



Safety & Class Contract

Required of ALL High School Science Students

I will:

- ✓ Follow all instructions given by the teacher and/or in the lab handout.
- ✓ Protect my eyes, face, hands, and body when involved in science experiments.
- ✓ Carry out good housekeeping practices.
- ✓ Know where to get help.
- ✓ Know the location of first aid, eye wash, fire blanket, and fire extinguisher.
- ✓ Conduct myself in a responsible manner at all times.

I, _____, have been instructed in the lab safety and emergency techniques needed for my science class. I will master 100% of the lab safety objectives, which allows me to participate in lab activities. I understand and agree to follow the lab safety regulations set forth above and in the Lab Safety Guide. I am aware that my safety and the safety of my classmates depends on my behavior in the laboratory. I also agree to follow the classroom expectations found in the physics syllabus since this will help ensure a proper learning environment

_____ X _____
Date: _____ **Student's Signature**

Dear Parent or Guardian:

We feel that you should be informed 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 son/daughter 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 the student and parent/guardian 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 son/daughter in the science laboratory, and will instruct your son/ daughter to uphold his/her agreement to follow these rules and procedures in the laboratory.

_____ X _____
Date: _____ **parent/guardian's name** **parent/guardian's signature**

1st Emergency Contact Name: _____

1st Emergency Contact Phone: home _____ work or cell _____

2nd Emergency Contact Name: _____

2nd Emergency Contact Phone: home _____ work or cell _____

Physician Name: _____ Phone Number: _____

*Important Medical Information (list drug or food allergies, special medical conditions, medications, etc):

PERSONAL BACKGROUND INFORMATION:

1. Your name (as you prefer to be called)?
2. What are your school activities (band, choir, baseball, etc)? Your other favorite activities (not school related)?
3. Will you be working this year? If so, doing what?
4. What are your plans (definite or tentative) after graduating from HHS?
5. Intended career? (If already decided or being considered) How sure are you about this choice? What led you to this choice?
6. Why are you taking physics?
7. When you hear "PHYSICS" what's the first thing that comes to your mind?
8. What math class are you taking this year? What math class did you complete last year?
9. Do you have any course expectations or goals? Anything that you hope will be covered or discussed in this class?
10. Is there anything else about the course or about yourself, which I haven't asked, but you'd like me to know?



Safety Guidelines

Required for all HHS Physics students

To the Student: The following rules and regulations are very important for your safety in the science laboratory. Your teacher is going to explain these rules to you, and you are to learn them. You will be given a safety test and it will be necessary for you to answer all questions correctly. Please study the rules very carefully and ask the teacher to explain anything that you do not understand.

General Guidelines

1. Listen to all instructions given by your teacher and follow them carefully.
2. Read your lab assignments before coming to class. Perform only those experiments on which you have been instructed.
3. When entering a science room, do not touch any equipment, chemicals, or other materials in the lab area until you are instructed to do so.
4. Your behavior and attitude in lab should be excellent; both your safety and the safety of others depend upon it. There should not be any loud talking or horseplay.
5. Do not eat food, drink beverages, or chew gum in the laboratory.
6. It is your responsibility to take care of the lab equipment. Use it only as instructed and report any damages to your teacher. If you are in doubt about any procedure, ask your teacher.
7. Know the location and use of all safety and emergency equipment (goggles, aprons, eye wash, fire blanket, fire extinguishers, lab shower, safety charts, MSDS sheet, etc.)
8. Know what to do if there is a fire drill during a laboratory period. Containers must be closed, and the following should be turned off: gas valves, fume hoods, and any electrical equipment.
9. Set up apparatus as far back on the lab table as conveniently possible so it will not tip onto the floor. Apparatus that can roll such as thermometers, etc., should be placed on the table at right angles to the end to keep them from rolling off onto the floor.
10. Be careful when operating electrical equipment. The lab working surface, equipment, and your hands should be dry. Check all cords and plugs to be sure they are in good condition. Look for exposed or broken wires and insulation in poor condition. Do not grab wires to unplug equipment. Use the plug to disconnect equipment from the socket.
11. Lasers should never be pointed into the eyes of another person. Never look directly into the oncoming beam as this might cause eye damage.
12. Clean and dry your lab work area at the close of the lab period. Return all equipment.

Clothing

13. Wear safety goggles when:
 - a. working with heat
 - b. working with chemicals
 - c. doing any type of grinding, cutting, soldering, etc.
 - d. instructed to do so by your teacher or lab directions
14. Tie back long hair, roll up sleeves, and remove dangling jewelry and/or jacket to prevent injury.

Accidents and Injuries

15. Report all accidents to the teacher, even if they are minor ones.

16. If a chemical should splash in your eye(s) or on your skin, immediately flush the affected area with running water for at least 20 minutes. Use running water from the eyewash station or safety shower.
17. If mercury thermometers are broken, mercury must not be touched. Notify the teacher immediately.
18. If you smell natural gas in the lab room, notify your teacher immediately.

Handling Chemicals

19. Never taste, touch, or smell any chemical unless instructed to do so. The proper technique for smelling chemicals fumes will be demonstrated to you.
20. Never return unused chemicals to their original container.
21. Never remove chemicals or other materials from the laboratory area.
22. Carefully read the label twice on any bottle prior to using it. Many formulas and chemical names look very much alike but confusing them could be dangerous.

Handling Glassware

23. Examine glassware before each use. Report chipped or broken glassware to the teacher. Chipped or broken glassware should be disposed of in the proper place.
24. Never handle broken glass with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.
25. Do not immerse hot glassware in cold water because it may shatter.

Heating Substances

26. Never reach across a flame or a hot plate. Do not touch a burner or hot plate – it may not look to be hot.
27. Never leave anything that is being heated unattended. Always turn the burner or hot plate off when unattended.
28. Use tongs or heat protected gloves before handling any hot glassware or heated metal.

Emergency Equipment

1. **Safety Goggles** - these are provided for each student. They can be the most important piece of safety equipment you use. They are vital to the safety of your vision. Wear them when heating, when working with chemicals or at any time you are instructed to do so by your teacher.
2. **Safety Aprons** - these cover everyday clothing and are worn on the front of the body to protect against chemical spills.
3. **Eye Wash Station** - provided in all labs to flood eye with water for 20 minutes to remove foreign materials and to dilute any harmful chemical. Know where these are located in your lab and how to use them.
4. **Fire Blankets** - these fire retardant blankets are provided in all labs. They are used to smother out a fire, can be used to wrap around an individual, smother a table surface fire, or smother a fire in a waste basket. Know where they are located.
5. **Fire Extinguisher** - provided in all lab areas, these are used to put out small chemical or paper fires. In case of major fires, signal alarm and evacuate building, using fire drill procedures.
6. **Lab Showers** – these are found in all science labs. They are operated by pulling a release chain. Their purpose is to flood an individual's body in order to dilute a chemical spill or to extinguish a clothing or hair fire. Know their location.

7. **Safety Charts** - provided in all lab areas. It is important to read them. They will remind you of important lab procedures and safety precautions.
8. **Gas Leaks** - if you should smell the odor of natural gas in your lab room, immediately inform your teacher.
9. **Microscopes** - should always be carried with two hands. After use, the light should be turned off, the objectives on low power, the body tube all the way down and the cord wrapped around the base.
10. **Material Safety Data Sheets** - these sheets contain important information about the chemicals you use in lab. Know the location of the MSDS file.
11. **Know the location of each piece of emergency equipment in your classroom.**
12. Learn the safety symbols below.

Disposal Alert



This symbol appears when care must be taken to dispose of materials properly.

Biological Hazard



This symbol appears when there is danger involving bacteria, fungi, or protists.

Open Flame Alert



This symbol appears when use of an open flame could cause a fire or an explosion.

Thermal Safety



This symbol appears as a reminder to use caution when handling hot objects.

Sharp Object Safety



This symbol appears when a danger of cuts or punctures caused by the use of sharp objects exists.

Fume Safety



This symbol appears when chemicals or chemical reactions could cause dangerous fumes.

Electrical Safety



This symbol appears when care should be taken when using electrical equipment.

Plant Safety



This symbol appears when poisonous plants or plants with thorns are handled.

Animal Safety



This symbol appears whenever live animals are studied and the safety of the animals and the students must be ensured.

Radioactive Safety



This symbol appears when radioactive materials are used.

Clothing Protection Safety



This symbol appears when substances used could stain or burn clothing.

Fire Safety



This symbol appears when care should be taken around open flames.

Explosion Safety



This symbol appears when the misuse of chemicals could cause an explosion.

Eye Safety



This symbol appears when a danger to the eyes exists. Safety goggles should be worn when this symbol appears.

Poison Safety



This symbol appears when poisonous substances are used.

Chemical Safety



This symbol appears when chemicals used can cause burns or are poisonous if absorbed through the skin.