

## SAFETY QUIZ

1. Sketch below a representation of your laboratory, showing clearly the location of the following: exits, fire extinguisher, safety shower, eyewash fountain, student hood and fire blanket.
2. Determine whether each of the following items of apparel or footwear are forbidden, unsafe or appropriate for chemistry laboratory.

A. sandals	J. clogs
B. long pants	K. long skirts (ankle length)
C. high-heeled shoes	L. short skirts or dresses
D. synthetic finger nails	M. dangling necklaces
E. contact lenses	N. safety glasses
F. safety goggles	O. laboratory aprons
G. shorts	P. sandals with socks underneath
H. long sleeve T-shirts	Q. sneakers
I. halter tops	R. eyeglasses
3. What is the correct way to “smell” a chemical?
4. A chemical reaction is known to be accompanied by the release of a noxious gas. Where should this chemical reaction be carried out?
5. An acid spills onto your skin. What should you do?
6. After use, where should latex gloves and paper towels be disposed? solid waste chemicals? liquid waste chemicals? broken glassware?

7. A concentrated acid is to be diluted with water. Should the water be added to the acid or should the acid be added to the water? Why?
  
8. A 5 mL portion of a chemical is needed but you accidentally dispense 20 mL of the chemical into a beaker. Should the excess chemical be poured back into the reagent bottle? Why or why not?
  
9. Heating of a chemical is carried out in an open test tube. Where should you point the mouth of the test tube?
  
10. In the middle of your experiment, the fire alarm sounds. What should you do?
  
11. You are the first one finished with the experiment so you remove your goggles and apron but remain in the laboratory room to answer the post-laboratory questions. Is this safe? Why or why not?
  
12. A concentrated acid is contained within a *carboy* (large bottle used to hold corrosive liquids) that is capped with a pump for dispensing the acid. Is it safe to dispense the concentrated acid into a small test tube? a small beaker? Why or why not?
  
13. In the middle of your experiment, you must use the bathroom. Should you remove your latex gloves before exiting the laboratory room?

14. Upon entering the laboratory room, where should you place your book bag?
15. You accidentally touch a hot ring clamp and burn your thumb. What should you do?
16. What is the proper way to clean glassware? Should you wear your goggles and apron while cleaning your glassware?
17. To obtain a chemical from a reagent bottle, should you use the medicine dropper in your drawer? Why or why not?
18. A student removes the glass lid from a reagent bottle and places the lid down on the bench top. Why is this wrong?
19. Before lighting the Bunsen burner flame, what should be done with long hair and/or loose sleeves? Why?
20. A reaction generates the noxious gas  $\text{H}_2\text{S}$  (rotten egg smell). You are carrying out the reaction under the student hood but can still detect a strong odor of  $\text{H}_2\text{S}$ . What is wrong?  
NOTE: This gas is dangerous since the nose becomes desensitized to the  $\text{H}_2\text{S}$  odor over time.