Chemistry - Mr. Rathje - 2014 - 2015

Hello, and welcome to Chemistry. Chemistry is one of my favorite subjects. For those of you who think the previous statement is crazy I will explain shortly. I am well aware that most students have had varied success when it comes to science. Regardless of your past, ALL students can do well in this class. We will be trying many different techniques to help you reach your potential. Remember that it is HARD WORK that will determine your success. In order to have a successful year we need to set some guidelines or rules.

Here are the class rules:

1. Be in your seat when the bell rings.
2. No food, pop, or candy in the lab. (State regulations)
3. Follow all class procedures. (Very important!)
4. Follow all rules in the student handbook.

Here are the consequences if you choose not to follow the rules:

1. Friendly warning.
2. Student-Teacher conference.
3. Parental contact.
4. Referral to Administration.

*Severe Disruptions may cause me to skip steps!

Required Materials: Lab book RECOMMENDED: Scientific calculator

Homework: Repetition and practice is the key to success in Chemistry. Because of this fact, homework is an extremely important part of this class. You will often be given time in class to complete the majority of each days assignment. What you do not finish will be considered homework.

Homework assignments are due at the beginning of class. ***"If you are early, you are on time. If you are on time, you are late. If you are late, you are FIRED."*** Homework is graded *on completion*. The majority of assignments are worth 4 points and graded as follows: All problems attempted ~ 4 pts, Majority (over half) of problems attempted but less than 100% ~ 2 pts, and *zero* points for anything under 50% completion. It is your responsibility to make up any assignments missed when you are absent. You will have one day for each day you miss with an *excused absence* – to turn in your make-up work. **SEE ME BEFORE SCHOOL!!**

Grades: Your marking period grade will be based on total points comprise of the following:
warm-ups, homework, labs, projects, quizzes, and tests
****Your grade will be adjusted according to the school policy for grade reductions related to attendance. Refer to the school handbook for reductions due to absences and tardies. (both excused and unexcused)

Semester Grades: Will be comprised of three marking period grades (90%) and a cumulative final exam (10%). The grading scale will be as follows: 100-98% A+, 97-93 A, 92-90 A-, 89-87 B+, 86-83 B, 82-80 B-, 79-77 C+, 76-73 C, 72-70 C-, 69-67 D+, 66-63 D, 62-60 D-, 59-below E.

Tests: All students are given the opportunity after each test to do test corrections. Students may earn half the points back for each question that is successfully corrected, up to a maximum increase of 10%.

Tests will generally be given for each chapter. If a cumulative test is given, it will count only towards the grade for the marking period in which it is given.

Notebooks: We will keep our warm-ups online this year. Each day must be labeled with the date AND number of your warm-ups. Problems (Warm-ups) must show work and be complete in order to receive the points for that day. Each warm-up is worth two (2) points. That is ten (10) points per week and will count toward your homework grade. I will "collect" your notebooks no less frequently than once each marking period. It is your responsibility to obtain any warm-ups missed due to absences (ask a classmate or see me).

Cheating/Plagiarism: Cheating in any form will not be tolerated. If I suspect that cheating or plagiarism has occurred, you will receive a zero for that particular quiz, test, or assignment, and so will the person whose paper you copied, NO exceptions!

F.I.T. Rules: Sign only YOURSELF in under the appropriate column in the F.I.T. book. You may ONLY sign up for F.I.T. the day before if it is after school, otherwise, sign up the day of. Please bring 28 minutes of work with you. You will not be allowed to leave the room once the F.I.T. period has started. Sleeping, eating, and drinking are not allowed in F.I.T. (NO F.I.T. on Thursdays)

I am looking forward to a great year in Chemistry. Remember that communication is the key. If you do not understand something, Ask!

Lab Reports

I. Outline of Lab Reports

A. Pre-lab quiz on some labs
B. Title (2pts)
C. Objectives/Purpose (2pts)
D. Data/Observations (10pts)
E. Calculations and Analysis (5pts)
F. Questions (to be determined)
G. Conclusion (5pts)
H. Error Statement (5pts)

**** Points may be shifted depending on what is included in the lab report.**

II. Missed Labs

Students are required to make-up the lab OR complete make-up assignment as given by teacher. Arrangements must be made by the student by the next school day. Do not forget!!!

Chemistry Laboratory Safety Agreement

The chemistry student's personal safety and that of others demands care in following all regulations and procedures. Each student is expected to operate in the laboratory in a safe manner at all times and is responsible for understanding the following rules. **If necessary, students will be removed from the laboratory area by the teacher if and when:**

1) Their personal appearance or dress is such that they can cause an injury to themselves or other students.
2) They are behaving in such a manner that they are placing themselves or other students at risk of injury.
3) They are not following the lab **safety rules** (see attached page).
4) They are going beyond the limits of science activity into areas that may lead to an unsafe situation.
5) They have not completed the pre-experiment activities that will allow them to work safely in the laboratory.

Rules of conduct for Laboratory Exercises

1. Always maintain a businesslike attitude.
2. Do not engage in practical jokes.
3. Loud talking and excessive discussion of matters unrelated to the experiment is unwise.
4. Dispose of chemicals as indicated by the instructor.
5. Never return excess chemicals to the bottle that you got them from. Ask the teacher what to do with them when finished.
6. Use only the amount of each chemical called for in the experiment.
7. Wash your hands thoroughly after each laboratory period.
8. Always leave your workbench clean and dry.

9. Be sure the gas and water outlets are turned off completely after use.
10. Any time you do not understand directions, ask instructor for help.
11. Know where the fire extinguisher is and how to use it.
12. Know the location of the eyewash and how to use it.
13. Know the location of the fire blanket and how to use it.
14. **Always wear eye protection (goggles) when doing an experiment.**
15. **Never wear contact lenses** in the laboratory. There is a distinct possibility that chemicals may infuse under the contact and cause irreparable eye damage.
16. Perform only the experiments in the laboratory manual or ones that have been approved by your instructor.
17. Never taste chemicals.
18. Never leave flames unattended.
19. Never use a flammable liquid near an open flame.
20. Never pour a flammable liquid into the sink.
21. **Notify your instructor of an accident, no matter how minor it may seem.**
22. Check the label and double check the label on all reagent bottles before using.
23. If spillage of an acid or base occurs, flood the area with water and notify your instructor immediately.
24. When diluting acids, ALWAYS pour the acid into the water. REMEMBER: A to W
25. When heating the contents of a test tube, keep it tilted and moving in the flame with the mouth pointed AWAY from yourself and all other persons.
26. Do not wear long, loose sleeves in the laboratory.
27. If you have long hair, you must tie it back with a rubber band or ribbon while working in the laboratory.
28. Never drink from the laboratory glassware and never pipette by mouth.
29. Never eat or drink in the laboratory.
30. Know the exit locations in the laboratory.
31. Examine equipment for cracks and other hazards before starting and experiment.
32. Know safety limits and hazardous properties of chemicals to be used before beginning.
33. Follow directions **very** carefully.
34. Consider every chemical as poison and protect yourself accordingly.
35. Never mix chemicals together unless the instructor or the experiment has indicated you should do so.
36. Handle glass carefully to avoid possible sharp edges.

Hot glassware* looks *the same as cool glassware. Always be sure to check if glassware is hot before touching or moving it.

a. ***Test the temperature of apparatus by holding the back of hand close and feeling for heat before grasping. Use beaker tongs to handle hot beakers.***

37. Never leave anything unattended while it is being heated or is reacting violently.
38. Be very cautious when testing for odors. (Waft!)
39. Concentrate at all times on what you are doing.
40. Do not do anything that would put you or another member of the class in a position of danger.

_____

Please sign below and return this sheet to Mr. Rathje by FRIDAY September 13, 2013.

_____

I have read and understand the rules and procedures for Mr. Rathje's class.

Student name (print): _____

Student signature: _____ Date: _____

Parent/Guardian signature: _____ Date: _____

To parents and students,

Thank you for your help with the understanding and application of these safety rules and procedures. It is my sincere ambition that all experiments will be conducted in a manner that will ensure the safety of each and every student.

Sincerely,

Ryan Rathje

Mr. Rathje
Chemistry Teacher
Marysville High School

****

_____

Agreement

I, _____ (student) have read the attached rules for safe conduct in the chemistry lab. I feel that I fully understand what they mean. I further understand that if I am not allowed to complete an exercise due to unsafe conduct, my grade for the exercise will be a (zero) 0.

I, _____ (parent) have read the attached rules. I feel that my child understands what they mean and the consequences of removal from the laboratory area. I would also like to inform the school that my child has the following physical or medical situations which could affect classroom or lab safety:

Home phone: _____ Work phone: _____