

PEARLAND ISD BIOLOGY SAFETY RULES

Biology is a hands-on laboratory class. You 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 must be followed at all times. A separate safety contract must be signed by both you and a parent or guardian before you can participate in any laboratory activity. It will remain with the teacher in a student file. This set of rules is to be kept in your science notebook as a constant reminder of the safety rules.

Proper laboratory technique is essential to the education of successful scientist. Your success will depend on your attitude and conduct. If you work with an attitude of rushing through, you will profit very little. An interest in your work, an understanding of its purpose and a clear interpretation of your results are necessary factors for a good laboratory course. The biology laboratory is a safe place to experiment if you are careful. You must assume responsibility of the safety of yourself, your neighbors, and your teacher. The following are some safety and procedural rules to help guide you in protecting yourself and others from injury in the laboratory.

General Guidelines

1. Conduct yourself in a responsible manner at all times in the laboratory.
2. Become familiar with your lab assignment before you come to lab. 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 your teacher present.
4. When first entering a science room, do not touch any equipment, chemicals, or other materials in the laboratory areas until you are 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 your 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. Safety goggles and aprons must be worn whenever you work in lab.
8. Observe good housekeeping practices. Work areas should be kept clean and tidy at all times. Bring only your laboratory instructions, worksheets, and/or reports to the work area. Other materials such as purses and backpacks should be stored in the classroom area.
9. Know the locations and operating procedures of all safety equipment including the first aid kit, eyewash station, safety shower, fire extinguisher, and fire blanket.
10. Be alert and proceed with caution at all times in the laboratory. Notify your teacher immediately of any unsafe conditions you observe.
11. 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 your teacher. All insoluble materials are to be disposed of in the proper waste containers, not in the sink.
12. Labels and equipment instructions must be read carefully before use. Set up and use the prescribed apparatus as directed in the laboratory instructions provided by your teacher.
13. Keep hands away from your face, eyes, mouth, and body while using chemicals. Wash your hands with soap and water after performing all experiments. Clean (with soap), rinse, and dry all work surfaces and equipment at the end of the experiment.
14. 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.
15. Students are never permitted in the science storage rooms or preparation areas unless given specific permission by their teacher.
16. Know what to do if there is a fire drill during a laboratory period.
17. If you spill acid or any other corrosive chemical on you skin or clothes immediately wash area with large amounts of water (remember that small amounts of water may be worse than no water at all). After this get the teacher's attention.
18. At the end of the laboratory session see that: a) the water is turned off b) lab tables, floor area, and sink are clean and dry c) all equipment is clean and dry and arranged as directed by your teacher.

CLOTHING

19. Any time chemicals, heat, or glassware are used, students will wear laboratory goggles. There will be no exceptions to this rule!
20. 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 must completely cover the foot. No sandals are allowed.
21. Wear a laboratory apron whenever you are working with chemicals or heated substances.

ACCIDENTS AND INJURIES

22. Report any accident (spill, breakage, etc.) or minor injury (cut, burn, etc.) to your teacher immediately, no matter how trivial it may appear.
23. If you or your lab partner are seriously hurt, immediately yell out "**CODE ONE, CODE ONE**". This will notify your teacher of a medical emergency.
24. If a chemical should splash in your eye(s), immediately flush with running water from the eyewash station for at several minutes. Notify your teacher immediately.

USING CHEMICALS SAFELY

25. All chemicals in the laboratory are to be considered dangerous. Do not touch, taste, or smell any chemical unless specifically instructed to do so. The proper technique for smelling chemical fumes (when instructed to do so by the teacher) is to gently wave your hand over the opening of the container and direct the fumes toward your nose. Do not inhale the fumes directly from the container
26. Check the label on chemical bottles twice before removing any of the contents. If there is not a label on a chemical bottle notify your teacher immediately.
27. Keep all container lids closed when a chemical is not being used. Notify your teacher whenever chemicals are spilled.
28. Take only as much of a chemical as you need. Never return unused chemicals to their original containers.
29. Never take chemicals or other materials from the laboratory area.
30. Dispose of all chemicals as instructed by your teacher.
31. Take great care when transferring chemicals from one part of the laboratory to another. Hold them securely and in the method demonstrated by your teacher as you walk.

HANDLING GLASSWARE AND EQUIPMENT

32. Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware. Do not immerse hot glassware in cold water; it may shatter.
33. Cracked or broken glass should be placed in the special container for "Broken Glass."
34. Do not attempt to clean up broken glassware. Notify your teacher.
35. 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.
36. Report damaged electrical equipment immediately. Look for things such as frayed cords, exposed wires, and loose connections. Do not use damaged electrical equipment.
37. If you do not understand how to use a piece of equipment, ask your teacher for help.

HEATING SUBSTANCES

38. Keep in mind that hot glassware will not appear hot. Never pick up a container that has been heated without first holding the back of your hand near it. If you can feel the heat on the back of your hand, the container may be too hot to handle. Use a clamp or tongs when handling hot containers.
39. Do not point the open end of a test tube being heated at yourself or anyone else.
40. Never heat a closed container.

USING SHARP INSTRUMENTS

41. Handle scalpels with extreme care. Never cut materials toward you.