

Name: _____ Period: _____

Final Due Date: **Friday, March 30, 2007**

Chemical Reactions



objectives:

STUDENTS WILL BE ABLE TO:

- A. Classify unknowns as acidic, basic, or neutral using indicators.
- B. Identify balanced equations as neutralization, combination, and decomposition reactions.
- C. Determine the effect of various factors on reaction rate (eg. Temperature, surface area, concentration, agitation).
- D. Illustrate the laws of conservation of matter and energy through balancing simple chemical reactions.
- E. Identify chemical reactions that commonly occur in the home and in nature.

lectures:

- Monday, 3/12/07: The Nature of Chemical Reactions (6.1)
- Tuesday, 3/13/07: Reaction Types (6.2)
- Wednesday, 3/14/07: Balancing Chemical Equations (6.3)
- Thursday, 3/15/07: Rates of Change (6.4)
- Friday, 2/26/07: Chapter 6 Review & Activity Day**
- Monday, 3/26/07: Acids and Bases (8.1)
- Tuesday, 3/27/07: Reactions of Acids with Bases (8.2)
- Wednesday, 3/28/07: Acids, Bases and Salts in the Home (8.3)
- Thursday, 3/29/07: Chapter 8 Review & Activity Day**
- Friday, 3/30/07: Unit 4 Review and UNIT 4 TEST!**



c layer activities:

Students must earn at least 200 points to receive a "C" grade for this unit. You must complete 200 points of C-Layer activities to advance to B-Layer activities. You MUST complete activities with a "*".

Points possible	Points earned	Assignment description	Date Due	Teacher initial
Chapter 6: (115 points minimum)				
*10		Read section 6.1 & outline notes. Turn in your notes OR Listen to lecture, participate & take notes on 3/12/07. Turn in your notes	3/12/07	

*10		Answer section 6.1 section review questions, practice problems and math skills OR Concept Review Worksheet: "The Nature of Chemical Reactions"	3/13/07	
*10		Read section 6.2 & outline notes. Turn in your notes OR Listen to lecture, participate & take notes on 3/13/07. Turn in your notes	3/13/07	
*10		Answer section 6.2 section review questions, practice problems and math skills OR Concept Review Worksheet: "Reaction Types"	3/14/07	
*10		Read section 6.3 & outline notes. Turn in your notes OR Listen to lecture, participate & take notes on 2/14/07. Turn in your notes	3/14/07	
*10		Answer section 6.3 section review questions, practice problems and math skills OR Concept Review Worksheet: "Balancing Chemical Equations"	3/15/07	
*5		Science Skills Worksheet: "Balancing Chemical Equations"	3/15/07	
*10		Read section 6.4 & outline notes. Turn in your notes OR Listen to lecture, participate & take notes on 3/15/07. Turn in your notes	3/15/07	
*10		Answer section 6.4 section review questions, practice problems and math skills OR Concept Review Worksheet: "Rates of Change"	3/16/07	
*5		Math Skills Worksheet: "Balancing Chemical Equations"	3/19/07	
*10		Chapter 6 Review (p.214-215) #1-20 OR Chapter Test A Worksheet: Chapter 6, "Chemical Reactions"	3/19/07	
5		Create flashcards or a flipbook for the key terms for Chapter 6	3/19/07	
5		Creative Thinking: p. 216, #31	3/19/07	
5		Concept Map p. 217, #37	3/19/07	
5		Create flashcards or a flipbook for each type of chemical reaction	3/19/07	
5		Use a Venn Diagram to compare and contrast single-displacement and double-displacement reactions, based on the number of reactants. Use the terms: compound, atom or element, and ion	3/19/07	
5		Use a Venn Diagram to compare and contrast a catalyst and an inhibitor	3/19/07	
8		Make a flow-chart to explain Le Chatelier's Principle	3/19/07	
Chapter 8: (85 points minimum)				
*10		Read section 8.1 & outline notes. Turn in your notes OR Listen to lecture, participate & take notes on 3/26/07. Turn in your notes	3/26/07	

*10		Answer section 8.1 section review questions, practice problems and math skills OR Concept Review Worksheet: "Acids and Bases"	3/27/07	
*5		Math Skills Worksheet: "Determining pH"	3/27/07	
*10		Read section 8.2 & outline notes. Turn in your notes OR Listen to lecture, participate & take notes on 3/27/07. Turn in your notes	3/27/07	
*10		Answer section 8.2 section review questions, practice problems and math skills OR Concept Review Worksheet: "Reactions of Acids with Bases"	3/28/07	
*10		Read section 8.3 & outline notes. Turn in your notes OR Listen to lecture, participate & take notes on 3/28/07. Turn in your notes	3/28/07	
*10		Answer section 8.3 section review questions, practice problems and math skills OR Concept Review Worksheet: "Acids, Bases and Salts in the Home"	3/29/07	
*10		Chapter 8 Review (p.276-277), #s 1-27 OR Chapter Test A-Chapter 5, "Acids, Bases and Salts"	3/30/07	
5		Create flashcards or a flipbook for the key terms for Chapter 8	3/30/07	
5		Concept Map p.279 # 46	3/30/07	
5		Applying Knowledge: p.278, # 34	3/30/07	

b layer activities:

Students choose 2 ONLY (20 points): You must complete 20 points in order to receive a "B", and to advance to the A-Layer activities.

Points possible	Points earned	Assignment description	Date Due	Teacher initial
10		Research: Research Carbon monoxide from cigarette smoke. Why do you think carbon monoxide is in the smoke? Why do you think smoking is bad for your health? Summarize your findings in a one-page paper.	3/30/07	
10		Research: Choose an item labeled "biodegradable", and research the decomposition reactions involved. Write balanced chemical reactions for the decomposition reactions. Be sure to note any conditions that must occur for the substance to biodegrade. Is this product good for the environment?	3/30/07	
10		Research: Research the invention of the pH meter by Dr. Arnold O. Beckman. Why was the pH meter invented? How does it work? Prepare a poster to present your results, including a one-page paper summarizing your findings	3/30/07	

a layer activities:

Students choose 1 ONLY (30 points): You must complete 30 points in order to receive an "A".

Students are responsible for conducting these labs. The student should gather all consumable and household supplies. The experiment should be done in class after the daily lecture. If a student would like to conduct a lab at home, that is acceptable. Any lab conducted at home must be written up on the appropriate form *and* signed by a parent/guardian observer. All labs **MUST** have pre-lab written *before* the student can begin the lab. The post-lab must also be completed and turned in for the points.

Points possible	Points earned	Assignment description	Date Due	Teacher initial
30		Quick Lab, p. 260, "Which household substances are acidic, which are basic, and which are neither?"	3/30/07	
30		Quick Lab, p.272, "What does an antacid do?"	3/30/07	
30		Make a poster about kitchen chemistry. Include pictures of drawings of at least 5 common kitchen procedures that depend on acid-base reactions. Write captions explaining what the reaction is and what is does (please write the reactions using chemical nomenclature).	3/30/07	