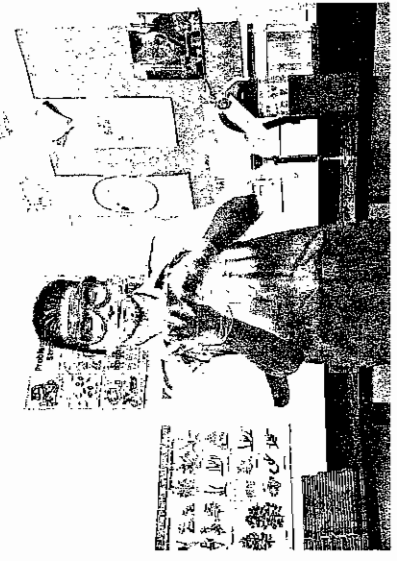


laboratory safety

SCIENCE WITH GRAMMO



Laboratory Safety

In your science class, you will perform many types of investigations. However, performing scientific investigations involves more than just following specific steps. You also must learn how to keep yourself and those around you safe by obeying the safety symbol warnings, shown in **Figure 16**.

In a **Laboratory** When scientists work in a laboratory, as shown in **Figure 15**, they take many safety precautions.

The most important safety advice in a science lab is to think before you act. Always check with your teacher several times in the planning stage of any investigation. Also make sure you know the location of safety equipment in the laboratory room and how to use this equipment, including the eyewashes, thermal mits, and fire extinguisher.

Good safety habits include the following suggestions. Before conducting any investigation, find and follow all safety symbols listed in your investigation. You always should wear an apron and goggles to protect yourself from chemicals, flames, and pointed objects. Keep goggles on until activity, cleanup, and handwashing are complete. Always slant test tubes away from yourself and others when heating them. Never eat, drink, or apply makeup in the lab. Report all accidents and injuries to your teacher and always wash your hands after working with lab materials.

In the **Field** Investigations also take place outside the lab, in streams, farm fields, and other places. Scientists must follow safety regulations there, as well, such as wearing eye goggles and any other special safety equipment that is needed. Never reach into holes or under rocks. Always wash your hands after you've finished your field work.

Figure 15 Safety is the most important aspect of any investigation.

Analysis, Inquiry, and Design

52.2a - Analyze the simple controlled experiment you designed earlier. List all safety precautions and the safety symbol warnings for your experiment.

- Eye Safety
- Clothing Protection
- Disposal
- Biological
- Extreme Temperature
- Sharp Object
- Fume
- Irritant
- Toxic
- Animal Safety
- Flammable
- Electrical
- Chemical
- Open Flame
- Handwashing

Figure 16 Safety symbols are present on nearly every investigation you will do this year. List the safety symbols that should be on the lab this student is preparing to do in **Figure 15**.

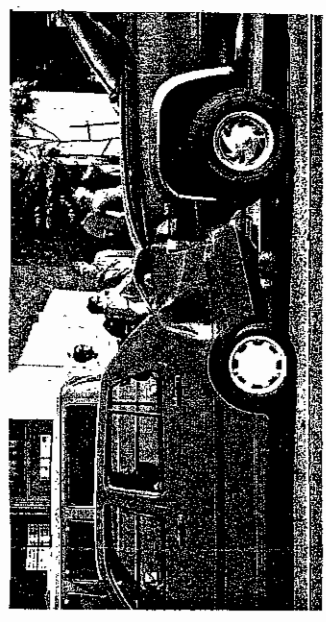
Figure 17 Accidents are not planned. Safety precautions must be followed to prevent injury.



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Why have safety rules? Doing science in the class laboratory or in the field can be much more interesting than reading about it. However, safety rules must be strictly followed, so that the possibility of an accident greatly decreases. However, you can't predict when something will go wrong.

Think of a person taking a trip in a car. Most of the time when someone drives somewhere in a vehicle, an accident, like the one shown in **Figure 17**, does not occur. But to be safe, drivers and passengers always should wear safety belts. Likewise, you always should wear and use appropriate safety gear in the lab—whether you are conducting an investigation or just observing. The most important aspect of any investigation is to conduct it safely.



our safety contract is on pg _____
our class rules are on pg _____

in Bob _____

OUR goal is to learn to be safe in the SCIENCE LAB

SECTION 2 REVIEW

Self Check

1. Explain the difference between an inference and an observation.
2. Explain the differences between independent and dependent variables.
3. Think Critically A classroom investigation lists bleach as an ingredient. Bleach can irritate your skin, damage your eyes, and stain your clothes. What safety symbols should be listed with this investigation? Explain.

Summary

Science Skills

- The scientific method was developed to help scientists investigate their questions.
- Hypotheses are possible explanations for why something occurs.
- Drawing Conclusions
- Scientists communicate with one another to share important information.

Experiments

- Controlled experiments test the effect of one factor on another.
- Laboratory Safety
- Safety precautions must be followed when conducting any investigation.

answer self check on back

pp 19-20 - Glencoe

From NY Science - Grade 6

222bob Standards 57a, 57b, 57c, 57d, 57e, RST.6-8.1, 52a, 56d

name _____
class _____ team _____
seat _____ data _____

1-

2-

3-

don't forget to tell/cite where you took your information from