

Physics Lab Safety Contract (a sample, contributed by a Mater Dei HS teacher in 2017)

Labs are a very important part of science, and they are good preparation for life: you'll use skills like measuring and problem solving for the rest of your life. Most students like and remember labs better than the other parts of the course, so I use as many labs as possible. However, it's very important to be able to work safely in the lab area. **We'll discuss specific safety issues before every lab, but rules that apply to all labs, are listed below.**

1. **Safety is everybody's responsibility, and it's often a matter of common sense: Use yours!** Think about what you are doing: focus on the science, but also on safety. I should not have to point out that scissors should not be used to cut someone else's shirt, hair, or finger, or that a hot glue gun might cause burns.
2. **If you have questions** about the safety of any particular step, **ask me!** You may see a problem I simply didn't notice, or there may be something I forgot to warn you about. Safety, and learning in general, requires communication. I will usually discuss issues with individual lab groups, but sometimes I will need to address an issue with the entire class. **If I ask for your attention, stop what you are doing as soon as you can do so safely, and give me your full (and silent) attention.**
3. **Safety requires communication.** If your partner is doing something unsafe, point it out and fix the problem on your own if you can. If your partner doesn't listen to you, tell me so that I can deal with the situation. However, *if there is an accident, or a situation that threatens safety (yours or that of other students), get my attention immediately!* Call my name **loudly**, point to and describe the problem if you can. If you hear someone else doing this, stop what you are doing safely and quickly, set down any tools you're using, and point silently towards the problem until you're sure that I am focused on it. Then listen for my instructions. I might need someone run to the office or to call 911, but whatever I need, it's extremely important that the rest of the class remain calm so that I can address the problem. *If I am in trouble, I will try to ask for help and tell you what I need.* If I can't do this, whoever notices that I'm in trouble should act immediately, telling the rest of the class to stop working and stay calm and quiet. One person should dial the office (at ---) and ask for help. Someone else should go the office to ask in person, and a third person should ask Mr. ----- or Mr. ----- (my next-door neighbors) for help. If you know what to do to help, do that; if not, stay out of the way and be quiet so that you can hear the instructions of whoever comes to help.
4. **Tools.** We will build several projects that involve using glue guns or a very sharp "multi-cutter" tool to cut small wood or plastic pieces. Use these tools carefully. Keep blades closed when not in use.
5. **Horseplay.** *Running or wrestling in the lab or classroom areas is forbidden.* Some of our experiments involve projectiles (stuff flying through the air). Never aim at another person, even if you know it wouldn't hurt them.
6. **Clothing.** The MD uniform is usually fine for labs, but if it's a special dress day I may ask you to leave part of your costume in the classroom (the office has T-shirts they can lend you if you actually need to change clothes to work safely). Shoes must remain on your feet, and if you have long hair it should be tied back. I have rubber bands you can use, but you'd be wise to keep a hair tie that doesn't hurt your hair in your pencil bag.
7. **Keep your stuff on your desk or under your chair** -- NOT in the aisle between the desks. Take only what you need into the lab area -- usually this is nothing more than your lab paper and a pen or pencil.
8. **Goggles (and lab aprons, gloves, or other safety gear):** Eye safety is important, and a lab apron can keep acid off your clothes! We will not require these for most labs, but we will use them occasionally. If you want your own pair of goggles, buy one you can use for the next 4 years and keep it in your locker. However, I do have enough for everyone to use. Unless I instruct you differently, you must *put any safety gear on before you enter the lab area, and you must wear it (properly -- goggles don't belong on top of your head or under your chin) until you have cleaned up and are leaving the lab area.*
9. **Work Zones:** Everyone needs to be able to contribute to their lab group and to focus on the work their group is doing. *Stay with your group during lab activities,* and do not distract other groups by calling to or visiting your friends in other groups, even if your group has finished the activity.

Additional safety instructions may be given before or during any lab, and you are responsible for understanding and following them at all times. Demonstrations are labs which I do 'for you' while you watch – either they are too difficult, we don't have enough equipment, or they are too dangerous to do as labs. Therefore, safety rules are every bit as important during demonstrations as they are during labs. If you are concerned about the safety of any demonstration, please tell me; I will address your concerns before I perform the demonstration!

Consequences. The rules given here, and any safety instructions that I might give you before a specific lab, are very important. If you cannot or will not follow them, you may not participate in the lab. I often provide a warning before I remove you from a lab, but it depends on how dangerous the behavior is. Also, if I have warned anyone in the class, I will consider the entire class warned. (This way I don't have to remember who has and hasn't been warned!) If you are removed from a lab, you will spend the rest of the day in the classroom area. I will provide you with an alternative assignment, which will be worth 75% of the points that available for whatever the class is working on: even if you do the assignment perfectly, the best score you can get for that day's work is a D. (While a single D is unlikely to change your grade in the course, repeated D's can!) When I grade this alternative assignment, it will go in the grade book as a score with an 'a' written after it (15a, for example). The 'a' does not affect the way that sycamore calculates the grades, but it reminds me that this is an alternate assignment grade. I will also make a comment in the grade book as to why you were given the alternate assignment. (You can also earn detentions or be sent to the office for inappropriate or unsafe behavior, whether or not it occurs during a lab.)

I require both my students and their parent or guardian to read, understand, and sign this document, both because I want to make sure everyone knows how important safety is to me, and because I want to be sure everyone is aware of (and agrees to) the penalties attached to unsafe behavior in the lab and classroom. If you have questions about these rules, email me at ----- . This form must be returned, signed, before the end of the first full week of classes; after that point, if your form is not returned, you will not participate in any further lab activities.

Student:

I, _____ (your name), have read and understand this document, and I agree to abide by all safety rules, both written and spoken, whenever I am in the lab.

Class and block

Sign here

Parent or guardian:

I, _____ (state your name), have read and understand this document, and I will ask _____ (student's name) to abide by its terms.

Sign here