

**DRESS CODE**

1. The eyes have it. Wear safety goggles when you are using heat, chemicals, or handling objects that may break, expand or endanger your eyes. If you wear contact lenses, notify your teachers.
2. Gain no stain. Wear a lab apron or coat when working with corrosive chemicals or substances that can stain.
3. Flaming beauty? Certain hair products (hair spray) are flammable and should not be worn while working near an open flame; avoid wearing excessive hair spray or gel on a lab day.
4. Caught in a bind? Loose clothing, dangling jewelry, and long loose hair can get in the way of your scientific investigations, so secure loose clothing, remove dangling jewelry, and tie back long hair.
5. Toe trouble! Avoid wearing sandals or open-toe-shoes in the laboratory, as they will not protect your feet if any chemical, glassware, or other objects is dropped on them.

**GENERAL PRECAUTIONS**

6. What's up? Before you begin an experiment, review the supplies you will be using and any safety issues you should be concern about. Read all directions for an experiment several times before beginning the activity. Carefully follow all written and oral instructions. If you are in doubt about any part of the experiment, ask your teacher for assistance.
7. Better safe than sorry. Never perform activities that are not assigned or authorized by your teacher. Obtain permission before "experimenting" on your own. If you have a great idea for a new experiment, first share the idea with your teacher- perhaps the whole class will benefit. Never handle any equipment unless you have specific permission.
8. Safety in numbers. Never work alone in the laboratory or perform lab activities without direct supervision.
9. Food for thought. Never eat or drink in the laboratory.
10. Clean the scene! Keep work areas clean at all times. Bring only notebooks, lab manuals, or written procedures to the work area. All other items such as purses and backpacks should be left in a designated area.
11. The lab is not a playground. Do not engage in horse playing.

**FIRST AID**

12. Accidents happen. Always report all accidents or injuries to your teacher, no matter how minor, and follow his directions immediately.
13. Safety protocol. Know what to do in case of specific accidents, such as getting acid in your eyes or on your skin. (Rinse acid from your body with lots of water.)
14. Safety patrol. Where is the safety equipment for the laboratory? Know the location of all safety and emergency equipment (such as fire extinguishers), and know how to operate them properly.
15. Who you gonna call? Where is the nearest telephone? How do you call for help? Are the phone numbers of the fire, police department, ambulance, and poison control center posted?
16. Nurse aid. Be aware of the locations of the first aid kit, but do not use it unless instructed by your teacher. In case of an injury, your teacher should administer first aid. Your teacher may also have you call the nurse or doctor.

**HEATING AND FIRE SAFETY**

17. Never use a heat source such as a candle, burner, or hot plate, without wearing safety goggles.
18. Never heat anything unless instructed to do so. A chemical that is harmless when cool may be dangerous when heated
19. Keep all combustible materials away from flames. Never use a flame or spark near a combustible chemical.
20. Never reach across an open flame or hot plate.
21. Before using a laboratory burner, make sure you know proper procedures for lighting and adjusting the burner as demonstrated by your teacher. Do not touch the burner, it may be hot. Never leave a burner unattended!
22. Aim for the stars. Chemicals can splash or boil out of a heated test tube. When heating a substance in a test tube, make sure that the mouth of the test tube is not pointing at you or anyone else.
23. Never heat a liquid in a closed container. The expanding gases produced may blow the container apart.
24. Before picking up a container that has being heated, hold the back of your hand near it. If you can feel heat on the back of your hand, the container is too hot to handle. Use an oven mitt to pick up the container that has been heated.

## USING CHEMICALS SAFELY

25. Don't mix for kicks. Never mix any chemicals unless your teacher specifically instructs you to do so. You might produce a dangerous or an explosive substance.
26. Never put your face near the mouth of a container that holds chemicals. Never touch, taste, or smell a chemical unless you are instructed by your teacher to do so. Many chemicals are poisonous.
27. Use only those chemicals needed in the activity. Read and double check all labels on supply bottles before removing any chemicals. Take only as much as you need. Keep all containers closed when chemicals are not being used.
28. Dispose all chemicals as instructed by your teacher. To avoid contamination, never return chemicals to their original containers. Never simply pour chemicals or other substances into the sink or trash containers.
29. Be extra careful when working with acids and bases. Pour all chemicals over the sink or a container, not over your work surface.
30. If you are instructed to test for odors, use a wafting motion to direct the odors to your nose. Do not inhale the fumes directly from the container.
31. Do as you should, add acids (or bases) to water! Never do the opposite. Pouring water into a strong acid or base could produce heat due to a chemical reaction and can cause dangerous spattering.
32. Take extreme care not to spill any material in the laboratory. Wash chemical spills and splashed immediately with plenty of water. Rinse with plenty of water any acids that get on your skin or clothing, and notify your teacher of any acid spills.

## USING GLASSWARE SAFELY

33. Never force glass tubing or thermometers into a rubber stopper or rubber tubing. Have your teacher insert the glass tubing or thermometer if required for the activity.
34. If you are using a laboratory burner, use a wire screen to protect glassware from the open flame. Never heat glassware that is not thoroughly dry on the outside.
35. Keep in mind that hot glassware looks cool. Never pick up glassware without first checking to see if is hot. Use an oven mitt. See rule #24.
36. Never use broken or chipped glassware. If glassware breaks, notify your teacher and dispose the glassware in the proper container. Never handle broken glass with your bare hands.
37. Never eat or drink from the lab glassware.
38. Thoroughly clean glassware before putting it away.

## USING SHARP INSTRUMENTS

39. Handle scalpels and other sharp objects with extreme care. Never cut materials towards you, cut it away from you and on a hard surface.
40. Immediately notify your teacher if you cut your skin when working in the laboratory.

## ANIMAL AND PLANT SAFETY

41. Never perform experiments that cause pain, discomfort, or harm to mammals, birds, reptiles, fish, or amphibians. This rule applies at home and in the classroom.
42. Animals should be handled only if absolutely necessary. Your teacher will instruct you how to handle each animal species brought into the classroom.
43. If you are allergic to certain plants, molds or animals, tell your teacher before doing an activity in which these are used.
44. During field work, protect your skin by wearing long pants, long sleeves, socks, and closed shoes. Know how to recognize the poisonous plants and fungi around your area, as well as plants with thorns, and avoid contact with them.
45. Never eat an unidentified plant or fungus.
46. Wash your hands after handling animals or a cage containing animals, wash your hands when you are finished with any activity involving animal parts, plants, or soil.

## END-OF-EXPERIMENT RULES

47. After an experiment has being completed, clean up your work area and return all equipment to its proper place.
48. Dispose of waste materials as instructed by your teacher.
49. Wash your hands after every experiment.
50. Turn off all burners and hot plates when they are not being used. Unplug hot plates and other electrical equipment. If you use a burner, check that the gas-line valve to the burner is off as well.