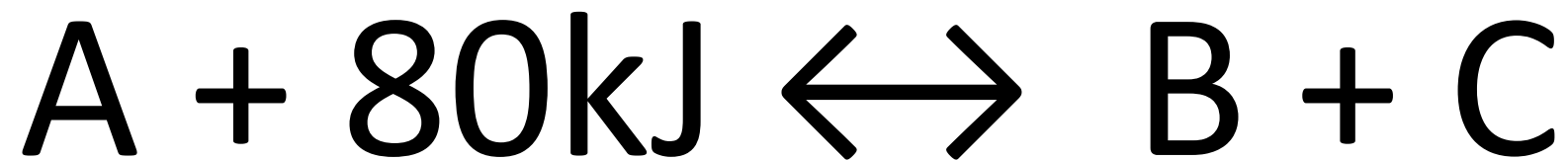
Objective: SWBAT review all concepts from Unit 7

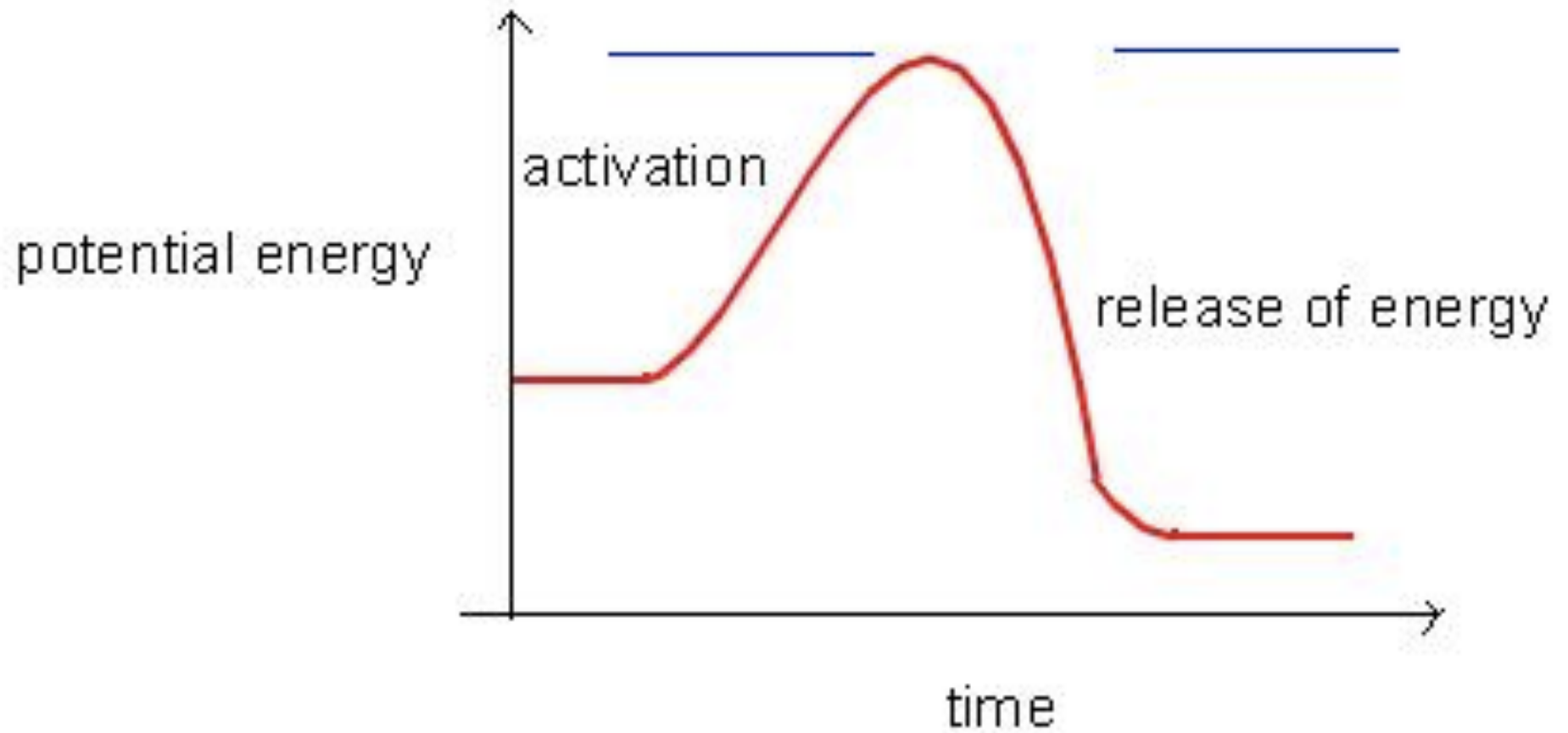
$$\Delta H = -571.6 \text{ kJ}$$

Objective: SWBAT review all concepts from Unit 7

- Potential energy of products = 20 kJ
- Potential energy of reactants = 60 kJ

Objective: SWBAT review all concepts from Unit 7

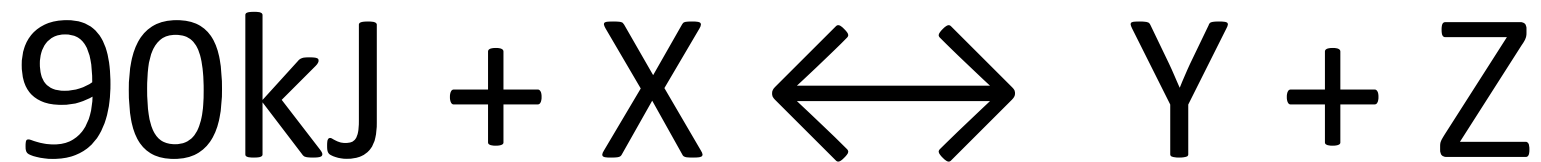




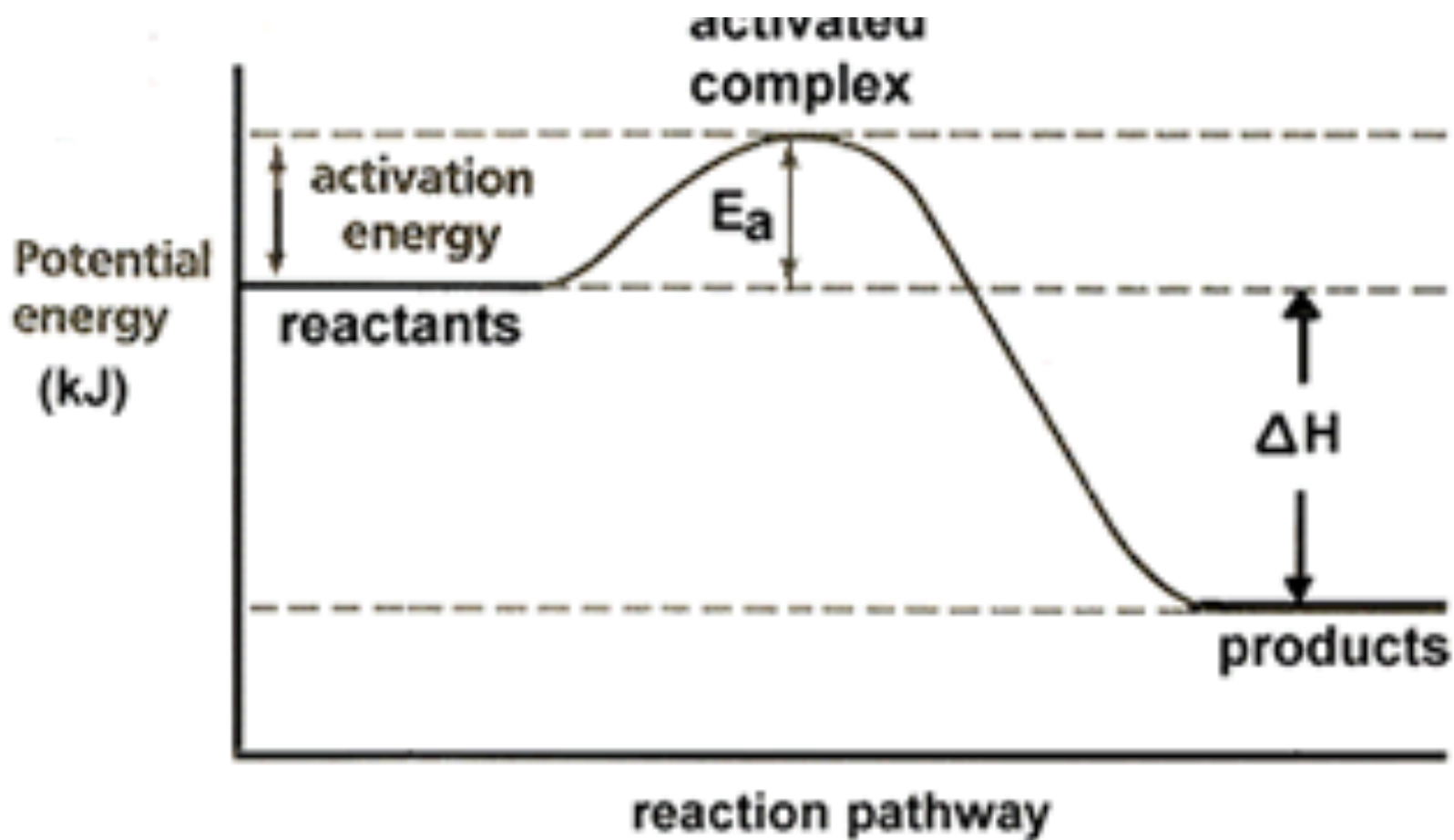
Objective: SWBAT review all concepts from Unit 7

$$\Delta H = +53.0 \text{ kJ}$$

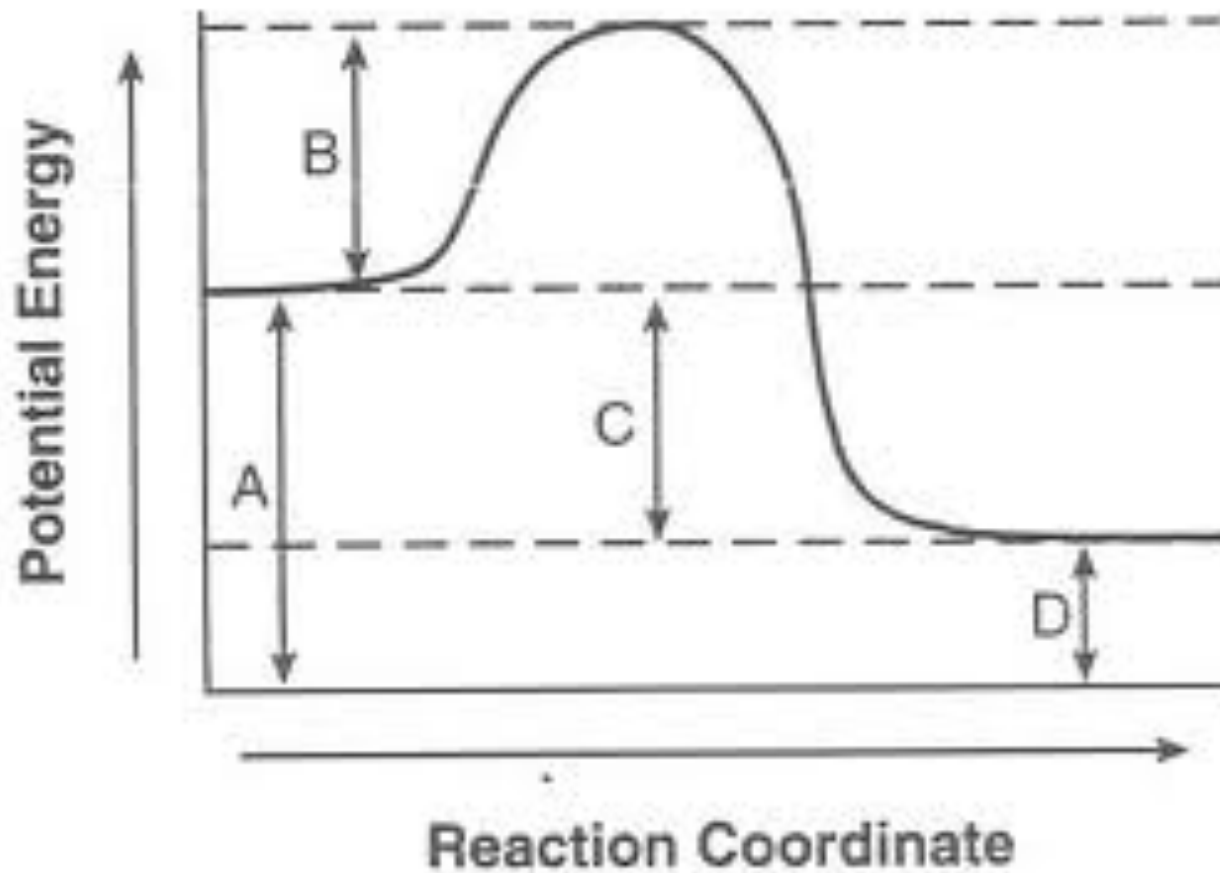
Objective: SWBAT review all concepts from Unit 7







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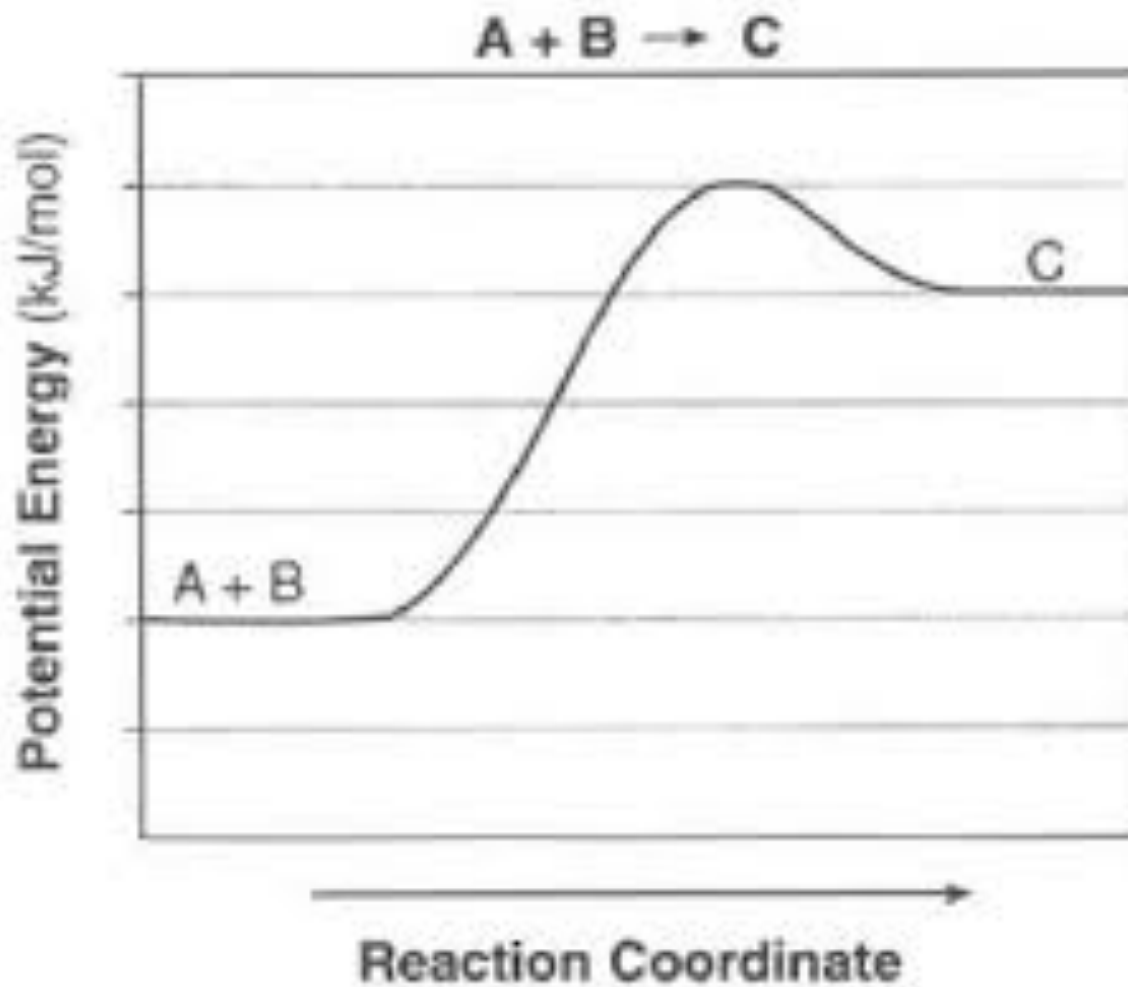
- Potential energy of products = 10 kJ
- Potential energy of reactants = 110 kJ

Objective: SWBAT review all concepts from Unit 7



Heat of reaction=  
-84 kJ

Objective: SWBAT review all concepts from Unit 7



Objective: SWBAT review all concepts from Unit 7

Heat of formation=  
-55.8 kJ

Objective: SWBAT review all concepts from Unit 7

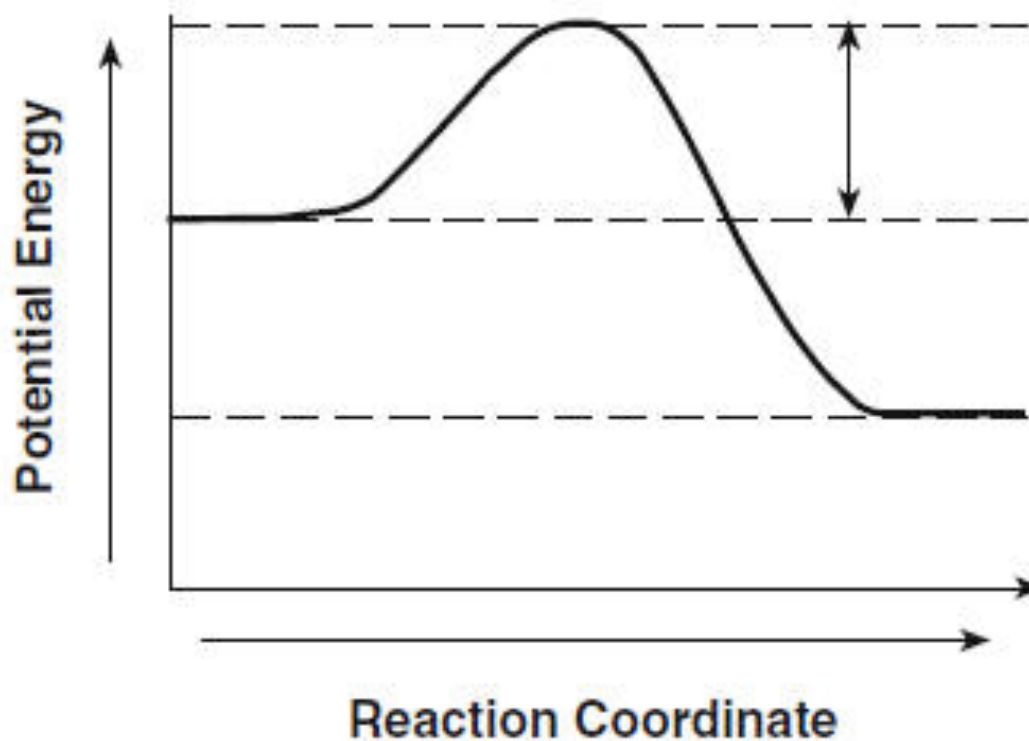
- Potential energy of products = 100 kJ
- Potential energy of reactants = 80kJ

Objective: SWBAT review all concepts from Unit 7



53 [1] Allow 1 credit.

Example of a 1-credit response:



Objective: SWBAT review all concepts from Unit 7

# NICE WORK!

Objective: SWBAT review all concepts from Unit 7

# Quiz Shout Outs- Anions!

- Ramlah
- Rimsha
- Shayna
- Mubeen
- Monica
- Mahnoor!

Objective: SWBAT review all concepts for Unit 7

# Quiz Shout Outs- Cations!

- Bukurie
- Desire

Objective: SWBAT review all concepts for Unit 7

# Let's Try This Together!

Part 1: A reaction is most likely to occur when reactant particles collide with

1. proper energy, only
2. proper orientation, only
3. both proper energy and proper orientation
4. neither proper energy nor proper orientation

SO if a question asks you about COLLISION THEORY, you need to mention energy or proper orientation!

# Let's Try This Together!

Part 2: What is required for a chemical reaction to occur?

1. standard temperature and pressure
2. a catalyst added to the reaction system
3. effective collisions between reactant particles
4. an equal number of moles of reactants and products

SO if a question asks you about COLLISION THEORY, you need to mention EFFECTIVE COLLISIONS

# Review of Quiz

1. For each quiz question, underline the KEY VOCABULARY word you need to know to answer the question and make a list on your sheet of loose leaf!
2. Make sure all of those words appear in your GLOSSARY (with your OWN definition AND a picture!)

Objective: SWBAT review all concepts from Unit 7

# Unit 7 Vocabulary

- Collision Theory – effective collision, proper orientation
- Collide
- Rate
- Rate of Reaction
- Equilibrium
- Equal
- Constant
- Closed System
- Concentration
- Pressure (increase volume)
- Surface Area
- Powder
- Catalyst
- Le Chatelier
- Forward Reaction (shift right)
- Reverse Reaction (shift left)
- Endothermic
- Exothermic
- Potential energy of the product (PEP)
- Potential energy of the reactants (PER)
- Enthalpy – heat of reaction – heat of formation
- Activated complex
- Activation Energy
- Heat of reverse reaction/forward reaction
- Coefficient – mole – particles
- Entropy

Objective: SWBAT review all concepts from Unit 7



# Charades - Tableau

With your group, will be assigned a concept from Unit 7. You will work with your group members to come up with a silent skit OR two still images to show the class. You will have 10 minutes to come up with your images and the class will guess what they see.

Objective: SWBAT review all concepts from Unit 7

# You're the TEACHER!

- Pick one vocabulary word from Unit 7 or topic and create a jiggle, rap, song, poem... some way to teach the concept to your peers!
- You will have ten minutes to complete this and you will be turning this in for classwork!

Objective: SWBAT review all concepts from Unit 7

# Regents Review

- Complete the 7.7 Regents Review Sheet!

Objective: SWBAT review all concepts from Unit 7

# HOMEWORK

Create a 10 question quiz on the vocabulary  
(using various question types)

Use the textbook to help! Chapters 17 and 18

Study for Unit 7 exam!

Objective: SWBAT review all concepts from Unit 7