



Science is a hands-on laboratory class. You will be doing some laboratory activities which may require the use of hazardous chemicals and materials. Safety in the science classroom is the #1 priority for students, teachers, and

parents. To ensure a safe science classroom, you will need to follow the rules in this student safety contract. Two copies of the contract will be provided. One copy must be signed by both you and a parent or guardian **before** you can participate in the laboratory and the second copy is to be kept in your science notebook. Violation of a safety rule will result in disciplinary action ranging from a 0 for the lab activity to being forbidden to do lab work during class time. If your behavior in class poses a safety risk, it is our legal and paramount duty to remove you from class to protect yourself and others.

# GENERAL

- 1. Always conduct yourself in a responsible manner in the laboratory.
- 2. Follow all written and verbal instructions carefully. If you do not understand a direction or part of a procedure, ask your teacher before proceeding.
- 3. Never work alone. No student may work in the laboratory without a teacher present.
- 4. When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory area until you are told to do so.
- 5. Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages.
- 6. Perform only those experiments authorized by teacher. Never do anything in the laboratory that is not called for in the laboratory procedures or by your teacher. Carefully follow all instructions, both written and oral. Unauthorized experiments are prohibited.
- 7. Be prepared for your work in the laboratory. Read all procedures thoroughly before entering the laboratory.
- 8. Never fool around in the laboratory. Horseplay, practical jokes, and pranks are dangerous and prohibited.
- 9. Work areas should always be kept clean and tidy. Bring only your laboratory instructions, worksheets, and/or reports to the work area. Other materials (books, purses, backpacks, headphones, etc.) should be stored in the classroom area.
- 10. Keep aisles clear.
- 11. Know the locations and operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, fire extinguisher, fire blanket, etc. Know where the fire alarm and the exits are located.
- 12. Use the fume hood when working with volatile substances or poisonous vapors. Never place your head into the fume hood.
- 13. Be alert and always proceed with caution in the laboratory. Notify the teacher immediately of any unsafe conditions you observe.
- 14. 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 teacher. Solid chemicals, metals, matches, filter paper, and all other insoluble materials are to be disposed of in the proper waste containers, not in the sink. Check the label of all waste containers twice before adding your chemical waste to the container.
- 15. Set up and use the assigned equipment as directed in the laboratory instructions or by your teacher.
- 16. 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 all work surfaces and apparatus at the end of the experiment. Return all equipment clean and in working order to the proper storage area.
- 17. Experiments must always be personally monitored. You will be assigned a laboratory station at which to work. Do not wander around the room, distract other students, or interfere with the laboratory experiments of others.
- 18. Students are never permitted in the science storage or preparation areas unless given specific permission by their teacher.
- 19. Know what to do if there is a fire drill during a laboratory period; containers must be closed, gas valves turned off, fume hoods turned off, and any electrical equipment turned off.
- 20. 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.
- 21. 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.
- 22. If you have a medical condition (e.g., allergies, pregnancy, etc.), check with your physician prior to working in lab.

### CLOTHING

- 23. Any time chemicals, heat, or glassware are used, students will wear laboratory goggles. Eye protection (goggles or tempered shop glasses) must also be worn during experiments involving airborne objects that have a high potential for serious eye impact injury. **No exceptions!**
- 24. For certain experiments, contact lenses should not be worn in the laboratory unless you have permission from your teacher.
- 25. Dress properly during a laboratory activity. Long hair, dangling jewelry, and loose or baggy clothing are a hazard in the laboratory. Long hair must be tied back, and dangling jewelry and loose or baggy clothing must be secured. For certain experiments, shoes must completely cover the foot.
- 26. For certain experiments, lab coats or aprons will be provided for your use and should be worn for the duration of the experiment.

### ACCIDENTS AND INJURIES

- 27. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the teacher immediately, no matter how small.
- 28. If you or your lab partner are hurt, immediately yell "help" to get the teacher's attention.
- 29. If a chemical splash causes entry into 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 the teacher immediately.

#### HANDLING CHEMICALS

- 30. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemicals unless specifically instructed to do so. The proper technique for smelling chemical fumes will be demonstrated to you.
- 31. Check the label on chemical containers twice before removing any of the contents. Take only as much chemical as you need.
- 32. Never return unused chemicals to their original containers.
- 33. Never use mouth suction to fill a pipette. Use a rubber bulb or pipet pump.
- 34. Acids must be handled with extreme care. You will be shown the proper method for diluting strong acids. Always add acid to water, swirl or stir the solution and be careful of the heat produced, particularly with sulfuric acid.
- 35. Handle flammable hazardous liquids over a pan to contain spills. Never dispense flammable liquids anywhere near an open flame or source of heat.
- 36. Never remove chemicals or other materials from the fume hood or laboratory area
- 37. Take great care when transporting acids and other chemicals from one part of the laboratory to another. Hold them securely and walk carefully.

#### HANDLING GLASSWARE AND EQUIPMENT

- 38. If you or another student accidentally break glassware, inform your teacher. Never handle broken glass.
- 39. 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.
- 40. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.
- 41. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
- 42. If you do not understand how to use a piece of equipment, ask the teacher for help.
- 43. Do not submerge hot glassware in cold water; it may shatter.

### **HEATING SUBSTANCES**

- 44. Exercise extreme caution when using a gas burner. Take care that hair, clothing, and hands are always a safe distance from the flame. Do not put any substance into the flame unless specifically instructed to do so. Never reach over an exposed flame. Light gas burners only as instructed by the teacher.
- 45. 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.
- 46. You will be instructed in the proper method of heating and boiling liquids in test tubes. Do not point the open end of a test tube being heated at yourself or anyone else.
- 47. 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 or heat-protective gloves if necessary.
- 48. Never "look into" a container that is being heated.

# FAILURE TO SIGN AND RETURN THIS FORM DOES NOT REMOVE THE LIABILITY FOR YOUR ACTIONS. YOU MUST BE A RESPONSIBLE CITIZEN REGARDLESS OF YOUR WILLINGNESS TO PARTICIPATE IN ACTIVITIES.

Your student will be instructed further in appropriate safety actions for each individual lab. If you have any questions, please call at (206) 631-7055 or email at cody.mcclurg@highlineschools.org. Thank you for your support.

#### Mount Rainier Science Department

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|-----------------------------------|--------------------------------|-------------------------------|---------------------------------------|----------------------------------|
| Student Name:                     |                                | Signature:                    |                                       | Date:                            |
| Parent/Guardian Name:             |                                | Signature:                    |                                       | Date:                            |
| Subject and Period:               |                                |                               |                                       |                                  |