



2023-2024

Safety Contract & Class Agreement (Grades 6-12)

PURPOSE

Science is a hands-on laboratory class. Students will be doing many laboratory activities which require the use of hazardous chemicals. 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 parents/guardians and to students in this safety contract. These rules must be followed at all times.

This agreement must be signed prior to participation in the laboratory.

GENERAL RULES FOR STUDENTS

1. Students must conduct themselves in a responsible manner at all times in the laboratory.
2. Follow all written and verbal instructions carefully. If a student does not understand a direction or part of a procedure, the student must ask the instructor before proceeding.
3. Never work alone. No student may work in the laboratory without an instructor present.
4. When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory area until instructed 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 the instructor. Never do anything in the laboratory that is not called for in the laboratory procedures or by the instructor. Carefully follow all instructions, both written and oral. Unauthorized experiments are prohibited.
7. Be prepared for 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. Observe good housekeeping practices. Work areas should be kept clean and tidy. Bring only laboratory instructions, worksheets, and/or reports to the work area. Other materials (books, purses, backpacks, etc.) should be stored in the classroom area. Keep aisles clear. Push in chairs under desks when not in use.
10. 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.
11. Always work in a well-ventilated area. Use the fume hood when working with volatile substances or poisonous vapors. A student must never place their head into the fume hood.
12. Be alert and proceed with caution at all times in the laboratory. Notify the instructor immediately of any unsafe conditions.
13. 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, not in the sink. Check the label of all waste containers twice before adding chemical waste to the container.
14. Labels and equipment instructions must be read carefully before use. Set up and use the prescribed apparatus as directed in the laboratory instructions or by the instructor.
15. Keep hands away from face, eyes, mouth and body while using chemicals or preserved specimens. Wash 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.

16. Experiments must be personally monitored at all times. Each student 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.
17. Students are never permitted in the science storage rooms or preparation areas unless given specific permission by their instructor.
18. 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.
19. 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.
20. When using knives and other sharp instruments, always carry with the tips and points pointing down and away. Always cut away from the body. Never try to catch falling sharp instruments. Grasp sharp instruments only by the handles.
21. If a student has a medical condition (e.g., allergies, pregnancy, etc.), check with the student's physician prior to working in the lab.

CLOTHING

22. Any time chemicals, heat, or glassware are used, students must wear laboratory goggles. There will be no exceptions to this rule! If a student wears contact lenses, the student must tell the instructor and obtain the designated laboratory goggles.
23. 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. Shoes should completely cover the foot; no sandals allowed.
24. Lab aprons have been provided for student use and should be worn during laboratory activities.

ACCIDENTS AND INJURIES

25. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the instructor immediately, no matter how trivial it may appear.
26. If a student or student's lab partner is hurt, immediately yell out to get the instructor's attention.
27. If a chemical splashes in a student's eye(s) or on skin, immediately flush with running water from the eyewash station or safety shower for at least 20 minutes. Notify the instructor immediately.
28. When mercury thermometers are broken, mercury must not be touched. Notify the instructor immediately.

HANDLING CHEMICALS

29. 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 chemicals will be demonstrated.
30. Check the label on chemical bottles twice before removing any of the contents. Take only as much chemical as needed.
31. Never return unused chemicals to their original containers.
32. Never use mouth suction to fill a pipet. Use a rubber bulb or pipet pump.
33. When transferring reagents from one container to another, hold the containers away from the body.
34. Acids must be handled with extreme care. The teacher will demonstrate 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. Take great care when transporting acids and other chemicals from one part of the laboratory to another. Hold them securely and walk carefully.

37. Never remove chemicals or other materials from the laboratory area.

HANDLING GLASSWARE AND EQUIPMENT

38. Carry glass tubing, especially long pieces, in a vertical position to minimize the likelihood of breakage and injury.

39. Never handle broken glass with bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.

40. 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. A student must always protect their 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 the instructor for removal.

41. Fill wash bottles only with distilled water and use only as intended, e.g., rinsing glassware and equipment, or adding water to a container.

42. 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.

43. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.

44. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.

45. If a student does not understand how to use a piece of equipment, the student should ask the instructor for help.

46. Do not immerse hot glassware in cold water; it may shatter.

HEATING SUBSTANCES

47. 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.

48. 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.

49. Students will be instructed in the proper method of heating and boiling liquids in test tubes. Students must not point the open end of a test tube being heated at self or anyone else.

50. 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.

51. Never look into a container that is being heated.

52. Do not place hot apparatus directly on the laboratory desk. Always use an insulating pad. Allow plenty of time for a hot apparatus to cool before touching it.

53. 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 the hand close to it prior to grasping it.

WHOA THERE YOUNG SCIENTISTS!

54. Watching a demonstration or performing a laboratory exercise does not provide the student with enough practical experience or background in hazardous chemicals and safety procedures to try

out their own version at home. Unless a student has been specifically told by the instructor that it is safe, the student should never try out experiments from this course outside of the school's academic setting.

OUTDOOR LABS

55. Stay in the designated area for the lab. Students must not wander off. Students must be supervised at all times.

56. Stay on paved sidewalks and step only after looking to see that it is safe. "WATCH WHERE YOU STEP!"

57. Beware of bees, snakes, and spiders.

58. Sun protection is recommended.

59. Wear closed toe shoes and gloves when instructed.

QUESTIONS

Does your student wear contact lenses? ___ YES ___ NO

Is your student color blind? ___ YES ___ NO

Does your student have allergies? ___ YES ___ NO

If so, list specific allergies: _____

AGREEMENT

Dear Parent or Guardian:

This is to inform you regarding the 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. 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 parent/guardian and the student (in class after review with the teacher) 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 their agreement to follow these rules and procedures in the laboratory.

Additionally, I have read and understood the course requirements (outlined in the course syllabus) and the academic honesty policy (CVUSD Administrative Regulations and Board Policy 5131.9).

Parent/Guardian Signature: _____

Date: _____