

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

Homework: Prep for project presentation on Wed

Sit with your group.

Monday, February 23rd

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?

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1. Importance & what you & what you did no life found to meet purpose

2. Who will you be filling out evaluations for after the

presentations are done?

everyone in group, 2 other groups, yourself

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.





# 8th/9th period

- Complete presentation boards...Write/type up project information for presentation (80 min)
- Exit Tix: Reflection (5 min)

Today: Using your guidelines and rubric, you should have

<u>Today:</u> Using your guidelines and rubric, you should have your entire presentation board completed today.

--Printouts to breanna.eng@rcsdk12.org

# Tomorrow:

9th period-- Prepare your 7 min talk

<u>Wednesday:</u> 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 in completing your presentation board? 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?

Board is 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.





# 9th period

- Prep for presentation (40 min)
- Exit Tix: Reflection (5 min)

# Presentation Day Setup EXPT 1 EXPT 2 7 min --> rotate (x2) Reflect and evaluate.

# Breanna. Eng CRCSDK12.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. :)



- Talk 1. Importance
  - 2. Did to meet purpose
  - 3. Results/Conclusion

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



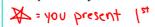
Learning Target: I can professionally present and thoughtfully reflect on my work.

Homework: n/a

## As you enter...

# PRESENTATION DAY!

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





Note: All assignments on Solutions due in the bin today

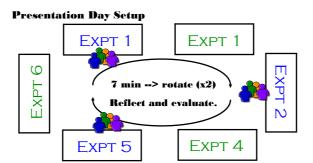
Big Idea: Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.





# 8th period

- Presentation Day! (30 min)
- Reflections: Complete evaluations in packet (15 min) 9th period
- NEW UNIT: Kinetics

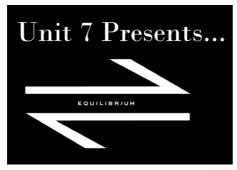




Tix out the door (Don't forget your name.)



- What is collision theory?
- What 2 factors determine if a collision is effective or not?



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
В	Bonding	7, 8, 17, 33, 34, 35, 71, 72, 74	1, 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	<u> </u>	5
0	Organic	21, 22, 23, 24, 42, 59, 61, 64,	65, 75	10
N	Nuclear	29, 30, 48, 49, 50, 84, 85		7

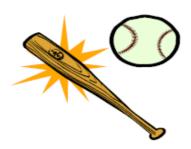
January 2014 chemistry regents... question analysis

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
В	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
0	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?







Thursday, February 26th



Learning Target: I can identify and represent an exothermic and/or endothermic reaction using potential energy diagrams. Homework: n/a

As you enter... (Write or rephrase the question(s))

What is collision theory?

2 particles that hit each other and form a new substance.

What two factors determine an effective collision?

energy & orientation

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.





# 9th 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.)

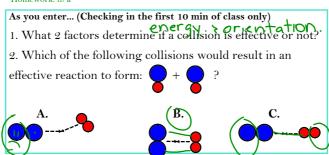


- 1. Give an example reaction of an <u>endothermic</u> reaction and draw the corresponding potential energy diagram.
- 2. Do the same as 1 for an exothermic reaction.

Exothermic Endothermic VS (absorb) enter of energy energy Rxn Coord reaction coordinate (time)

Friday, February 27th
Learning Target: I can draw and label a potential energy
diagram for endothermic and exothermic reactions .

Homework: n/a



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





### 8th period

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

# 9th period

- Catalyst FUN!
- Exit Tix (5 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.

# Activity 2: Create an analogy

Choose 1 of the following tasks to do to represent/show your understanding of a catalyst. You may work alone or with a small group.

- 1. ACT IT OUT
- 2. WRITE IT OUT
- 3. DRAW IT OUT

Last 15 minutes of class... we will share out our analogies.

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



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

What occurs during this reaction?

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

