

SAFETY

It's everyone's
responsibility!



Why Safety Instruction?

It's Required.

For all students prior to working with equipment.

Why Safety Instruction?

- Develop an awareness of hazards and become more safety conscious at school, work or at home.
- Develop a serious attitude toward the use and practice of safety procedures
- To prepare for safety before entering the work area, in the work area, at a workstation and on leaving the work area
- To recognize safety symbols, color codes and safety equipment



Making Safety a Habit

The text "Making Safety a Habit" is rendered in a large, bold, white, sans-serif font. Each letter is a thick, 3D block with a white top surface and a dark blue side surface. The text is arranged in a perspective view, receding from the bottom left towards the top right. The entire graphic is set against a solid, vibrant blue background.

Recognizing Hazards



What is a Hazard?

- A hazard is a dangerous situation that could cause an accident.



Three Types of Hazards

- **Immediate Hazard** – A situation that is visible and presents an immediate danger.
- **Potential Hazard** – A situation that is visible but could become dangerous if combined with other situations or events.
- **Hidden Hazard** – An existing dangerous situation that is hidden from obvious view.

List and Categorize as many hazards as you can recognize in the Smith's basement.



The Smiths

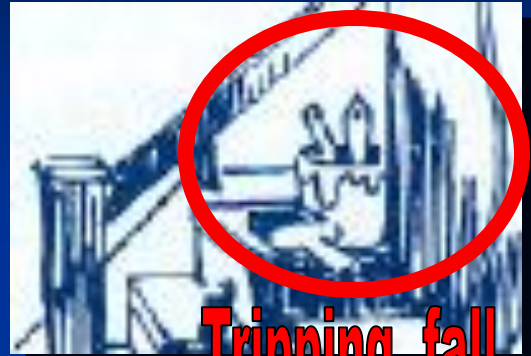
The Johnsons

Who do you predict to have the next accident?

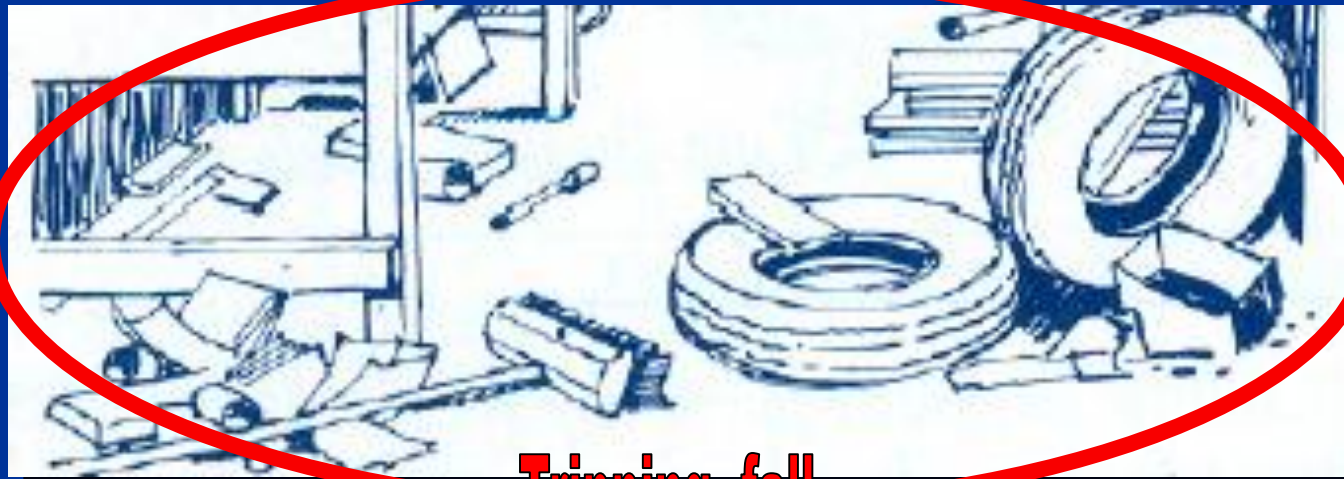
Immediate Hazards



Internal injury, abrasion, fractured rib...

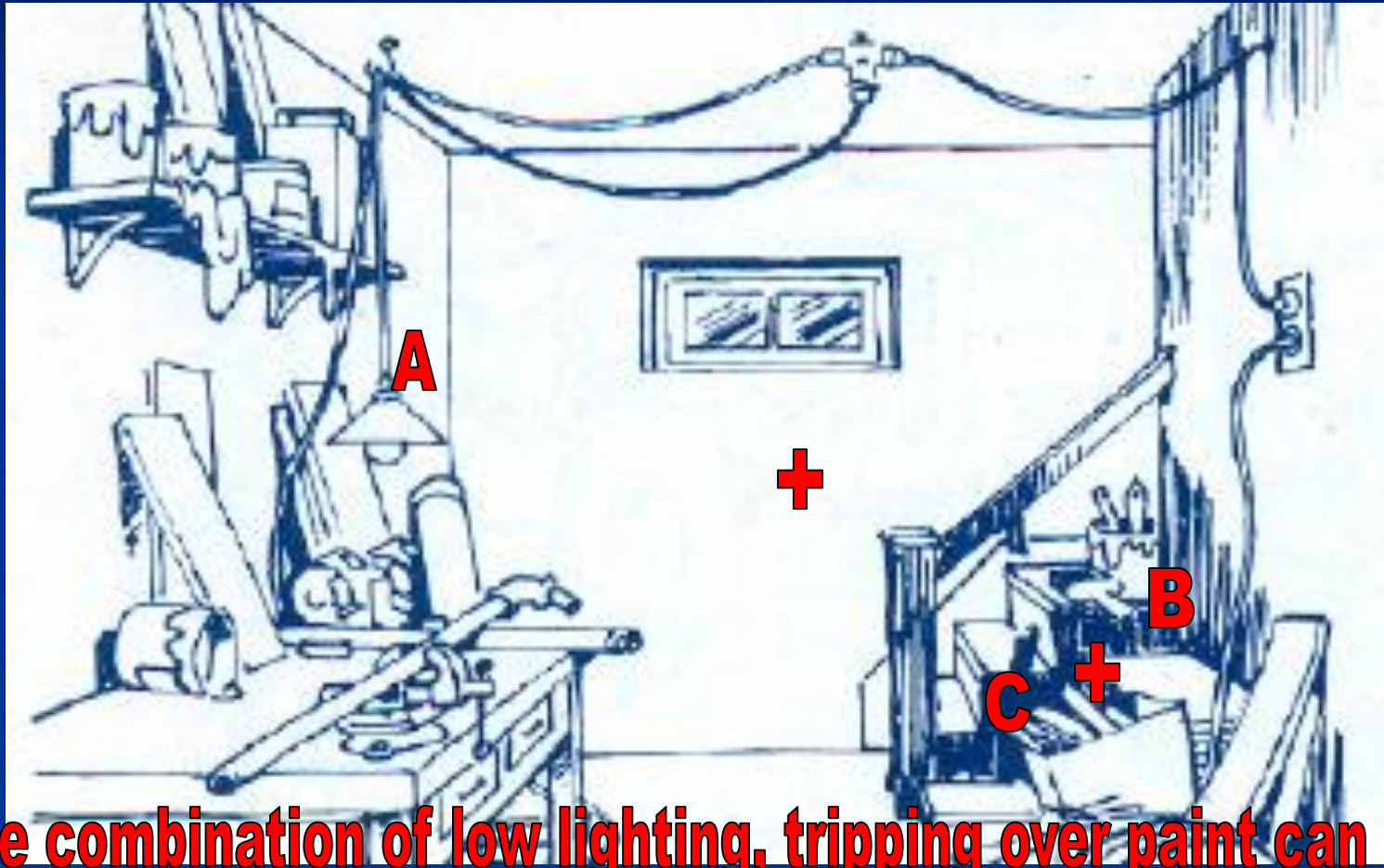


Tripping, fall...



Tripping, fall...

Potential Hazard



The combination of low lighting, tripping over paint can and the broken stair rail COULD combine for a serious injury.

Hidden Hazard



Open cans..paint and solvent fumes
Breathing Hazard & Possible explosion



Where does this extension cord go?

Possible mold and mildew - Health hazard



1. A safety hazard is...

- A. An obstacle on an OSHA golf course
- B. A device that protects the operator
- C. A visible unsafe situation
- D. Both A and B



2. A hidden hazard is...

- A. A dangerous situation but can't be seen.
- B. A dangerous situation that can be located in plain sight.
- C. Bo and Luke's cousin they don't talk about
- D. All of the above



3. A potential hazard is...

- A. Only dangerous when something else happens
- B. Always dangerous
- C. Never dangerous
- D. None of the above

Accident Prevention



Accidents can be prevented by...

Housekeeping

Identifying and correcting
hazardous situations or
conditions

Accidents can be prevented by...

Maintenance

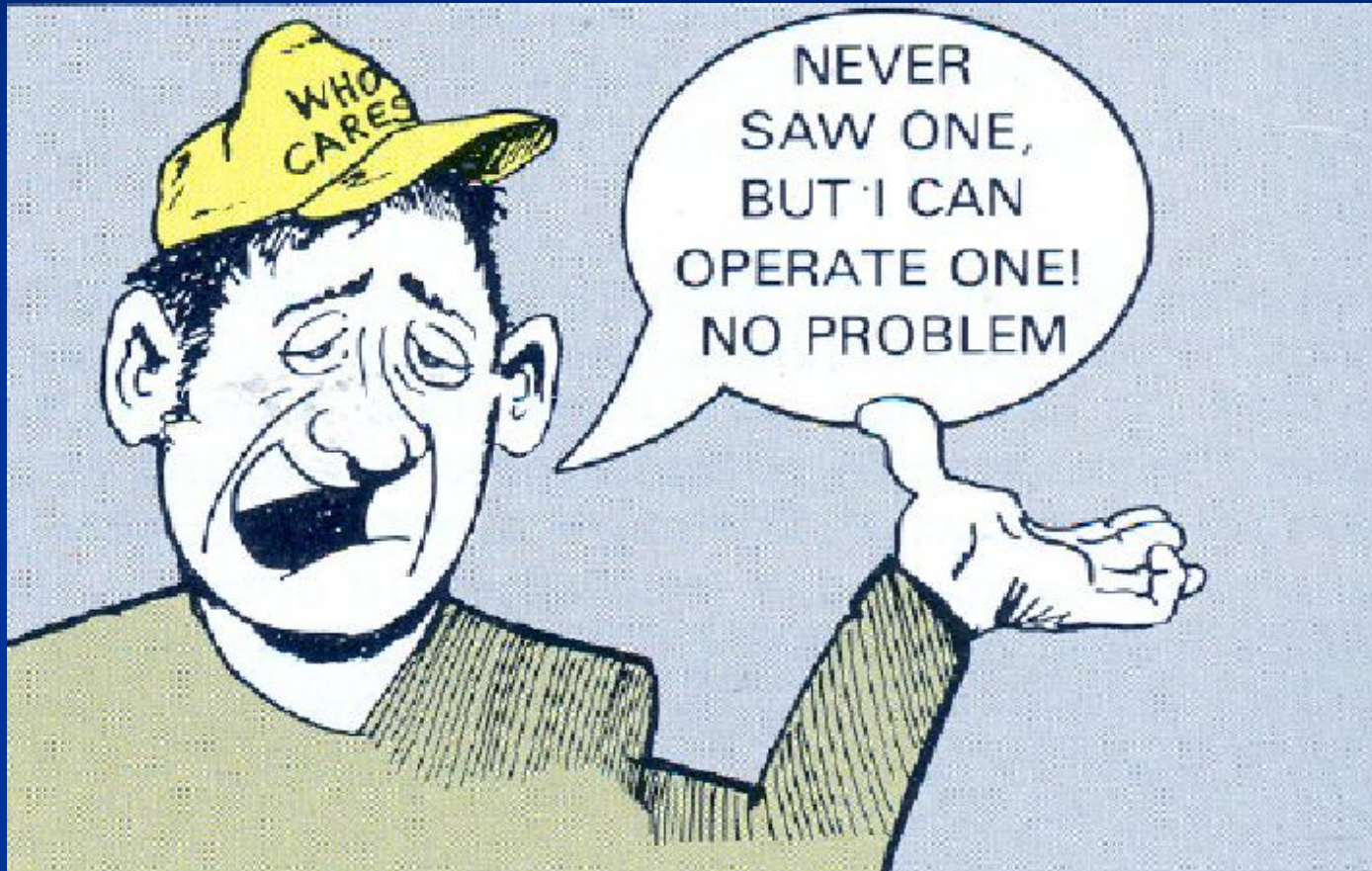
Keeping tools, machines and
the work environment in the
best possible condition

Accidents can be prevented by...

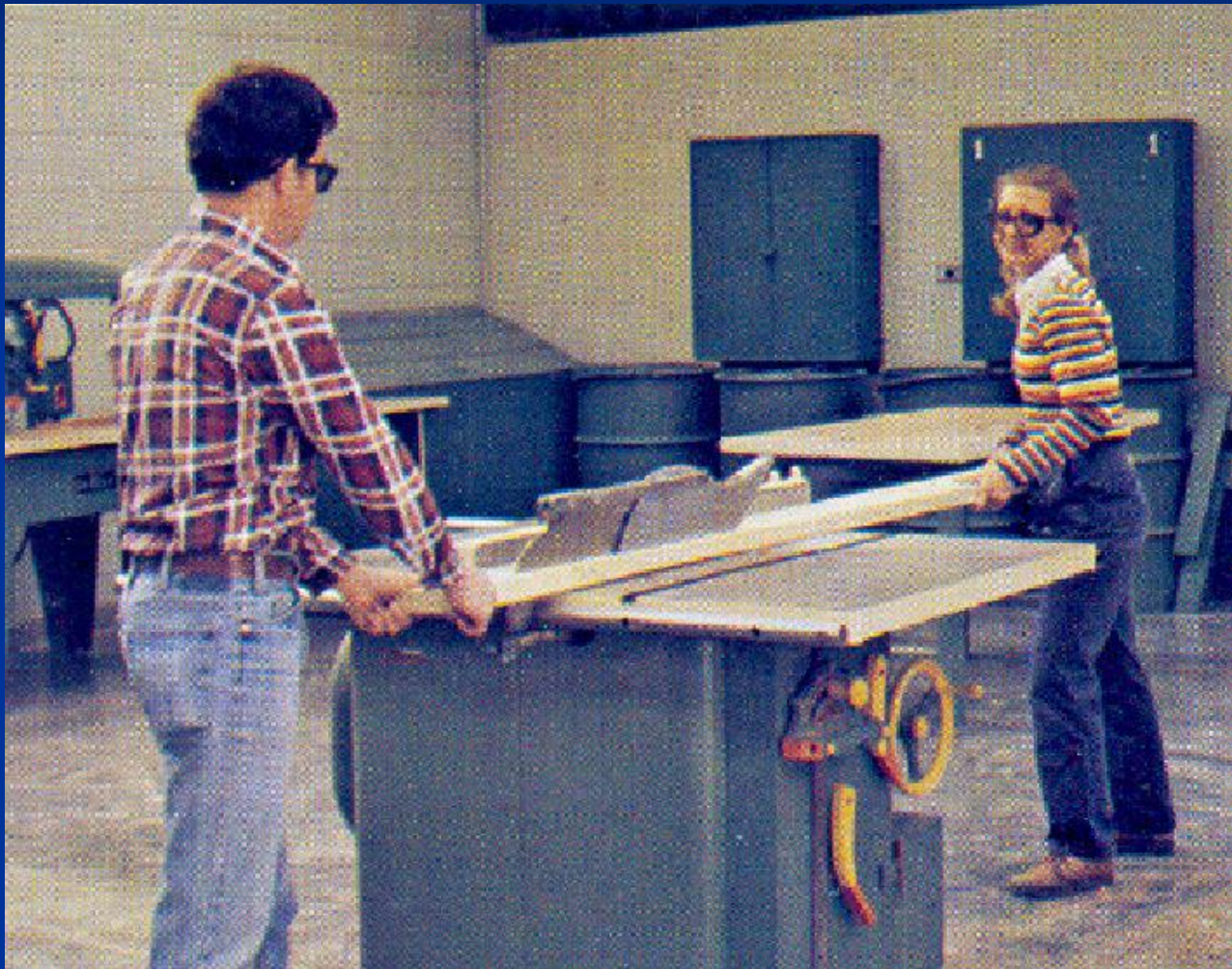
The Right Attitude

- Follow ***ALL*** Safety Rules
- Stay Alert
- Don't Take Chances
- **IF IN DOUBT....ASK!**

Overconfidence is Hazardous



Know your limitations. Get help
when necessary.





4. A term that refers to the act of identifying and correcting hazardous situations or conditions is...

- A. Maintenance
- B. Housekeeping
- C. Hazard Hunting
- D. Safety Rules



5. Keeping tools, machines and the work environment in the best possible condition is called...

- A. Maintenance
- B. Housekeeping
- C. Hazard Hunting
- D. Safety Rules



6. Which answer below is not considered in having the right attitude...

- A. Follow all the safety rules
- B. Stay alert
- C. Hide all of your mistakes from your teacher
- D. If you have a doubt, ask your instructor



7. True or False – Over confidence is hazardous.

- A. True
- B. False

Steps to Working Safely

1. Develop a safe attitude



Steps to Working Safely

2. Stop, Look and Listen



Steps to Working Safely

**3. Take the time to do it right.....
THE FIRST TIME!**



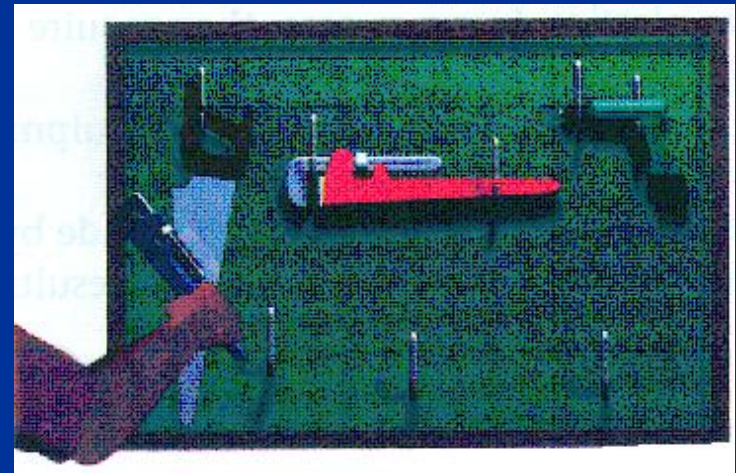
Steps to Working Safely

4. Keep tools & equipment in good working order.



Steps to Working Safely

**5. Keep the work area
clean & neat.**



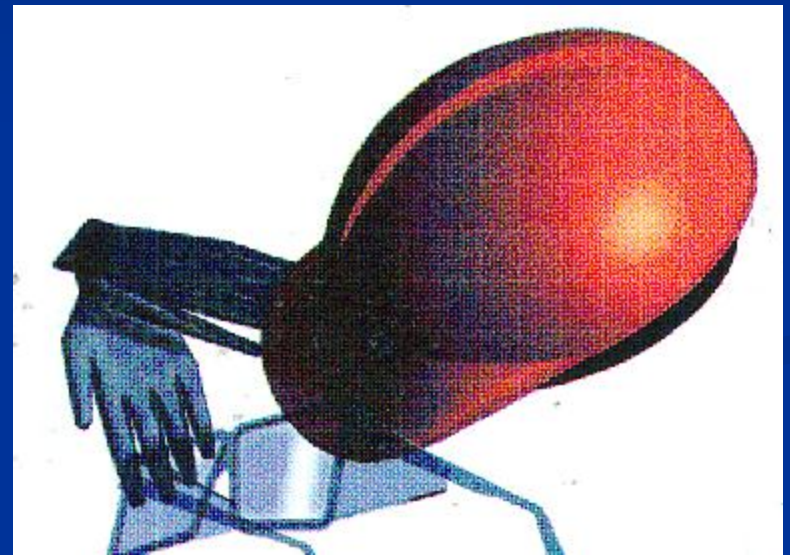
Steps to Working Safely

6. Put waste in its proper place.



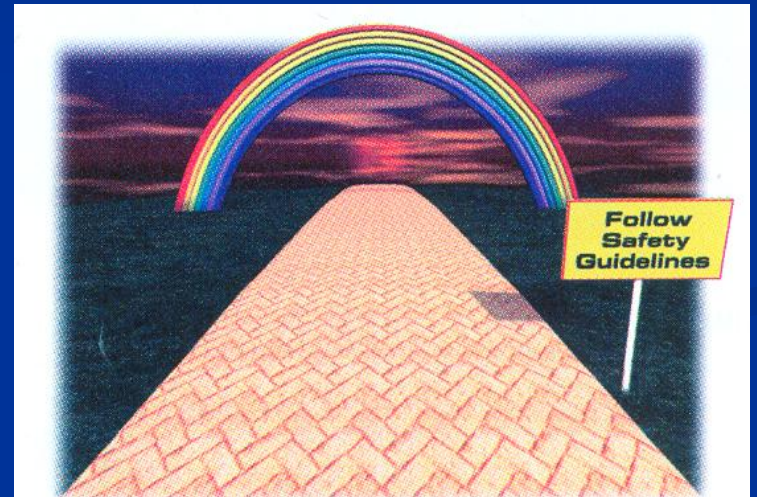
Steps to Working Safely

7. Dress for the job.



Steps to Working Safely

8. Follow the rules.





8. Which of the following is not a step to working safely...

- A. Develop a safe attitude
- B. Take the time to do it right the first time
- C. Keep tools and equipment in good working order
- D. Do not dispose of any waste, instead leave it out in the lab area

School Lab Safety



- The only law affecting work in school labs is:

Eye Protection is Required.

Georgia Code 32-4201. This law mandates the wearing of safety goggles by every student, teacher, and visitor participating in or observing chemical, physical, or combined chemical physical activities involving caustic or explosive materials, hot liquids or solids, injurious radiation or other hazards.

Safety Glasses are stored in sterilizing cabinet

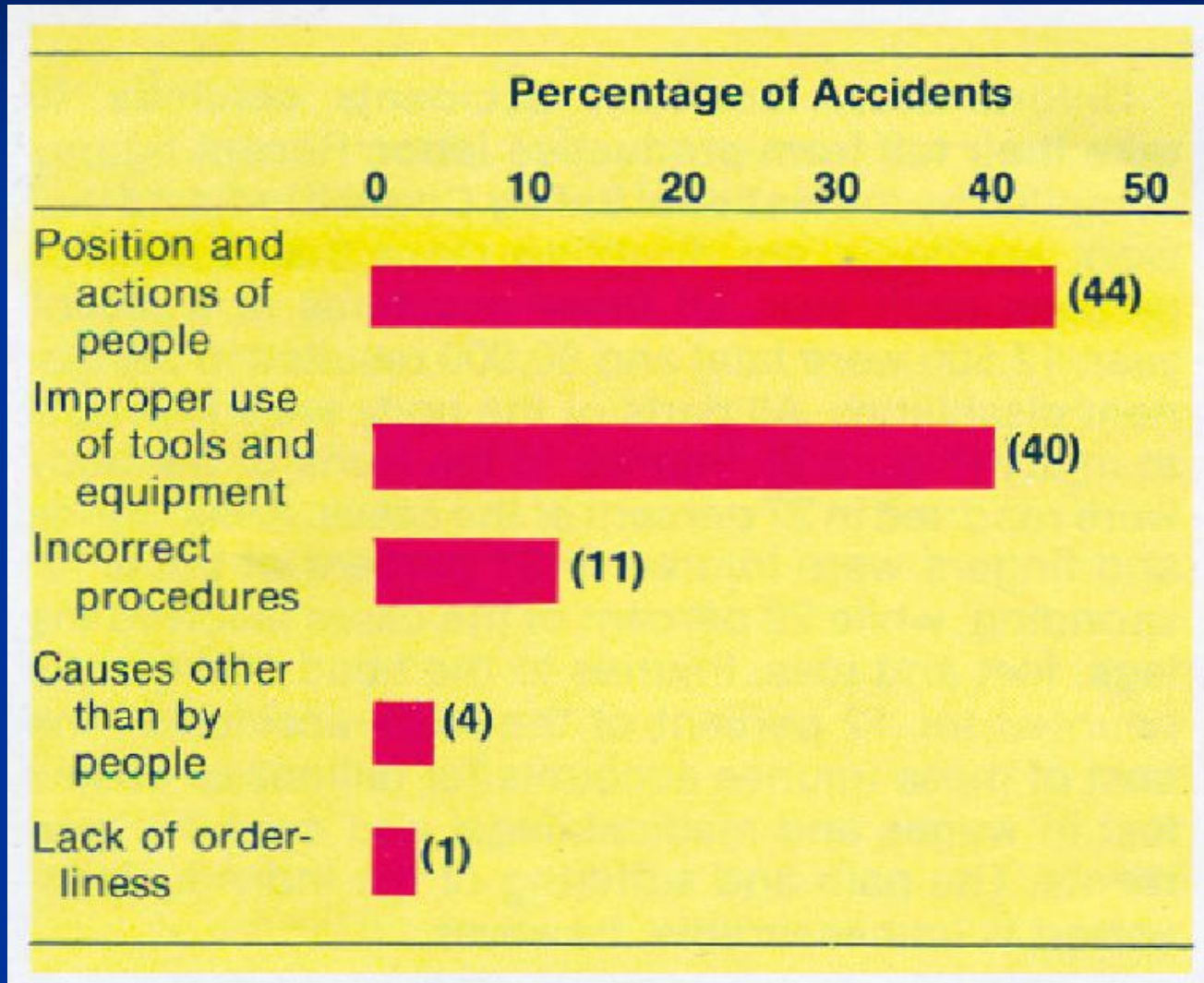




9. Which of the following is the only safety feature of the technology lab that is required by law...

- A. Safety glasses
- B. Circuit breaker
- C. Steel-toed boots
- D. Welding mask

What Causes Most Accidents?
















10. Which of the following causes the majority of accidents...

- A. Incorrect procedures
- B. Improper use of tools and equipment
- C. Positions and actions of people
- D. Lack of orderliness

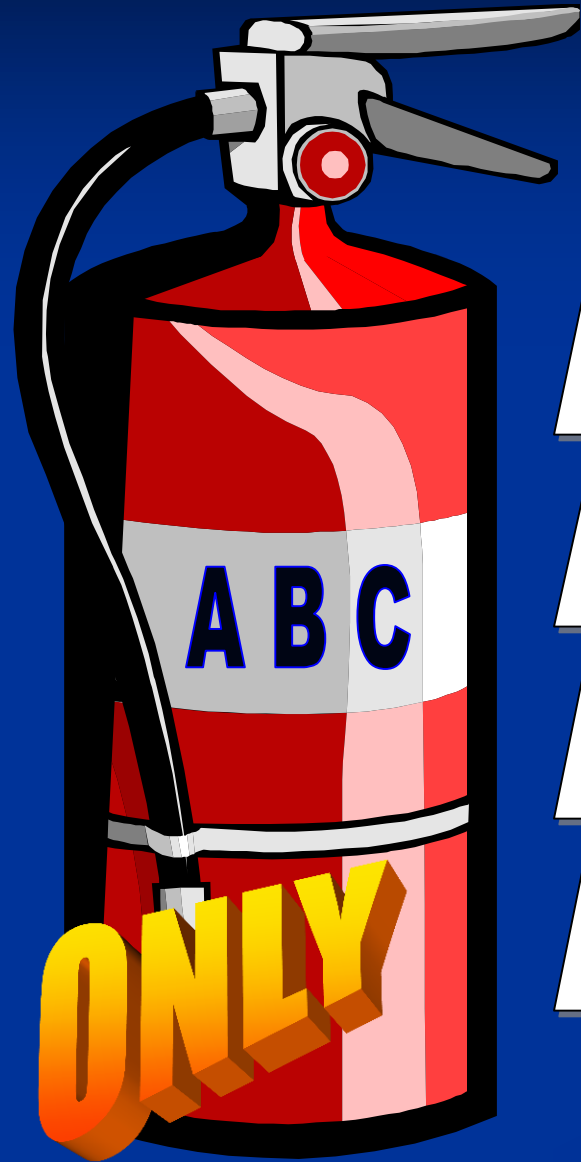
Fire Safety



Classifications of Common Fires

KIND OF FIRE		APPROVED TYPE OF EXTINGUISHER			
DECIDE THE CLASS OF FIRE YOU ARE FIGHTING...	THEN CHECK THE COLUMNS TO THE RIGHT OF THAT CLASS	MATCH UP PROPER EXTINGUISHER WITH CLASS OF FIRE SHOWN AT LEFT Important: Using the wrong type extinguisher for the fire may be dangerous			
		CARBON DIOXIDE Carbon Dioxide Gas Under Pressure	PUMP TANK Plain Water	MULTI-PURPOSE DRY CHEMICAL	ORDINARY DRY CHEMICAL
 CLASS A FIRES Use These Extinguishers ORDINARY COMBUSTIBLES • Wood • Paper • Cloth, etc.					
 CLASS B FIRES Use These Extinguishers FLAMMABLE LIQUIDS, GREASE • Gasoline • Paints • Oils, etc.					
 CLASS C FIRES Use These Extinguishers ELECTRICAL EQUIPMENT • Motors • Switches, etc.					

Our Fire Extinguishers



How long will they work?

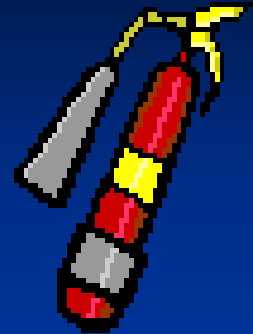
Lasts 15 Minutes

Lasts 5 Minutes

Lasts 60 Seconds

Lasts 15 Seconds

IF THE FIRE CAN'T
BE PUT OUT IN
15 SECONDS...



GET OUT AND CALL 911!

Smoke kills more people
than the fire itself.



11. A multi-purpose fire extinguisher can be used on which of the following types of fires...

- A. Class A fire
- B. Class B Fire
- C. Class C Fire
- D. All of the above



12. Our fire extinguisher will last...

- A. 15 minutes
- B. 5 minutes
- C. 60 seconds
- D. 15 seconds



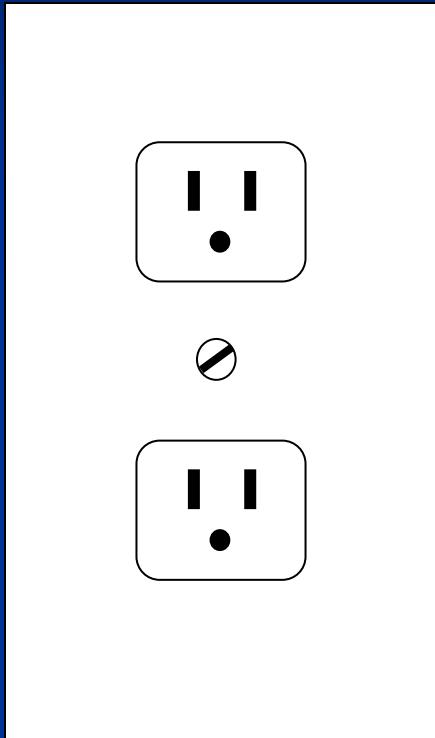
13. True or False – More people are killed by smoke than flame in a burning building?

- A. True
- B. False

Electrical Safety



Safety Around Electricity



ONLY

How Much Current Can Kill?

100 AMPS

20 amps

1 Amp

1/1000 of an Amp



Safety Color Code

Safety Red

Stop/Danger/Fire

Safety Orange

Warning

Safety Yellow

Caution

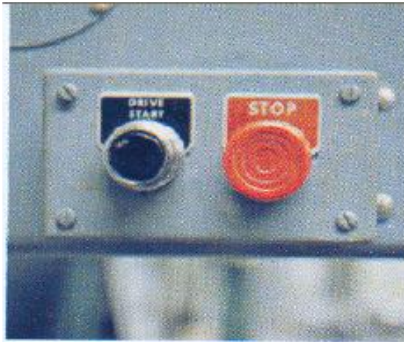
Safety Green

Start/Safety Info

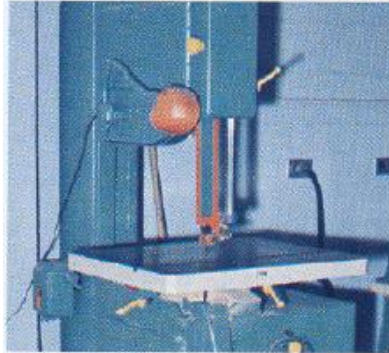
DANGER



high voltage



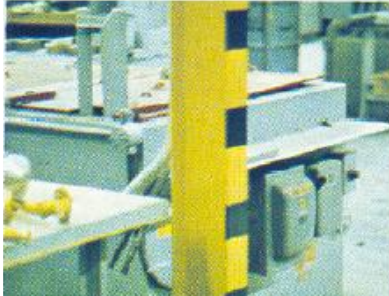
WARNING



CAUTION



DO NOT STARE INTO BEAM



START



**Electrical Ground
Wire**



14. The Safety color red means...

- A. Caution
- B. Warning
- C. Stop, danger, fire
- D. Start or safety info



15. The Safety color green means...

- A. Caution
- B. Warning
- C. Stop, danger, fire
- D. Start or safety info



16. The Safety color orange means...

- A. Caution
- B. Warning
- C. Stop, danger, fire
- D. Start or safety info



17. The Safety color yellow means...

- A. Caution
- B. Warning
- C. Stop, danger, fire
- D. Start or safety info

Lab Safety Rules

1. Obey All Safety Rules!
2. Listen to and obey the instructor at all times.
3. Eye protection is required by law while work is being done in the production lab as well as specific modules where debris or fluids could reach the eye.

Lab Safety Rules

4. Do not attempt to use machines and tools without proper instruction and instructor approval. ALL MACHINES REQUIRE INSTRUCTOR PERMISSION BEFORE USE.
5. Report ALL accidents no matter how small to the instructor immediately.
6. Report all damaged tools or machines to the instructor immediately. DO NOT ATTEMPT TO USE DAMAGED EQUIPMENT.

Lab Safety Rules

7. Use tools and machines ONLY for the job they were intended.
8. Running, Horseplay and roughhousing are forbidden in the lab.
9. Roll up loose fitting sleeves, secure loose shirts and do not wear coats or jackets in the production lab. Tie back loose hair. Take off jewelry, necklaces, chains etc. Loose things could become entangled in moving machine parts.

Lab Safety Rules

10. Keep hands and fingers a safe distance from sharp blades. Don't put your body in direct line with blades that are spinning or cut toward a body part.
11. Carry sharp tools/instruments pointed down when transporting them.
12. Return tools to their proper place when they are not being used.

Lab Safety Rules

13. Clean up the work area when finished for the day/period.
14. Guests must also wear safety glasses in the production lab. When a guest enters offer them a pair.



18. If something goes wrong with a machine you should...

- A. Stop immediately and report it to the instructor
- B. Try to fix it immediately
- C. Leave the machine running
- D. Finish what you were doing and then report it



19. Keep hands away from machine parts that...

- A. Cut
- B. Pinch
- C. Press
- D. All of the above



20. If an accident happens to you or someone else...

- A. Tough it out and get the job done
- B. Wait until you finish and then report it
- C. Report it immediately
- D. Only report it if it's a major accident



21. When you must use a machine that you haven't been trained on you should...

- A. Go ahead and be careful
- B. Not use the machine and ask for help
- C. Read up on the machine and go ahead with your job
- D. Get a partner and go ahead with your work



22. True or False - Loose clothing is a safety hazard.

- A. True
- B. False



23. True or False – Do not remove safety guards from machine.

- A. True
- B. False

Whether at work or play
one goal to say
don't let safety be
a stranger to thee.

From hazards you can't tame
you may not look the same.

Safety First!



"OK, I look a bit different since the accident...but I still love you."