

Safety In The Physics Laboratory

Systematic, careful lab work is an essential part of any science program because lab work is the key to progress in science. In this class, you will practice some of the same fundamental laboratory procedures and techniques that experimental physicists use to pursue new knowledge.

The equipment and apparatus you will use involve various safety hazards, just as they do for working physicists. You must be aware of these hazards. Your teacher will guide you in properly using the equipment and carrying out the experiments, but you must also take responsibility for your part in this process. With the active involvement of you and your teacher, these risks can be minimized so that working in the physics laboratory can be a safe, enjoyable process of discovery.

These safety rules always apply in the lab:

1. Always wear a lab apron and safety goggles.

Wear these safety devices whenever you are in the lab, not just when you are working on an experiment.

2. No contact lenses in the lab.

Contact lenses should not be worn during any investigations using chemicals (even if you are wearing goggles). In the event of an accident, chemicals can get behind contact lenses and cause serious damage before the lenses can be removed. If your doctor requires that you wear contact lenses instead of glasses, you should wear eye-cup safety goggles in the lab. Ask your doctor or your teacher how to use this very important and special eye protection.

3. Personal apparel should be appropriate for laboratory work.

On lab days avoid wearing long necklaces, dangling bracelets, bulky jewelry, and bulky or loose-fitting clothing. Loose, flopping, or dangling items may get caught in moving parts, accidentally contact electrical connections, or interfere with the investigation in some



potentially hazardous manner. In addition, chemical fumes may react with some jewelry, such as pearl jewelry, and ruin them. Cotton clothing is preferable to clothes made of wool, nylon, or polyester. Tie back long hair. Wear shoes that will protect your feet from chemical spills and falling objects. Do not wear open-toed shoes or sandals or shoes with woven leather straps.

4. NEVER work alone in the laboratory.

Work in the lab only while under the supervision of your teacher. Do not leave equipment unattended while it is in operation.

5. Only books and notebooks needed for the experiment should be in the lab.

Only the lab notebook and perhaps the textbook should be in the lab. Keep other books, backpacks, purses, and similar items in your desk, locker, or designated storage area.

6. Read the entire experiment before entering the lab.

Your teacher will review any applicable safety precautions before the lab. If you are not sure of something, ask your teacher.