

# Molecular Biology Lab Safety Contract 2023-2024

**READ FIRST:** Molecular biology is a hands-on laboratory class, and students will be doing many labs and activities throughout the school year that may require the use of chemicals, laboratory equipment, and other items which, if used incorrectly, could become hazardous. Safety in the science classroom is the #1 priority! To ensure a safe science classroom, a list of rules has been developed and provided to you in this student safety contract. **These rules must be followed at all times.** You and a parent/guardian must review and sign the contract, and **return the signature page (last page) by MONDAY 9/11/23.** This contract must be signed before you will be allowed to participate in the upcoming labs in molecular biology.

## **GENERAL GUIDELINES:**

1. Conduct yourself in a responsible manner at all times in the laboratory.
2. Follow all written and verbal instructions carefully. If you do not understand a direction or part of a procedure, ASK MS. RILEY BEFORE PROCEEDING WITH THE ACTIVITY.
3. Never work alone in the laboratory. No student may work in the science classroom without the presence of the teacher.
4. When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
5. Perform only those experiments authorized by Ms. Riley. Unauthorized experiments are not allowed.
6. Do not eat food, drink beverages, or chew gum in the laboratory. Never use laboratory glassware as containers for food or beverages, or laboratory sinks as disposal for trash.
7. Always work in a well-ventilated area to remove fumes and vapors. Do not smell or deeply inhale chemicals or laboratory substances without instruction. If you are ever required to observe the smell of a substance, waft the substance toward you by waving your hand back and forth.
8. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times, and care should be taken not to damage the lab tables and equipment. Notify Ms. Riley immediately if you notice any damage to equipment or damage/issues with cleanliness at your lab table. Use a rag to wipe off marks on lab tables and be sure to ALWAYS completely clean up the sink. **LEAVE IT BETTER THAN YOU FOUND IT!**
9. Be alert and proceed with caution at all times in the laboratory. Notify Ms. Riley immediately of any unsafe conditions you observe.
10. Labels and equipment instructions should be read carefully before use. Set up and use the materials and equipment only as instructed to do so.
11. Keep hands away from face, eyes, mouth, and body while using chemicals or lab equipment. Wash your hands with soap and water after labs.
12. Experiments must be personally monitored at all times. Do not wander around the room, distract other students, startle other students or interfere with the laboratory experiments of others. Horseplay and off-task behavior is dangerous and prohibited, and any lab members participating in such behavior will face immediate consequences, including loss of points and/or parent notification.
13. Know the locations and operating procedures of all safety equipment including: first aid kit(s), emergency eye wash, fire extinguisher.

14. Know where the fire alarm and the exits are located. Know what to do if there is a fire or fire drill during a laboratory period: Containers must be closed, and any electrical equipment turned off.

15. Any time chemicals or heat are used, students will wear safety glasses/goggles. NO EXCEPTIONS TO THIS RULE!

#### **ACCIDENTS AND INJURIES:**

16. If any accident (spill of chemicals, breakage of glassware, etc.) occurs, immediately notify Ms. Riley. Do not begin to clean it up yourself unless you have been given permission to do so.

17. If you or your lab partner is injured (cut, burn, etc), IMMEDIATELY notify Ms. Riley, no matter how trivial it may seem. Stay calm.

18. If a chemical should splash in your eye(s) or on your skin, immediately notify Ms. Riley. Flush eyes with running water at the eyewash station for at least 15 minutes if a chemical or foreign object enters the eyes.

#### **HANDLING CHEMICALS:**

19. All chemicals in the laboratory are to be considered dangerous and instructions for handling chemicals should be strictly followed. When making an observation, keep a safe distance away from chemicals/specimens. Do not taste or smell any chemicals/specimens. Do not touch chemicals or specimens unless directed to do so, and only in the manner instructed.

#### **HANDLING GLASSWARE AND EQUIPMENT:**

20. Never handle broken glass with your bare hands. Notify Ms. Riley immediately when glassware has broken, and use a broom/brush and dustpan to carefully clean up broken glass with Ms. Riley's supervision. Place broken glass in the designated broken glass disposal container.

21. Examine glassware before each use. Don't use chipped, cracked, or dirty glassware. Notify Ms. Riley if you see it.

22. If you do not understand how to use a piece of equipment, ASK MS. RILEY FOR HELP FIRST!

23. Do not immerse hot glassware in cold water. The glassware may shatter!

#### **HEATING SUBSTANCES:**

24. Do not operate a hot plate or gas burner by yourself. Take care that hair, clothing, and hands are a safe distance from the hot plate or gas burner at all times. Use of hot plate is only allowed when Ms. Riley is present in the room and has instructed you to do so, and all hot plates and burners should be monitored at all times (never left unattended).

25. Heated glassware may remain very hot for a long time! They should be set aside in a designated place to cool, and picked up with caution. Use tongs or heat protective gloves when necessary. Never look directly into a container that is being heated.

26. Do not place hot glassware or objects directly on the laboratory table/surfaces. Always use an insulated pad or wait for the hot object to cool before removing it from the hot plate. Always allow plenty of time for a hot apparatus to cool before touching it.

#### **CLEAN UP/ DISPOSAL:**

27. Always follow Ms. Riley's directions carefully for disposal of all chemicals or laboratory wastes. Do not ever pour substances down the sink unless told to do so!

28. **ALWAYS CLEAN UP** your lab station/materials completely, **following all clean-up instructions and making sure all materials are left orderly for the next class period.** Leave it the same (or better!) than you found it! **Members of lab groups that do not follow clean up procedures properly will have points deducted from their grades.**

**Student Name (first and last, please print clearly):** \_\_\_\_\_  
**Molecular Biology- Per.** \_\_\_\_

## **2023-2024 MOLECULAR BIOLOGY LAB SAFETY CONTRACT PAGE**

Student Agreement:

I have read and agree to follow all of the safety rules set forth in the lab safety contract. I realize that I must adhere to these rules to ensure my own safety and that of my fellow classmates and teacher. I will cooperate to the fullest extent with Ms. Riley and follow directions to maintain a safe science lab environment. I am aware that any violation of this safety contract (that results in unsafe conduct in the laboratory or misbehavior on my part) may result in my being removed from the lab classroom, a call home, detention, receiving a failing grade on an assignment, and/or further disciplinary action.

\_\_\_\_\_  
Student signature

\_\_\_\_\_  
Date

Dear Parent or Guardian:

We feel that you should be informed regarding Kennedy High School's effort to create and maintain a safe science classroom/laboratory environment. With the cooperation of the teachers, parents, and students, a safety instruction program can eliminate, prevent, and correct possible hazards. You should be aware of the safety instructions your student will receive before engaging in any laboratory work. Please read the list of safety rules above. No student will be permitted to perform laboratory activities unless this contract is signed by both the student and parent/guardian and is on file with the teacher. Your signature on this contract indicates that you have read this Student Safety Contract, are aware of the measures taken to ensure the safety of your student in the science laboratory, and will instruct your student to uphold the agreement to follow these rules in the laboratory.

\_\_\_\_\_  
Parent/Guardian signature

\_\_\_\_\_  
Date

**PLEASE RETURN THIS PAGE ONLY TO MS. RILEY- DUE BY MON. 9/11/23**