STEPS IN Working Safely

Follow these steps to learn how to work safely in the science classroom.

1 Know How to Find Safety Equipment

Ask your teacher to show you the location of all safety equipment in the classroom. Learn how to use each item.

2 Read the Steps

Read all the steps for any experiment before you begin. Make sure you understand all instructions and safety symbols shown.

3 Prepare and Protect

Use all the protective gear that is recommended for the experiment. Before beginning the experiment, during the experiment, and while doing cleanup, make sure you do the following:

- ✓ Tie back long hair and loose clothing.

Clothing Protection Safety

- ✓ Wear safety goggles, a lab apron, and insulated gloves.

Eye Safety, Skin Protection Safety

- ✓ Keep all materials away from flames and heat sources.

Fire Safety

- ✓ Use tongs or a pot holder to pick up hot items.

Thermal Safety

- ✓ Always slant test tubes away from yourself and others.

Thermal Safety, Fume Safety

- ✓ Apply cold, running water to any minor skin burn.
- ✓ Never inhale chemicals or put them close to your nose or eyes.

Chemical Safety, Fume Safety, Poison Safety

- ✓ Tell your teacher immediately if you spill a chemical on your skin or clothing.

Chemical Safety

- ✓ Never taste any materials used in an experiment.

Poison Safety

- ✓ Return all chemicals to your teacher at the end of an experiment.

Chemical Safety

USE THIS SKILL

Work Safely

For each experiment listed below, tell which of the following safety tools or procedures would be used.

Clothing Protection Safety

Fire Safety

Thermal Safety

Skin Protection Safety

Eye Safety

Fume Safety

Poison Safety

Chemical Safety

1. Mixing vinegar and baking soda to observe the chemical reaction
2. Boiling water on a hot plate to observe changing states of matter from liquid to gas
3. Mixing different kinds of natural inks and dyes to stain cloth or strips of paper
4. Using a Bunsen burner while testing the effects of heat on different kinds of metal shavings
5. Using litmus paper to test the acidity of an unknown chemical
6. Mixing oil, water, and food coloring while studying mixtures and solutions
7. Burning a piece of wood or magnesium metal while observing chemical reactions
8. Measuring or pouring ammonia, rubbing alcohol, or hydrogen peroxide

TEST TIP

If a test question asks you what kind of tools or equipment you would use for a specific science activity or experiment, think about what the question is asking. Choose the tool that would be most helpful to complete the task.

Name _____

Practicing Skill 3

HOW TO Work Safely

Science Fair Safety

Imagine that your town's science fair is going to be held at your school this year. Your teacher wants you to design a poster to hand out to other schools and to post in the hallways of your school. The purpose of the poster is to inform other students about science safety. You may use colored pencils or markers and the symbols you have learned about in the ***Student Edition.***
You want the poster to be interesting and visible from a distance, but you won't be able to include everything you have learned about science safety. You'll have to choose the points that are most important to emphasize.

Symbols to Use

Before you design your poster, what labels should go next to these safety symbols?


_____


_____


_____


_____


_____


_____


_____


_____

Name _____

Ideas to Use

What important safety ideas do you want to emphasize in your poster?

_____

_____

_____

Use this space to design your safety poster.