

# North East Independent School District

## Science Safety Rules



### PURPOSE

Science is a hands-on, minds-on laboratory class. Throughout the year, you will be doing many laboratory activities that may require the use of hazardous chemicals or specialized equipment. In North East, safety in the science classroom is the first priority for students and teachers. To ensure a safe science classroom, a list of rules has been developed and provided to you. Please review the attached rules with your parent/guardian, sign the safety contract, and return it to your teacher. Retain the safety rules for reference. Appropriate rules will be reviewed and discussed before each lab.

## NORTH EAST ISD SCIENCE SAFETY RULES

### GENERAL GUIDELINES

1. When first entering the science room, do not touch any equipment, chemicals, or other materials in the laboratory area until you are instructed to do so.
2. Conduct yourself in a responsible manner at all times in the laboratory. Horseplay, practical jokes, and pranks are dangerous and prohibited.
3. Be alert, listen for the teacher's direction, and proceed with caution at all times in the laboratory. Notify the teacher immediately of any unsafe conditions you observe.
4. Carefully follow all instructions, both written and oral. If you do not understand a direction or part of a procedure, ask your teacher before proceeding.
5. Experiments must be personally monitored at all times. 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.
6. Perform only those experiments authorized by the teacher. Never do anything in the laboratory that is not called for in the laboratory procedures or by your teacher. Unauthorized experiments are prohibited.
7. 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 your teacher.
8. Never work alone. No student may work in the laboratory without a teacher present.
9. Do not eat food, drink beverages, or chew gum in the laboratory. Do not use laboratory glassware as containers for food or beverages.
10. Keep hands away from face, eyes, and mouth while using chemicals or preserved specimens. Wash your hands with soap and water after performing all experiments.
11. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times. Return all equipment clean and in working order to the proper storage area.
12. Keep aisles clear. Push your chair or stool under your table when not in use.
13. Know the locations and operating procedures of all safety equipment including the eyewash station, safety shower, fire extinguisher, and fire blanket. Know where the fire alarm and the exits are located.

14. 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.
15. Students are never permitted in science storage rooms, chemical storage rooms, or preparation areas unless they are provided with specialized training and accompanied by the teacher.
16. 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.

### EYE PROTECTION

17. Any time chemicals, heat, or glassware are used, students will wear chemical splash goggles. (Prescription eyeglasses do not offer protection against chemical splashes to the eyes, therefore, students wearing prescription glasses must wear goggles over their glasses.)
18. Goggles will be worn any time there is a risk of eye injury from flying objects/projectiles.
19. Notify your teacher if you wear contact lenses. In the event of an accident, wearing contact lenses can pose a danger if foreign materials are held against the cornea. For washing to be effective, the lens must be removed quickly. The eyes will be flushed with water and no attempt to salvage the contact lenses will be made by the teacher. Eye safety is the primary concern.

### CLOTHING

20. Dress properly during laboratory activities. Long hair, dangling jewelry, and loose baggy clothing are a hazard in the laboratory. Long hair must be tied back and dangling jewelry and loose baggy clothing must be secured. Shoes should completely cover the feet.
21. Lab aprons and/or gloves should be worn during laboratory activities when required to protect skin and clothing.

### HANDLING CHEMICALS

22. All chemicals in the laboratory are to be considered dangerous.
23. Do not touch, taste, or smell any chemicals unless requested to do so by your teacher. If you are instructed to smell fumes during the investigation, do so by gently waving your hand over the container so that the fumes are brought to you. Never inhale fumes directly from the container as they may be concentrated and cause you injury.

**North East ISD  
Science Safety Contract**

I, \_\_\_\_\_, have read each of the safety rules and agree to abide by the safety regulations as set forth by the teacher and/or district. I further agree to follow all other written and verbal instructions given in class. I understand that failure to do so will result in nonparticipation of that particular lab.

\_\_\_\_\_  
Signature of Student

\_\_\_\_\_  
Date

I have reviewed the safety rules with my child and will encourage him/her to abide by them.

\_\_\_\_\_  
Signature of Parent

\_\_\_\_\_  
Date

(Cut here)

- 
24. Always work in a well-ventilated area. Use the fume hood when working with volatile substances or poisonous vapors. Never place your head into the fume hood.
  25. Check the label on chemical containers twice before removing any of the contents. Take only as much chemical as is called for in the laboratory procedure.
  26. Never return unused chemicals to their original containers. This causes contamination of the chemical and may cause incorrect results to occur in future investigations.
  27. When transferring chemicals from one container to another, hold the containers away from your body.
  28. Take great care when transferring acids and other chemicals from one part of the laboratory to another. Hold them securely and walk carefully.
  29. Acids must be handled with extreme care. Always add acid to water, swirl or stir the solution and be careful of the heat produced.
  30. Never leave anything that is visibly reacting unattended.
  31. Never dispense flammable chemicals anywhere near an open flame or source of heat.
  32. Never remove chemicals or other materials from the laboratory area.
  33. Dispose of chemical waste properly. Sinks are to be used only for water and those solutions designated by the teacher. Solid chemicals, metals, matches, filter paper, and other insoluble materials are to be disposed of in the proper waste containers, not in the sink.
  34. Never handle broken glass with your bare hands. Use a brush and a dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.
  35. Inserting and removing glass tubing from rubber stoppers can be dangerous. Always lubricate glassware 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 teacher for removal.
  36. Examine glassware before each use. Never use chipped or cracked glassware.
  37. Handle cutting instruments carefully. Never cut materials towards you. Always cut away from the body.
  38. Hot and cold glass has the same visual appearance. Determine if an object is hot by bringing the back of your hand close to it prior to grasping it. Use tongs or heat-protective gloves if necessary.
  39. Exercise extreme caution when using a burners or hot plates. Take care that hair, clothing and hands are a safe distance from the heat source at all times. Never reach over an exposed flame or hot plate.
  40. Do not put any substance into the flame or on the hot plate unless specifically instructed to do so. Light burners only as instructed by the teacher. Never leave a lit burner or an activated hot plate unattended. Always turn the burner or hot plate off when not in use.
  41. Never look into a container that is being heated. Never leave anything that is being heated unattended.
  42. Do not place hot apparatus directly on the laboratory desk. Always use an insulating pad. Allow plenty of time for hot apparatus to cool before touching it.
  43. Do not use hair spray, hair mousse, or other flammable hair products during or just before laboratory work where an open flame is used. These products may contain highly flammable chemicals that ignite easily. (Synthetic fingernails are also highly flammable.)
  44. When removing an electrical plug from its socket, grasp the plug, not the electrical cord.
  45. Hands must be completely dry before touching an electrical switch, plug, or outlet. Never connect, disconnect, or operate a piece of electrical equipment with wet hands or while standing on a wet floor.
  46. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
- ACCIDENTS AND INJURIES**
47. In the event of an accident or injury, follow the campus safety plan.
  48. If materials or chemicals enter your eye, rush to the eye/face wash station and flush the eyes with a continuous stream of water for at least 15 minutes. Hold your eyelids open with your fingers, or get assistance from your teacher.
  49. If a chemical should splash on your skin, immediately flush with running water from the drench hose or safety shower for at least 15 minutes. Notify the teacher immediately.
  50. Report any accident (spill, breakage, etc.) or injury (cut, burn, etc.) to the teacher, no matter how trivial it may appear.