# **Student Safety Contract**

The following rules are required for safety during labs in the chemistry classroom. Two copies of these rules are provided – one is to be signed by you and your parent/guardian before you can participate in labs and the other is for you to keep as a reminder of the safety rules.

Please be aware that violation of these rules will result in removal from the lab and a grade of zero on this laboratory activity. This is not just arbitrary punishment - each year many students are badly injured because they have failed to work safely, and I am determined that you will not be one of them.

General safety rules:

- 1) Always conduct yourself appropriately in the laboratory. Be serious and alert at all times.
- 2) Follow all written and verbal instructions carefully. If you are not certain about what to do after reading the instructions, please ask your teacher for clarification.
- 3) Never work alone in the laboratory. A teacher must always be present.
- 4) Do not touch any equipment or chemicals in the laboratory until your instructor has given permission. This includes the balances, which are very sensitive to tampering.
- 5) You may not eat or drink anything while performing a lab.
- 6) Keep your work area and walkways clear of debris, backpacks, books, and other obstacles.
- 7) Do not perform unauthorized experiments.
- 8) Know where all of the safety equipment is in the room and how to use it.
- 9) Don't play with the safety equipment.
- 10) Use the fume hood when working with chemicals that give off toxic fumes.
- 11) Notify the instructor of any unsafe conditions you observe.
- 12) Wash your hands after touching anything in the laboratory. While working in the lab, keep your hands away from your face.
- 13) Pay attention to your experimental apparatus at all times. Unattended laboratory equipment is a serious hazard.
- 14) You are not allowed in the chemical storage room.
- 15) If there is a fire, all electrical equipment and equipment using gas must be shut off.

Clothing and protective equipment:

- 16) Goggles must be worn in the laboratory at all times until <u>all</u> students are finished working. Failure to wear goggles will result in a zero on the lab assignment and removal from the laboratory.
- 17) Lab aprons and gloves should only be worn with teacher approval. Gloves should never be worn when working with hot equipment.
- 18) Long hair should be tied back.
- 19) Loose clothing and jewelry should be secured to prevent accidents.
- 20) Shoes that cover the feet must be worn. Sandals are not allowed.

Accidents and injuries:

- 21) Instantly report any accident, spill, or injury to your instructor, no matter how minor.
- 22) If chemicals get in your eyes, flush them in the eyewash until professional medical assistance arrives.

Using chemicals:

- 23) All chemicals in the laboratory are assumed to be dangerous. Never eat, touch, or smell any of them unless specifically told otherwise.
- 24) The proper way to smell chemicals are to waft the odors toward you with your hand, not to take a big sniff.
- 25) Chemicals should never be handled with your bare hands. Use a spatula.
- 26) Chemicals should never be placed directly on the balance. Use weighing paper, plastic weighing boats, or a beaker to weigh chemicals.
- 27) Always read the label of a chemical bottle before using it.
- 28) When moving reagents from one bottle to another, always hold both away from your body.
- 29) Never return unused chemicals to their original containers without prior permission.
- 30) Acids give off large amounts of heat when mixed with water. Always slowly add acid to water, never water to acid.
- 31) Never remove chemicals from the lab.
- 32) Be careful when moving chemicals from one part of the lab to another.
- 33) If you spill an acid or corrosive chemical on your skin, wash it off immediately using lots of water.
- 34) Dispose of chemicals properly. Your teacher will inform you of how to do this before the lab.

Handling glassware and equipment:

- 35) Never handle broken glass with your bare hands. Use a brush and dustpan to clean it up and place it in a glass disposal container.
- 36) Never use dirty, cracked, or chipped glassware.
- 37) If you don't know how to use a piece of equipment, ask your teacher.
- 38) Don't put hot glassware in cold water it will shatter.
- 39) Never press down on a balance it will break.

Heating substances:

- 40) Keep combustible materials from open flames (especially alcohols, acetone, and anything that smells like gasoline).
- 41) Never place anything into a Bunsen burner flame that doesn't belong there.
- 42) Never leave a lit Bunsen burner unattended.
- 43) When heating something in a test tube, point it away from yourself and others.
- 44) Before touching something that's been heated on a hotplate or Bunsen burner, splash a few drops of water on it. If it sizzles, it's too hot to touch.
- 45) Never look into anything that's being heated.

- 46) Never heat anything in a closed container.
- 47) Never reach across a flame.
- 48) Turn off all Bunsen burners and hotplates before leaving the lab.

Handling sharp instruments:

49) Handle sharp instruments with care. Always cut away from your body, not toward it.

Using electricity:

- 50) Never use electrical equipment in areas that are wet or while you have wet hands.
- 51) When you are finished using a piece of electrical equipment, unplug it.
- 52) Report damaged electrical equipment promptly.

## **Safety Contract**

I, \_\_\_\_\_\_\_\_ (student name), have read and understand the safety rules given to me in class. I agree to follow them and realize that I must obey them to insure my own safety and those of others in the laboratory. I will cooperate to the fullest extent with my instructor and fellow students to maintain a safe lab environment. I will also closely follow the oral and written instructions provided by the teacher. I am aware that any violation of this safety contract will result in being removed from the laboratory and a zero on the lab assignment.

Student signature:

Date: \_\_\_\_\_

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 child will receive before engaging in any laboratory work. Please read the list of safety rules above. No students will be permitted to perform laboratory activities unless this contract is signed by both the students and parent/guardian and is on file with the teacher.

Your signature on this contract indicates that you have read this student safety contract and are aware of the measures being taken to insure the safety of your child in the science laboratory, and will instruct your child to uphold his/her agreement to follow these rules and procedures in the laboratory:

Parent/Guardian signature:

Date:
-------

### Laboratory Safety Rules

General safety rules:

- 1) Always conduct yourself appropriately in the laboratory. Be serious and alert at all times.
- Follow all written and verbal instructions carefully. If you are not certain about what to do after reading the 2) instructions, please ask your teacher for clarification.
- 3) Never work alone in the laboratory. A teacher must always be present.
- 4) Do not touch any equipment or chemicals in the laboratory until your instructor has given permission. This includes the balances, which are very sensitive to tampering.
- You may not eat or drink anything while performing a lab. 5)
- 6) Keep your work area and walkways clear of debris, backpacks, books, and other obstacles.
- 7) Do not perform unauthorized experiments.
- 8) Know where all of the safety equipment is in the room and how to use it.
- 9) Don't play with the safety equipment.
- 10) Use the fume hood when working with chemicals that give off toxic fumes.
- 11) Notify the instructor of any unsafe conditions you observe.
- 12) Wash your hands after touching anything in the laboratory. While working in the lab, keep your hands away from your face.
- 13) Pay attention to your experimental apparatus at all times. Unattended laboratory equipment is a serious hazard.
- 14) You are not allowed in the chemical storage room.
- 15) If there is a fire, all electrical equipment and equipment using gas must be shut off.

Clothing and protective equipment:

- 16) Goggles must be worn in the laboratory at all times until all students are finished working. Failure to wear goggles will result in a zero on the lab assignment and removal from the laboratory.
- 17) Lab aprons and gloves should only be worn with teacher approval. Gloves should never be worn when working with hot equipment.
- 18) Long hair should be tied back.
- 19) Loose clothing and jewelry should be secured to prevent accidents.
- 20) Shoes that cover the feet must be worn. Sandals are not allowed.

#### Accidents and injuries:

- 21) Instantly report any accident, spill, or injury to your instructor, no matter how minor.
- 22) If chemicals get in your eyes, flush them in the eyewash until professional medical assistance arrives.

Using chemicals:

- 23) All chemicals in the laboratory are assumed to be dangerous. Never eat, touch, or smell any of them unless specifically told otherwise.
- 24) The proper way to smell chemicals are to waft the odors toward you with your hand, not to take a big sniff.
- 25) Chemicals should never be handled with your bare hands. Use a spatula.
- 26) Chemicals should never be placed directly on the balance. Use weighing paper, plastic weighing boats, or a beaker to weigh chemicals.
- 27) Always read the label of a chemical bottle before using it.
- 28) When moving reagents from one bottle to another, always hold both away from your body.
- 29) Never return unused chemicals to their original containers without prior permission.
- 30) Acids give off large amounts of heat when mixed with water. Always slowly add acid to water, never water to acid. 31) Never remove chemicals from the lab.
- 32) Be careful when moving chemicals from one part of the lab to another.
- 33) If you spill an acid or corrosive chemical on your skin, wash it off immediately using lots of water.
- 34) Dispose of chemicals properly. Your teacher will inform you of how to do this before the lab.

#### Handling glassware and equipment:

- 35) Never handle broken glass with your bare hands. Use a brush and dustpan to clean it up and place it in a glass disposal container.
- 36) Never use dirty, cracked, or chipped glassware.
- 37) If you don't know how to use a piece of equipment, ask your teacher.
- 38) Don't put hot glassware in cold water it will shatter.
- 39) Never press down on a balance it will break.

Heating substances:

- 40) Keep combustible materials from open flames (especially alcohols, acetone, and anything that smells like gasoline).
- 41) Never place anything into a Bunsen burner flame that doesn't belong there.
- 42) Never leave a lit Bunsen burner unattended.
- 43) When heating something in a test tube, point it away from yourself and others.
- 44) Before touching something that's been heated on a hotplate or Bunsen burner, splash a few drops of water on it. If it sizzles, it's too hot to touch.
- 45) Never look into anything that's being heated.
- 46) Never heat anything in a closed container.
- 47) Never reach across a flame.
- 48) Turn off all Bunsen burners and hotplates before leaving the lab.

Handling sharp instruments:

49) Handle sharp instruments with care. Always cut away from your body, not toward it.

Using electricity:

- 50) Never use electrical equipment in areas that are wet or while you have wet hands.
- 51) When you are finished using a piece of electrical equipment, unplug it.
- 52) Report damaged electrical equipment promptly.