

Monday, February 23rd

Learning Target: I can analyze and discuss my experiment results.

Homework: Prep for project presentation

Sit with your group.

As you enter... Write out the question or rephrase it.

Use the "Presentation Day" packet to answer these questions:

1. What must you include in your presentation talk?

① Results of expt, ② importance, ③ achieving purpose/goal

2. Who will you be filling out evaluations for after the presentations are done?

2 other groups, self, team members

Note: All assignments on Solutions due Wednesday (check white board)

Big Idea: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.3rd period

- Write/type up project information (35 min)
- Exit Tix: Reflection (5 min)

Today: Using your guidelines and rubric, you should have at least HALF of your presentation board completed today.

--Printouts to breanna.eng@rcsdk12.org

Tomorrow:

3rd period-- Complete presentation board

4th period-- Prepare your 7 min talk

Wednesday: Presentation Day! (You will present to 2 different groups)



Tix out the door

Write the names of group members here today.

Individual reflection...

1. Did you make satisfactory progress so that you will be done with the presentation board tomorrow? Explain.
2. Were you an equal contributor to your group? Explain.
3. Did you follow through on your roles and responsibilities for your team? Explain.

Tuesday, February 24th



Learning Target: I can work with my team to summarize the purpose and results of my project.

Homework: Prep for project presentation

As you enter... Write out the question or rephrase it.

Use the "Presentation Day" packet to answer these questions:

1. How many times will you present?

twice

2. How can you get bonus points on this project?

Neat & organized

Note: All assignments on Solutions due tomorrow (check white board)

Big Idea: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.



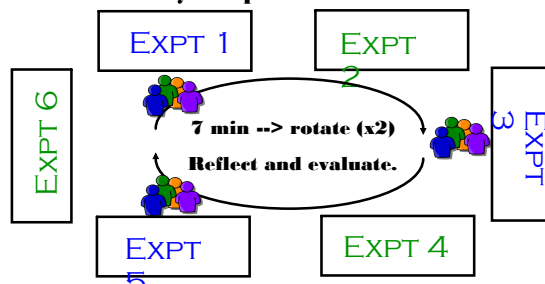
3rd period

- Finish display boards (45 min)

4th period

- Prep for presentation (45 min)
- Exit Tix: Reflection (5 min)

Presentation Day Setup



Breanna.Eng@RCSDK12.org

- Be professional. (We may have visitors too!)
- Use as much solution vocabulary as you can.
- Dress up and I will give you bonus points. :)

Tix out the door (Don't forget your name.)



Individual reflection...

1. Did you make satisfactory progress so that you will be ready to present tomorrow? Explain.
2. Were you an equal contributor to your group? Explain.
3. Did you follow through on your roles and responsibilities for your team? Explain.

Wednesday, February 25th



Learning Target: I can professionally present and thoughtfully reflect on my work.

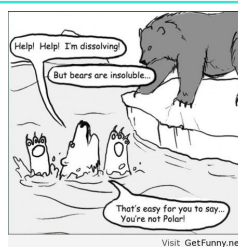
Homework: n/a

As you enter...

PRESENTATION DAY!

Find your lab table.
Bring your Presentation Day packet and a pen with you.

*Experiments 1, 3, and 5 (KDE) will present first.



Note: All assignments on Solutions due in the bin today

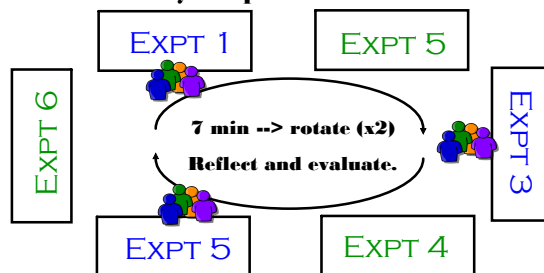
Big Idea: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.



3rd period

- Presentation Day! (30 min)
- Exit Tix: Complete evaluations in packet (15 min)

Presentation Day Setup



Tix out the door (Don't forget your name.)



Evaluations...

1. Fill out the two group evaluation forms
2. Fill out your team member evaluation form for each member and yourself

Hand completed packet into bin.

Thursday, February 26th

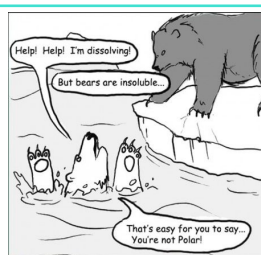


Learning Target: I can define and represent my understanding of collision theory using an analogy.

Homework: n/a

As you enter...

Finish your evaluation forms from yesterday and put them in the bin. There are more copies on the side table.



Visit: GetFunny.net

Note: You may retake the solutions quiz during lunch or after school.

Big Idea: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.



3rd period

- NEW UNIT: Kinetics and Equilibrium
 - > Intro (15 min)
- Collision Theory Packet (30 min)

4th period

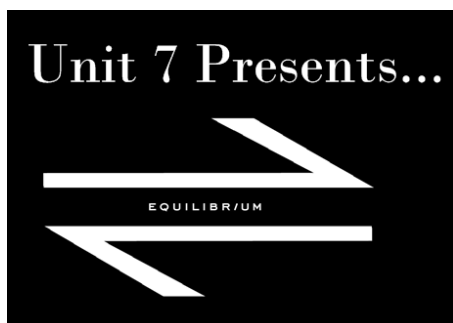
- Endothermic vs Exothermic Intro Activity (10 min)
- Identify examples as endo- or exo- (30 min)
- Exit Tix (5 min)

Tix out the door (Don't forget your name.)



Evaluations...

1. What are the two factors that will determine if a collision is effective or not?
2. What is the difference between endothermic and exothermic reactions? Be specific.



Kinetics and Equilibrium!

Big Idea: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.



What is that all about?

- Why do reactions take place?
- What factors affect how fast a reaction will be?
- What can cause a reaction to be out of whack?

What's so important about this unit?

- Other than EVERYTHING!... Take a look at the following table:



Symbol	Topic	Question Numbers	Total Questions
I	Introduction	10, 11, 12, 13, 32, 53	6
AS	Atomic Structure	1, 2, 3, 4, 39, 77, 82, 83	8
FE	Formulas & Equations	18, 19, 51, 54, 66	5
MS	Moles & Stoich	58, 67, 70	3
E	Energy		0
G	Gases	15, 37, 38	3
PT	Periodic Table	5, 6, 9, 31, 52	5
B	Bonding	7, 8, 17, 33, 34, 35, 71, 72, 74, 76	10
Matter	Matter	14, 40, 55, 73	4
S	Solutions	16, 57, 69	3
KE	Kinetics & Equilib	20, 36, 41, 45, 56, 60, 78, 80, 81	9
ABS	Acids/Bases/Salts	26, 28, 43, 47, 62, 63, 68	7
Redox	Redox	25, 27, 44, 46, 79	5
O	Organic	21, 22, 23, 24, 42, 59, 61, 64, 65, 75	10
N	Nuclear	29, 30, 48, 49, 50, 84, 85	7

January 2014 chemistry regents... question analysis

Symbol	Topic	Question Numbers	Total Questions
I	Introduction	13, 19, 49, 67, 69, 79	6
AS	Atomic Structure	1, 2, 3, 4, 5, 12, 31, 55, 56, 57, 58, 73, 74, 75	14
FE	Formulas & Equations	33, 36, 37, 47, 77	5
MS	Moles & Stoich	6, 23, 34, 35, 68, 76,	6
E	Energy	15	1
G	Gases	11, 42	2
PT	Periodic Table	7, 8, 14, 22, 39, 66	6
B	Bonding	9, 10, 21, 24, 38, 40, 51	7
Matter	Matter	20, 43, 45	3
S	Solutions	18, 62, 65	3
KE	Kinetics & Equilib	16, 17, 52, 53, 54, 63, 80, 81, 82	9
ABS	Acids/Bases/Salts	26, 27, 32, 50, 64, 78	6
Redox	Redox	25, 44, 70, 71, 72	5
O	Organic	46, 59, 60, 61, 83, 84, 85	7
N	Nuclear	28, 29, 30, 41, 48	5

June 2013 chemistry regents... question analysis

Collision Theory Recap

Collision theory states that a reaction is most likely to occur if reactant particles collide with the proper **energy** and **orientation**.



Scenario 1: The pitcher throws a fastball down the middle of the plate. The batter takes a mighty swing and totally misses the ball. The umpire yells, "Strike one!"

Scenario 2: The pitcher throws an off-speed pitch and the batter checks his swing. The batter just barely makes contact with the ball and it dribbles down in front of the batter's feet into foul territory. The umpire yells, "Foul ball; strike two!"

Scenario 3: The pitcher throws a curve ball that looks like it might catch the outside corner of the plate. The batter swings with all his strength, but the bat grazes the underside of the ball and the ball skews off to the right, flying into the crowd. The umpire yells, "Foul ball, still two strikes!"

Scenario 4: The pitcher throws another fastball down the middle of the plate. The batter swings and wallops the ball high into the air and the ball clears the center field wall that reads 410 feet. The ump yells, "Homerun!"

More Analogies...

How does collision theory relate to a game of billiards or bowling?



Endothermic vs Exothermic Reactions

Endothermic: energy goes into the reaction
(absorbed)

Exothermic: energy exits/released from the
reaction

Friday, February 27th



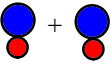
Learning Target : I can draw and label a potential energy diagram for endothermic and exothermic reactions .

Homework: n/a

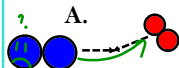
As you enter... (Checking in the first 10 min of class only)

1. What 2 factors determine if a collision is effective or not?

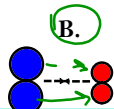
2. Which of the following collisions would result in an

effective reaction to form:  ?

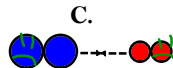
A.



B.



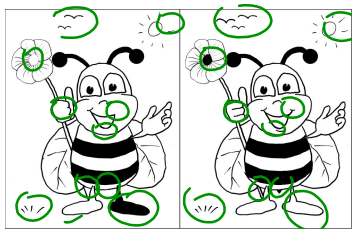
C.



Big Idea: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.

3rd period

- Notes: Labeling the potential energy diagram (15 min)
- Activity: What's wrong with this picture? (20 min)
- Exit Tix (10 min)



Activity: What's wrong with this picture?

1. Draw either an endothermic or an exothermic potential energy diagram on a blank piece of paper.
2. Label every part that we learned about, BUT... purposefully **make 1-3 mistakes** on your diagram in terms of the drawing or labeling.
3. You will get someone else's diagram and you will have to **find and correct** all of the mistakes.
4. Hand it back to the original artist when you are done to see if you found all of the mistakes.

- Reactants
- Products
- Reaction coordinate
- Potential energy
- activated complex
- activation energy
- heat of reaction

Tix out the door (Don't forget your name.)



1. Given the balanced equation representing a reaction: $O_2 \rightarrow O + O$

What occurs during this reaction?

- a. Energy is absorbed as bonds are broken
- b. Energy is absorbed as bonds are formed
- c. Energy is released as bonds are broken
- d. Energy is released as bonds are formed

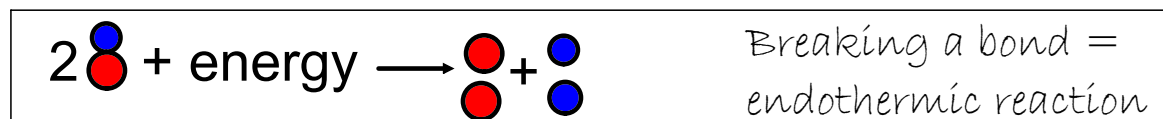
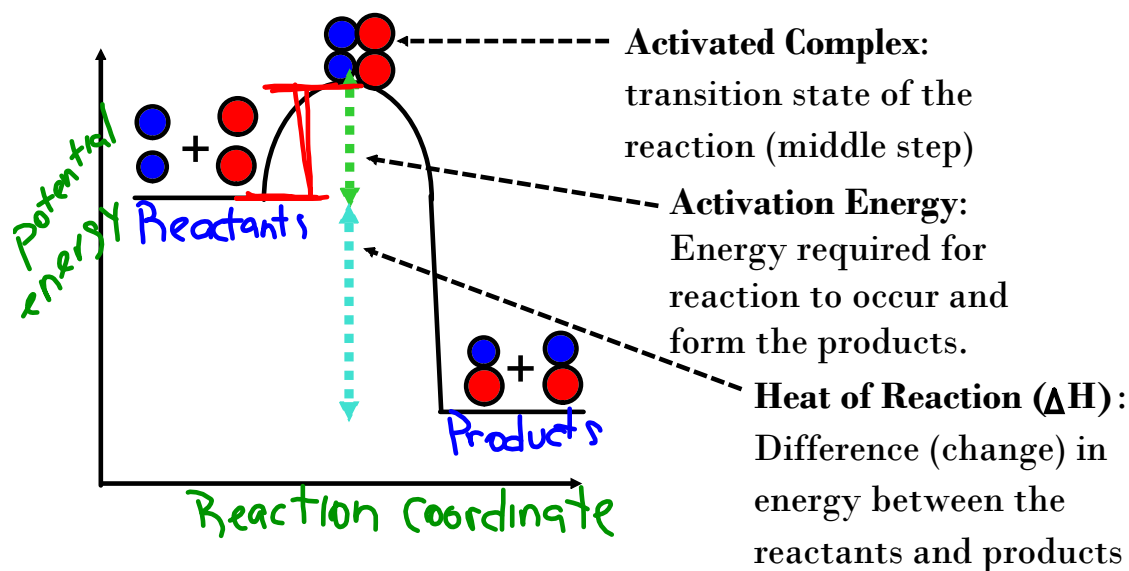
2.

According to Table I, which potential energy diagram best represents the reaction that forms $H_2O(l)$ from its elements?





Potential Energy Diagram



Potential Energy Diagram

