

# TEST ON SAFETY IN THE ACADEMIC LABORATORY

As part of your requirement for this course, you will be required to complete a safety exam with a **grade of 100**. You may repeat the exam as many times as needed until the grade of 100 is attained, however, you will not be able to complete any laboratory work until you do get a grade of 100.

The questions on the safety exam will be the same as or variations of the following. They may be short answer questions, similar to those below, or multiple choice, depending on your instructor's preference. They will be arranged in a random order.

What should be worn in the lab to decrease the likelihood of eye injury?

What should you do if you get a chemical in one or both of your eyes?

Are special precautions required if you wear contact lenses in the lab?

Who should be called for assistance in case of an accident or injury to you in the lab?

Referring to an unlabeled map of the laboratory, you should be able to locate

- The safety shower
- The eye wash
- The fire extinguishers
- The fire blanket
- The fire alarm
- The first aid kit.
- The emergency telephone

If you spill a liquid chemical, what should you do?

What should you do for a large chemical spill on your skin or your clothing?

Small contained fires can most easily be put out by:

How do you react to a large fire in the lab?

How do you operate a dry chemical fire extinguisher properly?

What is the most severe hazard rating in the NFPA Hazard Signal System? What is the least severe rating?

What color represents:

The Health hazard in the NFPA Hazard Signal System?

The Fire hazard in the NFPA Hazard Signal System?

The Reactivity hazard in the NFPA Hazard Signal System?

What are some common flammable materials used in the laboratory?

What kinds of clothing should be worn in the laboratory?

The fire hazard presented by long hair and beards can be prevented by:

What type of footwear should be worn in the laboratory?

What does a properly adjusted Bunsen burner flame look like?

Why is it dangerous to leave a lit Bunsen burner unattended?

When is it advisable to turn off a Bunsen burner?

Eating and drinking in the lab are not permitted because:

Smoking in lab is not allowed because:

When you read the label on a chemical container, what are the three most important pieces of information you should look for?

Why must the balances and weighing areas be kept clean?

What is the best way to obtain a small quantity of liquid reagent, such as 5mL, from a large reagent bottle?

What should be done with chemicals left over from the experiment?

How do you dilute concentrated sulfuric acid (or any concentrated acid) with water?

Why should chemicals NOT be stored in your chemistry drawer or locker?

Why must chemicals NOT be taken from the laboratory?

If irritating or potentially toxic fumes (such as HBr, HCl, or SO<sub>2</sub>) are evolved during a reaction, what should you do?

How do you safely smell or note the odor of a chemical?

How do you insert glass tubing into a rubber stopper?

What is firepolishing?

What do you do with broken glass?

How do you dispose of excess or used chemicals?

What is the proper way to heat a liquid in a test tube?

What is the purpose of adding boiling stones to liquids which are to be heated?

Which activities are considered unsafe when heating materials or apparatus in the laboratory?

How do you use a pipet?

The centrifuge you are using is making a loud noise and moving on the lab bench. What could be the problem?

Why are you not permitted to work alone in the laboratory?

Why are unauthorized experiments not permitted?

