

## **Lab Safety Study Guide**

Using the handout, answer the following questions.

1. The word *science* comes from a Latin word which means \_\_\_\_\_.
2. Chemical substances can pose a health risk and some lab equipment can cause serious injury. But in both cases the danger is there only under a certain condition. What is that condition?
3. How should you prepare for an experiment?
4. If, after reading over the experiment you don't understand part of the procedure, what should you do about it before you state the experiment?
5. Is there a relationship between preparing for a lab experiment and how safe your work will be? EXPLAIN.
6. If you cause a lab accident, will it only affect you? Explain.
7. Are you responsible for the safety of other students in the class during a lab experiment? Explain.
8. It is your responsibility to be aware of the possible hazards in the lab and to take the appropriate safety precautions. Why?
9. What are the five types of laboratory hazards you need to be aware of?

10. How can you prevent thermal burns?
11. What is the proper first aid for a thermal burn?
12. Should you always get medical attention for a thermal burn?
13. Should the teacher know about your burn?
14. What is a chemical burn?
15. What is the best defense against chemical burns?
16. You should protect your eyes with \_\_\_\_\_ and protect your feet by NOT wearing \_\_\_\_\_ to lab.
17. Should you get chemicals in your eyes, knowing the proper first aid may be the only thing that keeps you from being blinded. Remember, if you are wearing your goggles in the lab this should never happen. But, if it does, what is the proper first aid? Be complete in your answer. It is important that you know exactly what to do!
18. What is the proper first aid if you get chemicals on your skin?
19. Mixing acids and bases with water can be a special problem. There is only one way to do this. What is the only safe way to mix acids or bases with water?
20. List two ways you can prevent cuts from glass.

21. What is the proper first aid for glass cuts?
  
22. If you get cut by glass, why do you suppose that the proper first aid requires you to allow the cut to bleed?
  
23. When attempting to push a thermometer or some glass tubing through a rubber stopper, what should you do to protect your hands should the tube break off?
  
24. Why are long hair and loose fitting clothes dangerous in the lab?
  
25. Should you catch fire, what do you do?
  
26. Should you catch fire, what do you definitely NOT do? Why?
  
27. What two pieces of laboratory safety equipment are mentioned for use in putting out fires on people?
  
28. List five precautions you should take to prevent the possibility of poisoning.