

# TOWNSEND HARRIS HIGH SCHOOL AT QUEENS COLLEGE

Thomas Cunningham, Principal  
Susan Brustein, Assistant Principal, Supervision

## STUDENT LABORATORY SAFETY CONTRACT

### Purpose

Science is a hands-on laboratory class. Safety in the science classroom is the #1 priority for students, teachers, and parents. 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. Two copies of the contract are provided. A copy must be signed both by you, and a parent or guardian, before you can participate in the laboratory. The second copy is to be kept in your science notebook as a constant reminder of the safety rules.

### General Guidelines

1. Conduct yourself in a responsible manner at all times in the laboratory. Follow all written and verbal instructions carefully. If you do not understand a direction or part of a procedure, ask the instructor before proceeding.
2. No student may work in the laboratory without an instructor present.
3. Never touch any equipment, chemicals, or other materials until you are instructed to do so.
4. You may not eat or drink in the lab.
5. Carefully follow all instructions, both written and oral. Unauthorized experiments are prohibited.
6. Be prepared for your work in the laboratory. Read all procedures thoroughly before entering the laboratory.
7. Work areas should be kept clean and neat at all times. Bring only your laboratory instructions, work sheets, and/or reports to the work area. Other materials (books, purses, backpacks, etc.) must be stored away from the work area.
8. Know the locations and operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, fire extinguisher, and fire blanket. Know where the fire alarm and the exits are located.
9. Dispose of all chemical waste properly. Never mix chemicals in sink drains. Sinks are to be used only for water and those solutions designated by the instructor. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in the proper waste containers.
10. Keep hands away from face, eyes, mouth and body while using chemicals or preserved specimens. Wash your hands with soap and water after performing all experiments. Clean and wipe dry all work surfaces and apparatus at the end of the experiment.
11. You will be assigned a laboratory station at which to work. You may not wander around the lab.
12. If there is a fire drill during your lab period, turn off all gas valves, fume hoods and electrical equipment before leaving.
13. Handle all living organisms used in a laboratory activity in a humane manner. Preserved biological materials are to be treated with respect and disposed of properly.
14. When using knives and other sharp instruments, always carry with tips and points pointing down and away. Always cut away from your body. Never try to catch falling sharp instruments. Grasp sharp instruments only by the handles.

### Clothing

15. Laboratory goggles MUST, without exception, be worn any time chemicals, heat, or glassware are used.
16. Contact lenses should not be worn in the laboratory unless you have permission from your instructor.
17. Dress for safety when working in the lab. Long hair must be tied back and dangling jewelry and loose or baggy clothing must be secured. Shoes must completely cover the foot. No sandals allowed.

## Accidents and Injuries

18. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the instructor immediately.
19. If a chemical should splash in your eye(s) or on your skin, immediately flush with running water from the eyewash station or safety shower for at least 20 minutes. Notify your teacher immediately.

## Handling Chemicals

20. All chemicals in the laboratory are to be considered dangerous. Do not touch or smell any chemicals unless specifically instructed to do so. The proper technique for smelling chemical fumes will be demonstrated to you. NEVER taste *any* chemicals.
21. Check the label on chemical bottles before removing any of the contents. Take only as much chemical as you need. Never return unused chemicals to their original containers.
22. Always use a rubber bulb or pipet pump to fill a pipet..
23. When transferring reagents from one container to another, hold the containers away from your body.
24. Acids must be handled with extreme care. Always add acid to water slowly and carefully swirl or stir the solution.
25. Never remove chemicals or other materials from the laboratory area.

## Handling Glassware and Equipment

26. Carry glass tubing, especially long pieces, in a vertical position to minimize the likelihood of breakage and injury.
27. Never handle broken glass with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.
28. Inserting and removing glass tubing from rubber stoppers can be dangerous. Always lubricate glassware (tubing, thistle tubes, thermometers, etc.) before attempting to insert it in a stopper. Always protect your hands with towels or cotton gloves when inserting glass tubing into, or removing it from, a rubber stopper. If a piece of glassware becomes "frozen" in a stopper, take it to your instructor for removal.
29. When removing an electrical plug from its socket, grasp the plug, not the electrical cord. Hands must be completely dry before touching an electrical switch, plug, or outlet.
30. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.
31. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
32. If you do not understand how to use a piece of equipment, ask the instructor for help.
33. Do not immerse hot glassware in cold water; it may shatter.

## Heating Substances

34. Exercise extreme caution when using a gas burner. Take care that hair, clothing and hands are a safe distance from the flame at all times. Do not put any substance into the flame unless specifically instructed to do so. Never reach over an exposed flame. Light gas (or alcohol) burners only as instructed by the teacher.
35. Never leave a lit burner unattended. Never leave anything that is being heated or is visibly reacting unattended. Always turn the burner or hot plate off when not in use.
36. You will be instructed in the proper method of heating and boiling liquids in test tubes. *Never* point the open end of a test tube being heated at yourself or anyone else.
37. Heated metals and glass remain very hot for a long time. They should be set aside to cool and picked up with caution. Use tongs if necessary.
38. Never look into a container that is being heated.
39. When bending glass, allow time for the glass to cool before further handling. Hot and cold glass have the same visual appearance. Determine if an object is hot by bringing the back of your hand close to it prior to grasping it.



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PRINT YOUR NAME \_\_\_\_\_ SCIENCE CLASS \_\_\_\_\_  
TEACHER \_\_\_\_\_

### Questions (circle the appropriate answer)

1. Do you wear contact lenses? \_\_\_\_\_ YES \_\_\_\_\_ NO
2. Are you color blind? \_\_\_\_\_ YES \_\_\_\_\_ NO
3. Do you have allergies? \_\_\_\_\_ YES \_\_\_\_\_ NO
4. If so, list specific allergies: \_\_\_\_\_

### Laboratory Safety Agreement

I, \_\_\_\_\_ (student's name) have read and agree to follow all of the safety rules set forth in this contract. I realize that I must obey these rules to insure my own safety, and that of my fellow students and instructors. I will cooperate to the fullest extent with my instructor and fellow students to maintain a safe lab environment. I will also closely follow the oral and written instructions provided by the instructor. 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 being removed from the laboratory, detention, receiving a failing grade, and/or dismissal from the course.

Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Dear Parent or Guardian:

We want you to be aware of Townsend Harris High School's effort to create and maintain a safe science classroom/laboratory environment. With the cooperation of the instructors, parents, and students, a safety instruction program can eliminate, prevent, and correct possible hazards. The safety instructions your son/daughter will receive before engaging in any laboratory work are listed above. Please read the list of safety rules with your student. No one 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 insure the safety of your son/daughter in the science laboratory, and will instruct your son/daughter to uphold his/her agreement to follow these rules and procedures in the laboratory.

Parent/Guardian Signature \_\_\_\_\_ Date \_\_\_\_\_