

SPARTA HIGH SCHOOL
SCIENCE DEPARTMENT
CHEMISTRY SAFETY REGULATIONS
MUST BE "Signed" in Genesis to participate in Labs

1. Students are not permitted to bring food, candy, or beverages in the laboratory.
2. All students must wear approved safety goggles when involved in a laboratory activity in which caustic liquids, hot liquids, or solids are used in the activity, exposure to which might have an adverse effect on the tissue of the eyes.
3. It is required that all students who wear contact lenses remove them prior to all laboratory activities when chemicals are used and wear prescription eyeglasses and safety goggles.
4. All students are required to wear chemical resistant laboratory aprons when *any* chemical substances are used. (Many substances can cause burns, irritation, or be absorbed through the skin.)
5. All students are required to wear the proper shoes during all laboratory activities. Sandals and other open shoes are not permitted during laboratory activities.
6. Students with long hair exceeding shoulder length must tie back their hair when involved in laboratory activities.
7. Know the location of the fire blanket. If clothing should catch fire, smother the fire with the blanket.
8. Never taste chemicals or drink from a beaker in the laboratory.
9. Always waft odors toward your nose with your hand. Never breathe the odors directly nor ask a partner to do so.
10. Wash hands after handling chemicals.
11. Report all injuries to the teacher immediately regardless of how minor.
12. When evaporating a solution to dryness in an evaporating dish, place an inverted beaker or watch glass above the dish as protection from splattering. If available, use a hot plate with a temperature control or heat lamps.
13. Never point a heated test tube in anyone's direction. Hold it at an angle and heat it gently. While being heated, a test tube should never be more than half full. Keep the test tube moving in the flame.
14. If an acid or caustic material contacts the skin, flush with water for 10 minutes. Use the eyewash station if necessary.
15. Erlenmeyer and Florence flasks should be clamped to ring stands in addition to being supported on a wire gauze and ring.
16. Check bent glass tubing to ensure that a flow of gas is not obstructed.
17. To insert a thermometer or glass tubing into rubber stoppers, wet the glass and stopper with water or glycerin beforehand. Never push hard and use a turning motion. Do not use glycerin if the assembly is to be exposed to nitric acid. The use of a cork borer can facilitate the insertion.
18. Remove glass thermometers or tubing as soon as possible after use to prevent the glass from "freezing" to the stopper. If the glass has frozen to the stopper either split the stopper with a sharp knife or bore the tube out the stopper with a cork borer.

19. Sink drains should be thoroughly flushed with water after spilling out reagents. Follow the directions given by the teacher when disposing of chemicals.
20. Never return unused solution to stock containers or reagent bottles. Read the direction carefully to determine the amounts that you need for the laboratory activity.
21. Learn and use the correct technique for pouring chemicals from reagent bottles. Hold the glass stopper above the hand and between the index and middle finger so that the same hand can grasp the bottle. Be sure to wipe off the side of the reagent bottle if any of the reagent spills down the side during the pouring.
22. When pouring chemicals from beakers use a stirring rod to direct the flow.
23. Be especially careful with organic solvents since many are highly flammable and toxic.
24. In all cases of diluting acids, the acid should always be added to the water.
25. Mouth pipetting should never be done.
26. Check all glassware for cracks before using. Discard those pieces that have a crack in the appropriate place.
27. When carrying long pieces of glass tubing, hold them vertically.
28. If you feel faint or nauseous, begin to cough excessively, or your eyes begin to water, inform your teacher. You may have a reaction to some of the chemicals that are being used in the laboratory activity. Remember not everyone reacts in the same way for all chemicals.
29. Be alert and maintain decorum during laboratory activities. Never rush. Always be prepared to stop quickly.
30. Do not carry hot equipment or dangerous chemicals through a congested area of students.
31. When involved with an open flame such as a Bunsen burner, keep your head back from the flame and tie back long hair.
32. Do not wear loose clothing or jewelry.
33. Do not leave a colorless Bunsen flame unattended. If the burner is to be kept lighted, shut off the air vent and decrease the gas supply to produce a visible flame.

Finally, most of the chemistry laboratory activities have been done by many students. Over the years they have proven to be very safe. In fact, the laboratory is much safer than your home. By taking precaution and being forewarned, the chemistry laboratory will continue to remain a safe place. Hopefully, the experience in the chemistry laboratory will not only be a safe one but will make the student more safety conscious at home.