

Lab Title:...*Safety Lab*.....Lab #...1..

Lab Partners:.....

Your Lab Score will be based on the following:

Neatness: All labs must be **well-written and done in pencil** unless directed otherwise. There are to be no cross-outs or misspelled words. Questions should be answered in complete sentences.

Accuracy: Certain **questions will be checked** for accuracy.

Completeness: All questions are to be answered completely. There are to be **NO BLANKS** or incomplete sections.

Lab Class Procedure: You are to **follow directions** and use lab equipment properly, work for the entire period, and follow proper clean-up procedures

Rubric:

Lab Score Category	Points Earned										
Neatness	0	1									
Accuracy	0	1	2	3	4						
Completeness	0	1	2	3							
Lab Class Procedure	0	1	2								
<u>Total Lab Score</u>	0	1	2	3	4	5	6	7	8	9	10

You are to submit all lab material with this lab report:

Comments:

Safety

in the Biology Laboratory

Background: If there is one thing that can ruin a biology laboratory experiment or experience, it is the simple act of an accident or incident affecting a student, class, or the entire school. As such, there are certain rules and regulations that **MUST** be followed to ensure that everyone and everything remains safe. Completing the laboratory is a good way to make yourself aware of the hazards that may exist and be proactive with respect to your well-being and the safety of your fellow students.

Purpose: The purpose of this laboratory experience is:

- to make certain you know and agree to follow the rules and regulations that help keep the biology laboratory a safe place to work and gain knowledge.
- to identify hazards and implement a plan to react and respond to a hazardous condition if it presents itself.
- to agree with your teacher and your school that you will make your laboratory experience a positive learning time where you can gain valuable knowledge that supports the classroom curriculum.
- to agree that you will complete the 1,200 minutes of lab as well as the required New York State Education Department's mandated laboratory experiences in a timely fashion.

Materials: The following materials are needed to complete this laboratory experience:

- lab papers
- pencil
- A biology laboratory

Procedure:

1. Table 1 details the regulations and precautions that will be followed in our laboratory. Read each safety rule.
2. Give a reason as to why that rule is important in the space provided and add your initials to each explanation indicating that you will observe and obey this rule when you are working in the Biology laboratory. Safety in the laboratory must be a primary concern to both student and teacher.

Note: Each answer must refer to the specific rule you are addressing. General answers such as, "to be safe" are not acceptable.

Table 1: Safety Rules

Rule	Why is it Important?
At the beginning of most laboratories, your instructor will engage in a pre-lab discussion. Many safety procedures will be discussed during these discussions. Listen attentively and follow these procedures -- "an ounce of prevention is worth a pound of cure".	
Keep all books, papers, and other flammable materials away from hot plates or dangerous chemicals.	

<p>Tie back long hair when you are working with an open flame. Pipe cleaners, rubber bands, and string are useful for this purpose.</p>	
<p>Do NOT mix chemicals or perform unscheduled (unsanctioned) experiments without your teacher's approval</p>	
<p>Never use chemicals from an unlabeled container. Do not taste, smell, or touch chemicals unless specifically instructed by your teacher to do so.</p>	
<p>Wear safety goggles during experiments involving heating or hammering or while using acids or bases. If you do not have goggles on, stay away from students that are experimenting.</p>	
<p>It is also expected that you will wear goggles while doing dissections.</p>	
<p>Point the open end of a test tube or flask away from yourself and others while heating it. Never heat a closed container.</p>	
<p>Use squeeze bottles and droppers only for their intended purpose.</p>	
<p>No material should be left in the sinks; i.e. paper, beakers, etc.</p>	
<p>Discard all waste matter in the appropriate containers.</p>	
<p>Never place pencils, pens, or other materials in your mouth.</p>	
<p>NEVER return excess chemicals back to their container.</p>	
<p>Be certain that all laboratory equipment and materials are returned to their appropriate storage areas at the end of the laboratory period.</p>	
<p>Know where all laboratory safety equipment is located in case you need it.</p>	

<p>Most chemical spills are best handled by washing the affected area with water as quickly as possible. Call your teacher for assistance if necessary. Severe spills may require the removal of clothing.</p>	
<p>In an emergency situation an all too common response is panic. If you observe another student in trouble, tell them what to do, and assist them in doing it.</p>	
<p>You are responsible for keeping your laboratory area and completely neat and clean.</p>	

3. List the top five most important safety rules. All of these rules are VERY important but, these are rather specific. Feel free to combine similar rules into more general safety rules.

4. Take a few moments to walk around the lab. List 5 hazards present in the lab. For each hazard, describe what might be done to mitigate them.

Hazard	What can be done?
a.	
b.	
c.	
d.	
e.	

5. Why was this experience given to you?

6. What did you learn by completing this experience?

7. Describe a situation that could arise in lab. How would you respond to it?

8. How do you exit this room in case of a fire or fire drill? What if the entrance is blocked?

9. Read the Laboratory Completion Agreement on the next page. Then complete and sign the Student Laboratory contract

Laboratory Completion Agreement

The Living Environment offers a variety of laboratory exercises on current concepts in biology often using state of the art scientific equipment and technology. Various teaching techniques and materials will be employed to provoke student interest and enhance student understanding. Numerous laboratory methods will be utilized in demonstrations and student experiments. Safety instruction will be given and safe practices will be stressed in all laboratory work. Students will exercise critical thinking for solving problems and interpreting laboratory results.

STUDENT LABORATORY CONTRACT

I, _____, a student at New Paltz High School, have thoroughly read the Laboratory Safety Rules and Guidelines and do hereby agree to follow all safety rules and procedures given therein. I will conduct myself in a safe and conscientious manner in the laboratory. I will not perform any unauthorized lab procedure. I understand that misbehavior in the lab or failure to follow safe lab procedures could cause a serious accident. I further understand that a violation of these rules could result in my not being allowed to participate in future lab exercises.

Student Signature: _____ Date: _____