

Chapter 1 Information

1. What is one of the more dangerous labs in an undergraduate education?
2. What is a real possibility of not following safety procedures?
3. What is your primary protection against eye damage?
4. Are there any restrictions about wearing contact lenses?
5. What kind of gloves should you wear if you need to rub your eyes? What could you do if your eyes itched?
6. What are waste disposal laws written for? How do you know where to dispose of waste if you are not sure where it goes?
7. Under what conditions can you work alone in a chemistry lab? Why?
8. What kinds of practical jokes are permissible in a chemistry lab? Why?
9. Why should you keep your goggles on even when you are not doing anything dangerous?
10. When is it permissible to eat or drink in a chemistry lab?
11. When is it permissible to smoke in a chemistry lab?
12. If you spill a small amount of chemical, what should you do?

13. If you are done heating a reaction what should you do with the heat source
14. If you distillation is finished and the transfer has stopped, what should you do about the cooling water?
15. When you finish weighing a chemical at the balance, what should you do?
16. If you make a mess, what should you do? How fast?
17. Where is the location of the fire extinguishere
18. Where is the location of the eye wash and shower?
19. How should you dress for lab?
20. What priority does a Bunsen burner have as a heat source for heating reactions? What are some alternatives?
21. Where should you work (if possible) if noxious fumes are generated?
22. If you are working with a potentially explosive chemical, what is a good precaution to take?
23. How should you prepare before lab to do the experiment of the day?
24. What should you do if you are not sure about what to do?
25. Who is mainly responsible for your safety and for your education?

26. What do you do if you get a small cut that is not serious?
27. What should you do if you have a more serious wound that is bleeding heavily?
28. Who should you tell if you have an accident?
29. Who is responsible for cleaning up after the lab?
30. If you are not sure where to dispose of a chemical what should you do?
31. Where should you dispose of nonhazardous solid waste (paper, corks, sand, silica gel, drying agents, salts).
32. Where should you dispose of nonhazardous soluble solid and organic liquid waste? What do you have to be careful of?
33. Where does generic hazardous organic waste go? What do you have to watch out for?
34. Where do discarded halogenated organic compounds go?
35. How do you dispose strong inorganic acids and bases?
36. How do you dispose of strong oxidizing reagents?
37. How do you dispose of strong reducing reagents?
38. What is a good strategy to dispose of toxic heavy metals?

39. You have just recrystallized of toxic 4-nitroaniline and have about 100 mg (=0.2%) in 40 mL of nontoxic water (99.8%). What are advisable options for disposing this mixture?
40. What are some generic guidelines for how to reduce the cost of disposing such waste?